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Water Resources Data
New Jersey
Water Year 1997

Volume 1. Surface-Water Data

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-97-1

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

CALENDAR FOR WATER YEAR 1997

1996

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1997

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United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Water Resources Division
Mountain View Office Park
810 Bear Tavern Road, Suite 206
West Trenton, New Jersey 08628

I am pleased to announce the release of our Annual report "Water Resources Data for New Jersey, Water Year 1997". This report was prepared by the U.S. Geological Survey, in cooperation with the State of New Jersey as well as many local and federal government agencies.

This report is being published again in two volumes:

Volume 1.--Surface-water data.

Volume 2.--Ground-water data.

This volume contains surface-water data, such as stream discharge and surface-water-quality measurements, elevations of lakes and reservoirs, major surface-water diversions and tidal elevations. Special sections are devoted to low-flow and crest-stage data as well as to summaries of tidal-crest elevations in the New Jersey estuaries and intracoastal waterways.

Streamflow data again are presented in the format that was introduced in the 1988 report. The format includes extensive tabular presentations of streamflow statistics. Also, station numbers are included in the table of contents, and tables of discontinued surface-water and surface-water-quality stations are presented.

The New Jersey District of the U.S. Geological Survey has made a home page available on the world wide web. Real-time data for more than 30 stream-gaging stations around the State, peak-flow files for many gaging stations, monthly hydrologic conditions and links to other sites of interest may be accessed.This information is available at:

http://nj.usgs.gov/

Copies of this report in paper or microfiche are for sale through the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Data can also be provided by file transfer (ftp), or on floppy disk. When ordering, refer to U.S. Geological Survey Water-Data Report NJ-97-1 (for Volume 1) and NJ-97-2 (for Volume 2). For further information on this report, or to change or remove your address from our mailing list, please contact me at the above address, telephone (609) 771-3980, send e-mail to wbauers@usgs.gov.

Sincerely,

William R. Bauersfeld

William R. Bauersfeld, Chief
Hydrologic Data Assessment Program

Water Resources Data New Jersey Water Year 1997

Volume 1. Surface-Water Data

by T.J. Reed, G.L. Centinaro, M.J. DeLuca, and J.H. Oden

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-97-1
Prepared in cooperation with the New Jersey Department of Environmental Protection and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, ***Secretary***

GEOLOGICAL SURVEY

Thomas J. Casadevall, ***Acting Director***

For information on the water program in New Jersey write to

District Chief, Water Resources Division
U.S. Geological Survey
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West Trenton, New Jersey 08628

1998

PREFACE

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

Hydrologic data for New Jersey are contained in 2 volumes:

Volume 1. Surface-Water Data
Volume 2. Ground-Water Data

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

Jacob Gibs　　Robert D. Schopp

M.D. Morgan word processed the text of the report. G.L. Simpson and D.K. Sun drafted the illustrations.

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

M.A. Ayers	H. Gylling	A.K. O'Brien	J.J. Scudder
G.A. Brown	W.D. Jones	J. Pflaumer	K.M. Smith
M. Campbell	D.S. Kauffman	E.A. Pustay	G.C. Steckroat
V. Corcino	G.R. Long	R.G. Reiser	W.M. Summer
J.F. Dudek	R.C. McTigue	M.L. Riskin	K. VanNest
B. Gray	J.P. Nawyn		

Some data were collected by the following N.J. Department of Environmental Protection personnel:

A.A. Altieri	R. Maruska	J.R. Spiritosanto
R.F. Fenton	J.R. Specht	

Some data were also collected by Kim Laidig of the New Jersey Pinelands Commission.

This report was prepared in cooperation with the State of New Jersey and with other agencies under the general supervision of William R. Bauersfeld, Chief of the Hydrologic Data Assessment Program; under the general supervision of David A. Stedfast, Associate District Chief; Eric Evenson, District Chief, New Jersey; and William J. Carswell, Jr., Regional Hydrologist, Northeastern Region.

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T.J. Reed, G.L. Centinaro, M.J. DeLuca, and J.H. Oden

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13. ABSTRACT *(Maximum 200 words)*
Water-resources data for the 1997 water year for New Jersey are presented in two volumes, and consists of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground water. Volume 1 contains discharge records for 92 gaging stations; tide summaries at 7 gaging stations; stage-only at 15 gaging stations; stage and contents at 35 lakes and reservoirs; and water quality at 102 surface-water stations. Also included are stage and discharge for 62 crest-stage partial-record stations and stage-only at 17 tidal crest-stage gages. Locations of these sites are shown in figures 11 and 12. Additional water data were collected at various sites that are not part of the systematic data-collection program. Discharge measurements were made at 73 low-flow partial-record stations and 67 miscellaneous sites. Data collected for the LINJ National Water Quality Assessment Program is presented for 7 gaging stations and 45 miscellaneous sites.

14. SUBJECT TERMS
*New Jersey, *hydrologic data, *surface water, *streamflow, *water quality, flow rate, gaging stations, lakes, reservoirs, chemical analyses, sediments, water temperatures, sampling sites, and water analysis

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SURFACE WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

Note.--Data for partial-record stations and miscellaneous sites for both surface-water discharge and quality are published in separate sections of the data report. See references at the end of this list for page numbers for these sections.

[Letter after station name designates type of data: (d) discharge, (c) general chemical, (m) microbiological, (s) sediment, (t) water temperature, (e) elevation, gage height or contents, (w) whole-water-recoverable metals, (v) volatile organic compounds, (p) pesticide]

SURFACE WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record surface-water discharge stations in New Jersey have been discontinued. Daily streamflow records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

Discontinued Surface-Water Discharge Stations

Station name	Station number	Drainage area (mi^2)	Period of record
Wallkill River near Unionville, NY	01368000	140	1938-81
Auxiliary outlet of Upper Greenwood Lake at Moe, NJ	01368720	----	1968-80a
Passaic River near Bernardsville, NJ	01378690*	8.83	1968-77
Russia Brook tributary at Milton, NJ	01379630	1.64	1969-71
Rockaway River at Berkshire Valley, NJ	01379700	24.4	1960-72, 1985-96
Beaver Brook at Splitrock Reservoir, NJ	01380000	5.50	1925-46, 1976-88a
Wanaque River at Monks, NJ	01384000	40.4	1935-85
Cupsaw Brook near Wanaque, NJ	01385000	4.37	1935-58
Erskine Brook near Wanaque, NJ	01385500	1.14	1934-38
West Brook near Wanaque, NJ	01386000	11.8	1935-78
Blue Mine Brook near Wanaque, NJ	01386500	1.01	1935-58
Passaic River at Paterson, NJ	01389800	785	1897-1955
Hohokus Brook at Ho-Ho-Kus, NJ	01391000*	16.4	1954-73, 1977-96
Weasel Brook at Clifton, NJ	01392000	4.45	1937-62
Second River at Belleville, NJ	01392500*	11.6	1938-64
Elizabeth River at Irvington, NJ	01393000	2.90	1931-38
Elizabeth River at Elizabeth, NJ	01393500	20.2	1922-73
East Fork East Branch Rahway River at West Orange, NJ	01393800	.83	1972-74
West Branch Rahway River at Millburn, NJ	01394000	7.10	1940-50
Robinsons Branch Rahway River at Goodmans, NJ	01395500	12.7	1921-24
Robinsons Branch at Rahway, NJ	01396000	21.6	1939-96
Walnut Brook near Flemington, NJ	01397500*	2.24	1936-61
Back Brook tributary near Ringoes, NJ	01398045*	1.98	1977-88
Holland Brook at Readington, NJ	01398107	9.00	1978-95
North Branch Raritan River at Pluckemin, NJ	01399000	52.0	1903-06
Lamington (Black) River at Succasunna, NJ	01399190	7.37	1976-87
Lamington (Black) River near Ironia, NJ	01399200	10.9	1975-87
Upper Cold Brook near Pottersville, NJ	01399510	2.18	1972-96
Axle Brook near Pottersville, NJ	01399525*	1.22	1977-88
South Branch Rockaway Creek at Whitehouse, NJ	01399690	13.2	1964-67, 1977-86
North Branch Raritan River at North Branch, NJ	01399830*	174	1977-81
Peters Brook near Raritan, NJ	01400300	4.19	1978-95
Macs Brook at Somerville, NJ	01400350	.77	1982-85
Millstone River at Plainsboro, NJ	01400730*	65.8	1964-75, 1987-89
Baldwins Creek at Baldwin Lake, near Pennington, NJ	01400932	2.52	1963-70
Honey Branch near Pennington, NJ	01400953	.70	1967-75
Millstone River at Carnegie Lake, at Princeton, NJ	01401301*	159	1972-74, 1987-89
Millstone River near Kingston, NJ	01401500	171	1934-49
Royce Brook tributary at Frankfort, NJ	01402590	.29	1969-74
Royce Brook tributary near Belle Mead, NJ	01402600	1.20	1966-74, 1980-95
Raritan River at Bound Brook, NJ	01403000	779	1903-09, 1945-66
Green Brook at Plainfield, NJ	01403500*	9.75	1938-84
Bound Brook at Middlesex, NJ	01403900*	48.4	1972-77
Bound Brook at Bound Brook, NJ	01404000	49.0	1923-30
Lawrence Brook at Patricks Corner, NJ	01404500	29.0	1922-26

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record
Lawrence Brook at Farrington Dam, NJ	01405000*	34.4	1927-90
Matchaponix Brook at Spotswood, NJ	01405300	43.9	1957-67
South River at Old Bridge, NJ	01405500	94.6	1939-88
Deep Run near Browntown, NJ	01406000	8.07	1932-40
Tennent Brook near Browntown, NJ	01406500	5.25	1932-41
Matawan Creek at Matawan, NJ	01407000	6.11	1932-55
South Branch Metedeconk River at Lakewood, NJ	01408140	26.0	1973-76
Cedar Creek at Lanoka Harbor, NJ	01409000	55.3	1933-58, 1971
Oyster Creek near Brookville, NJ	01409095	7.43	1965-84
Westecunk Creek at Stafford Forge, NJ	01409280	15.8	1974-88
West Branch Wading River near Jenkins, NJ	01409810	84.1	1974-96
Absecon Creek at Absecon, NJ	01410500	17.9	1946-85
Great Egg Harbor River tributary at Sicklerville, NJ	01410787	1.64	1972-79
Fourmile Branch at New Brooklyn, NJ	01410810*	7.74	1973-79
Great Egg Harbor River near Blue Anchor, NJ	01410820	37.3	1972-79
Maurice River at Brotmanville, NJ	01411485	88.1	1992-94
Blackwater Branch at Norma, NJ	01411495	12.5	1992-94
Maurice River near Millville, NJ	01411800	191	1992-94
Maurice River at Union Lake Dam at Millville, NJ	01411878	216 (revised)	1993-94
Menantico Creek near Millville, NJ	01412000*	23.2	1931-57, 1978-85
West Branch Cohansey River at Seeley, NJ	01412500*	2.58	1951-67
Cohansey River at Seeley, NJ	01412800*	28.0	1978-88
Loper Run near Bridgeton, NJ	01413000	2.34	1937-59
Delaware River below Tocks Island Damsite, near Delaware Water Gap	01440200	3,850	1964-96
Paulins Kill at Columbia, NJ	01444000	179	1908-09
Pequest River at Huntsville, NJ	01445000*	31.0	1940-62
Pequest River at Townsbury, NJ	01445430*	92.5	1977-80
Beaver Brook near Belvidere, NJ	01446000*	36.7	1923-61
Brass Castle Creek near Washington, NJ	01455160	2.34	1970-83a
Pohatcong Creek at New Village, NJ	01455200*	33.3	1960-70
Beaver Brook near Weldon, NJ	01455355	1.72	1969-71
Musconetcong River at outlet of Lake Hopatcong, NJ	01455500*	25.3	1928-75
Musconetcong River near Hackettstown, NJ	01456000*	68.9	1922-73
Delaware River at Riegelsville, NJ	01457500*	6328	1906-71
Delaware and Raritan Canal at Kingston, NJ	01460500	---	1947-91
Delaware River at Lambertville, NJ	01462000	6680	1898-06
New Sharon Run at Carsons Mills, NJ	01463587	6.63	1976-77
Shipetaukin Creek tributary at Lawrenceville, NJ	01463657	.78	1976-77
Little Shabakunk Creek at Bakersville, NJ	01463690	3.98	1976-77
Thorton Creek at Bordentown, NJ	01464525*	.84	1976-77
South Branch Rancocas Creek at Vincentown, NJ	01465850*	64.5	1961-75
Middle Branch Mount Misery Brook in Lebanon State Forest, NJ	01466000	2.82	1953-65, 1977
Mill Creek near Willingboro, NJ	01467019	4.12	1975-78
Mill Creek at Levitt Parkway, at Willingboro, NJ	01467021	9.12	1975-77
Mantua Creek at Pitman, NJ	01475000*	6.05	1940-76
Still Run near Mickleton, NJ	01476600	3.98	1957-66
Oldmans Creek near Woodstown, NJ	01477500	18.5	1932-40
Salem River at Woodstown, NJ	01482500*	14.6	1940-85, 1989
Alloway Creek at Alloway, NJ	01483000	20.3	1953-72

a Not published, on file at U.S. Geological Survey, West Trenton, NJ.

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS

The following stations have been discontinued as continuous water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station.

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
Passaic River near Chatham, NJ	01379500	100	Sed.	1964-68
			Temp.	1967-68
Green Pond Brook at Picatinny Arsenal, NJ	01379773	7.65	Temp., S.C., pH, D.O.	1984-86
Green Pond Brook at Wharton, NJ	01379790*	12.6	Temp., S.C., pH, D.O.	1984-85
Passaic River at Two Bridges, NJ	01382000	361	Temp.,	1963-74
			S.C., pH, D.O.	1969-74
Wanaque River at Wanaque, NJ	01387000	90.4	Temp.	1964-80
Ramapo River near Mahwah, NJ	01387500	118	Sed.	1964-65
Pompton River near Two Bridges, NJ	01389000	372	Temp., S.C., pH, D.O.	1969-74
Passaic River at Little Falls, NJ	01389500	762	Sed.	1964-65
			Temp., S.C.	1981-86
South Branch Raritan River near High Bridge, NJ	01396500	65.3	Temp.	1961-79
			S.C.	1969-79
Spruce Run at Clinton, NJ	01396800	41.3	Temp.	1969, 1971-80
South Branch Raritan River at Stanton, NJ	01397000	147	Temp., S.C.	1969-79
			Sed.	1960-63
South Branch Rockaway Creek at Whitehouse, NJ	01399690	13.2	Temp., S.C.	1977-78
			Sed.	1977
Rockaway Creek at Whitehouse, NJ	01399700	37.1	Temp., S.C.	1977-78
Raritan River near Manville, NJ	01400510	497	Temp., S.C., pH, D.O.	1968-74
Baldwins Creek at Baldwin Lake, near Pennington, NJ	01400932	2.52	Temp.	1963-66
			Sed.	1963-69
Stony Brook at Princeton, NJ	01401000	44.5	Temp.	1957-70
			Sed.	1960-70
Millstone River near Manville, NJ	01402900	287	Temp., S.C., pH, D.O.	1968-74
Raritan River near South Bound Brook, NJ	01404100	862	Temp., S.C., pH, D.O.	1969-77
Manasquan River at Squankum, NJ	01408000	44	Temp., S.C., pH, D.O.	1969-74
Toms River near Toms River, NJ	01408500	123	Temp.,	1964-66, 1975-81
			S.C.	1975-81
Oyster Creek near Brookville, NJ	01409095	7.43	Temp., D.O.	1975-76
			S.C., pH	1975-77
West Branch Wading River near Jenkins, NJ	01409810	84.1	Temp., S.C.	1978-81
Great Egg Harbor River trib. at Sicklerville, NJ	01410787	1.64	Sed.	1974-78
Fourmile Branch at New Brooklyn, NJ	01410810	7.74	Sed.	1974-78
Great Egg Harbor River at Folsom, NJ	01411000	57.1	Temp.	1961-75, 1977-80
			S.C.	1969-75, 1977-80
			Sed.	1966-70, 1979
Delaware Bay at Ship John Shoal Lighthouse, NJ	01412350		Temp.	1970-86
Maurice River at Norma, NJ	01411500	112.0	Temp.	1967-68, 1980-87, 1993-94
			S.C.	1980-87, 1993-94
			pH	1993-94
			Sed.	1965-68
Delaware River near Delaware Water Gap, Pa.	01440200	3850	Sed.	1964-65, 1972
Delaware River at Dunnfield, NJ	01442750	4150	Temp.	1967-76
			Sed.	1966-76
Delaware River at Trenton, NJ	01463500	6780	Sed.	1949-82
Delaware River at Marine Terminal, at Trenton, NJ	01464040	6870	Temp., S.C.	1973-76
Crosswicks Creek near Extonville, NJ	01464500	81.5	Temp.	1967-70
			Sed.	1965-70
McDonalds Branch in Lebanan State Forest, NJ	01466500	2.35	Temp.	1960-92
			S.C.	1968-92
			pH, D.O.	1984-92

* Unpublished records are available in the files of the District office.

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
Rancocas Creek at Willingboro, NJ	01467016	315	Temp., S.C.,	1969-74
			D.O.	1970-72
			pH	1970-74
Cooper River at Haddonfield, NJ	01467150	17.0	Temp., Sed.	1968-69
Raccoon Creek near Swedesboro, NJ	01477120	26.9	Temp.	1966-73
			Sed.	1966-69

Type of record: Temp. (temperature), S.C. (specific conductance), pH (pH), D.O. (dissolved oxygen), Sed. (sediment).

DISCONTINUED LOW-FLOW STATIONS

The following low-flow partial-record stations in New Jersey have been discontinued. Stream flow measurements were made during periods of base-flow, for the period of record shown for each station. These measurements, when correlated with the simultaneous discharge at nearby continuous-record sites, will give a picture of the low-flow potentiality of a stream.

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Wallkill River at outlet Lk Mohawk at Sparta, NJ	01367620	4.38	1979-86
Wallkill River at Franklin, NJ	01367700	29.4	1959-64,1982-83,1985,1987-90
Beaver Run near Hamburg, NJ	01367750	5.59	1966-72
Papakating Creek at Pellettown, NJ	01367800	15.8	1959-64
West Branch Papakating Creek at McCoys Corner, NJ	01367850	11.0	1967-72
Clove Brook above Clove Acre Lake at Sussex, NJ	01367890	19.2	1967-72
Clove Brook at Sussex, NJ	01367900	19.7	1959-64
Musquapsink Brook near Westwood, NJ	01377475	2.12	1964-72,1975,1978,1981-86
Tenakill Brook at Cresskill, NJ	01378350	3.01	1964-73,1975
Dwars Kill at Norwood, NJ	01378410	4.23	1973-80
Norwood Brook at Norwood, NJ	01378430	2.03	1973-80
Hirshfeld Brook at New Milford, NJ	01378520	4.54	1965-72
French Brook at New Bridge, NJ	01378530	.46	1965-72
Coles Brook at Hackensack, NJ	01378560	7.00	1965-72
Wolf Creek at Ridgewood, NJ	01378615	1.18	1964-72
Passaic River at outlet Osborn Pd at Osborn Mill, NJ	01378700	10.1	1961-68
Great Brook at Green Village, NJ	01378750	7.92	1961-65
Primrose Brook near New Vernon, NJ	01378800	4.68	1961-65
Great Brook near Basking Ridge, NJ	01378850	23.1	1961-65
Black Brook near Meyersville, NJ	01378900	11.7	1959-63
Harrisons Brook at Liberty Corner, NJ	01379150	3.74	1964-67
Dead River near Millington, NJ	01379200	20.8	1961-67,1973-75,1986-89
Passaic River at Stirling, NJ	01379300	84.1	1968-70,1972-73,1983-84
Passaic River at Lower Chatham Bridge near Chatham, NJ	01379550	116.0	1964,1984,1988-89
Passaic River at Hanover, NJ	01379570	128.0	1963-66,1973,1987-89
Rockaway River at Dover, NJ	01379750	30.8	1963-66,1983-86
Hibernia Brook at outlet of Lake Telemark, NJ	01380050	2.53	1966-72
Stony Brook near Rockaway Valley, NJ	01380300	8.43	1963-67,1985-86
Crooked Brook near Boonton, NJ	01381150	7.86	1963-66
Whippany River near Morristown, NJ	01381400	14.0	1964-72
Jacquis Brook at Greystone Park State Hospital, NJ	01381470	1.39	1967-73
Watnong Brook at Morris Plains NJ	01381490	7.77	1966-72, 1995
Whippany River near Whippany, NJ	01381600	48.5	1963-66,1973
Troy Brook at Troy Hills, NJ	01381700	10.1	1961-66,1972-73
West Brook at Troy Hills, NJ	01381750	1.32	1961-66
Pequannock River near Stockholm, NJ	01382050	5.39	1959-64
Kanouse Brook at Newfoundland, NJ	01382360	3.87	1963-67
Macopin River at Macopin Reservoir, NJ	01382450	5.25	1970-73
Belcher Creek at Stowaway Rd at West Milford, NJ	01382870	2.44	1973-77
Belcher Creek tributary at West Milford, NJ	01382880	.61	1973-77
Belcher Creek at West Milford, NJ	01382890	7.27	1973-77, 1995
Morsetown Brook at West Milford, NJ	01382910	1.31	1973-77
Green Brook near West Milford, NJ	01382960	1.47	1973-77
Cooley Brook near West Milford, NJ	01382990	1.34	1973-77
Stag Brook near Mahwah, NJ	01387520	1.35	1963-70,1972

DISCONTINUED LOW-FLOW STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Darlington Brook at Darlington, NJ	01387600	3.38	1963-67
Ramapo River near Darlington, NJ	01387670	131	1963-66,1982-83
Bear Swamp Brook near Oakland, NJ	01387700	3.25	1963-67
Ramapo River tributary 5 at Oakland, NJ	01387930	.86	1963-67
Ramapo River tributary 6 at Pompton Plains, NJ	01387950	1.79	1963-67
Haycock Brook at Pompton Lakes, NJ	01387980	4.18	1963-64,1973-77
Pompton River at Two Bridges, NJ	01389000	372	1963-68,1984,1986-88
Goffle Brook at Hawthorne, NJ	01389850	8.77	1963-67
Hohokus Brook at Wyckoff, NJ	01390700	5.31	1963-67
Valentine Brook at Allendale, NJ	01390800	2.48	1963-67
Saddle River at Paramus, NJ	01391110	45.0	1964-69,1971-72
Sprout Brook at Rochelle Park, NJ	01391485	5.56	1964-72
Third River at Nutley, NJ	01392200	11.4	1963-73
Elizabeth River below Chancellor Ave at Irvington, NJ	01393200	5.14	1955,1961-62,1966
South Branch Rahway River at Colonia, NJ	01396030	9.41	1979-86
South Branch Raritan River trib 7 at Budd Lake, NJ	01396080	.21	1973-1977
South Branch Raritan River at outlet of Budd Lake, NJ	01396090	5.03	1964,1973-77,1980-83
South Branch Raritan River at Bartley, NJ	01396120	12.5	1964-73,1990
Drakes Brook at Reger Road at Flanders, NJ	01396160	11.6	1965,1990
Drakes Brook at Bartly, NJ	01396180	16.6	1964-73,1975-76,1988-90
South Branch Raritan River at Middle Valley, NJ	01396280	47.7	1963-67,1973,1975,1982-92
South Branch Raritan River at Califon, NJ	01396350	58.5	1975-76,1989-90
Spruce Run near High Bridge, NJ	01396590	15.5	1973-77
Spruce Run near Clinton, NJ	01396600	18.1	1959-64
Mulhockaway Creek at Van Syckel, NJ	01396670	11.8	1973-77
Mulhockaway Creek near Clinton, NJ	01396700	20.5	1959-64
Capoolong Creek at Lansdowne, NJ	01396900	14.1	1959-65
Prescott Brook at Round Valley, NJ	01397100	4.61	1958-63
Assiscong Creek at Bartles Corners, NJ	01397290	2.98	1981-89
Neshanic River near Fleminton, NJ	01397800	11.4	1981-89
Third Neshanic River near Ringoes, NJ	01397900	9.24	1981-89
Back Brook near Reaville, NJ	01398052	11.4	1981-89
Pleasant Run at Centerville, NJ	01398075	8.11	1982-89
India Brook near Mendham, NJ	01398220	4.36	1964-67
North Branch Raritan River near Chester, NJ	01398260	7.57	1964-67,1980-92
Dawsons Brook near Ironia, NJ	01398300	1.04	1964-67
Burnett Brook near Chester, NJ	01398360	6.64	1964-67
Peapack Brook at Gladstone, NJ	01398700	4.23	1964-67
Peapack Brook at Far Hills, NJ	01398850	11.7	1964-67,1973-76
Mine Brook at Far Hills, NJ	01398950	7.78	1964-67,1973-76
Middle Brook at Burnt Mills, NJ	01399100	6.67	1964-67,1976
Lamington River near Chester, NJ	01399280	17.3	1963-64,1973,1990
Cold Brook at Oldwick, NJ	01399540	5.32	1973-76
Rockaway Creek at McCrea Mills, NJ	01399570	17.0	1961-65
South Branch Rockaway Creek tributary at Lebanon, NJ	01399600	1.02	1958,1960-64

DISCONTINUED LOW-FLOW STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Rockaway Creek at Whitehouse, NJ	01399700	37.1	1959-62,1964-65,1973
Chambers Brook near North Branch, NJ	01399820	4.71	1964-72
Chambers Brook at North Branch Depot, NJ	01399900	10.2	1959-64,1976
Millstone River at Applegarth, NJ	01400560	15.0	1960-64,1971-72
Millstone River at Hightstown, NJ	01400580	19.7	1960-64,1969-74
Rocky Brook at Hightstown, NJ	01400593	9.58	1965-72
Peddie Brook at Hightstown, NJ	01400596	3.07	1965-72
Millstone River at Locust Corner, NJ	01400600	37.5	1959-64,1971-72
Cranbury Brook at Old Church, NJ	01400670	3.69	1960-64
Cranbury Brook at Cranbury Station, NJ	01400700	9.56	1959-64,1971-72
Bear Brook near Hickory Corner, NJ	01400750	3.46	1960-65
Little Bear Brook at Hickory Corner, NJ	01400770	1.88	1960-64
Bear Brook near Grovers Mill, NJ	01400800	9.52	1959-64
Bear Brook at Princeton Junction, NJ	01400810	12.4	1962-67,1971-72
Millstone River at Princeton Junction, NJ	01400820	78.5	1960-61
Woodsville Brook at Woodsville, NJ	01400850	1.78	1957-59,1965-73
Stony Brook at Pennington, NJ	01400947	26.7	1965-72
Honey Branch near Rosedale, NJ	01400970	3.83	1957-59,1971-72
Stony Brook at Clarksville, NJ	01401100	46.5	1959-64
Duck Pond Run at Clarksville, NJ	01401200	3.74 (revised)	1954-55,1960-67
Beden Brook near Hopewell, NJ	01401520	6.67	1965-72
Rock Brook at Blawenburg, NJ	01401590	8.02	1962-67,1971-72
Pike Run near Rocky Hill, NJ	01401700	22.2	1959-63,1971-72
Ten Mile Run near Blackwells Mills, NJ	01401800	4.36	1960-64,1971-72
Six Mile Run at Blackwells Mills, NJ	01401900	16.1	1960-67,1971-72
Royce Brook at Manville, NJ	01402700	11.7	1960-64
East Branch Middle Brook at Martinsville, NJ	01403100	8.45	1959-64
Bound Brook at South Plainfield, NJ	01403330	9.55	1979-86
Cedar Brook at South Plainfield, NJ	01403350	7.10	1979-86
Ambrose Brook at Middlesex, NJ	01404060	13.9	1979-91
Mill Brook at Highland Park, NJ	01404180	1.41	1979-86
Lawrence Brook at outlet of Davidsons Mill Pond, NJ	01404300	12.2	1973-77
Oakeys Brook near Patricks Corner, NJ	01404400	4.75	1973-77
Beaverdam Brook near Patricks Corner, NJ	01404700	1.51	1973-77
Milford Brook at Englishtown, NJ	01405170	4.86	1982,1984-91
McGellairds Brook at Englishtown, NJ	01405180	14.9	1982,1984-91
Pine Brook at Clarks Mills, NJ	01405210	4.66	1982,1984-91
Matchaponix Brook near Englishtown, NJ	01405240	29.1	1978-88
Barclay Brook near Englishtown, NJ	01405285	4.94	1977-88
Manalapan Brook near Manalapan, NJ	01405335	16.0	1979-88
Manalapan Brook at Bridge Street at Spotswood, NJ	01405440	43.9	1973-76
Iresick Brook at East Spotswood, NJ	01405470	2.29	1973-77
East Creek at North Centerville, NJ	01407055	2.56	1969,1986-93
Waachaack Creek at Middle Road near Keansburg, NJ	01407070	4.30	1987-93
Town Brook at Church Street at New Monmouth, NJ	01407102	3.35	1987-93

DISCONTINUED LOW-FLOW STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Hop Brook at Holmdel, NJ	01407200	5.72	1969-74,1989
Willow Brook at Holmdel, NJ	01407250	6.88	1969-74,1989
Big Brook at Vanderburg, NJ	01407300	8.41	1969-74,1989
Yellow Brook at Colts Neck, NJ	01407400	9.71	1969-74,1989
Mine Brook at Colts Neck, NJ	01407450	5.48	1969-74,1989
Pine Brook at Tinton Falls, NJ	01407520	12.1	1969-74,1989
Poricy Brook at Red Bank, NJ	01407532	2.54	1987-93
Shark River at Glendola, NJ	01407700	9.14	1956-63,1966
Wreck Pond Brook near Spring Lake, NJ	01407800	7.00	1956-63,1966
Debois Creek at Adelphia, NJ	01407860	7.21	1966,1969-74
Yellow Brook at West Farms, NJ	01407890	3.57	1966,1969-74
Manasquan River at West Farms, NJ	01407900	33.5	1959-66,1973
Timber Swamp Creek near Farmingdale, NJ	01407970	3.38	1964-72
Mingamahone Brook at Squankum, NJ	01408020	10.7	1966,1969-74
North Branch Metedeconk River at Lakewood, NJ	01408100	19.4	1959-63,1966
Toms River at Whitesville, NJ	01408300	45.2	1959-63,1966
Union Branch at Lakehurst, NJ	01408440	19.0	1960-64
Manapaqua Brook at Lakehurst, NJ	01408460	6.32	1960-64
Ridgeway Branch near Lakehurst, NJ	01408490	28.2	1959-63
Webbs Mill Branch near Whiting, NJ	01408800	2.92	1973-77
Webbs Mill Branch tributary near Whiting, NJ	01408810	.53	1973-77
North Branch Forked River near Forked River, NJ	01409050	13.4	1961-65
South Branch Forked River near Forked River, NJ	01409080	1.28	1968-74
Oyster Creek near Waretown, NJ	01409100	9.95	1961-65
Mill Creek near Manahawkin, NJ	01409150	10.4	1961-67
Fourmile Branch near Manahawkin, NJ	01409200	5.24	1961-67
Cedar Run near Manahawkin, NJ	01409250	3.34	1961-67
Mullica River at outlet Atsion Lake at Atsion, NJ	01409387	26.7	1980-81,1985-89
Mill Branch near Tuckerton, NJ	01409300	4.89	1961-67
Mullica River tributary near Atsion, NJ	01409395	4.10	1975-77
Wildcat Branch at Chesilhurst, NJ	01409403	1.03	1974-77
Sleeper Branch near Atsion, NJ	01409404	18.2	1975-77
Clark Branch near Atsion, NJ	01409405	7.12	1975-77
Sleeper Branch at Batsto, NJ	01409406	36.1	1975-77
Pump Branch near Blue Anchor, NJ	01409407	6.20	1974-77
Blue Anchor Brook near Blue Anchor, NJ	01409409	3.01	1974-77
Albertson Brook near Hammonton, NJ	01409410	19.3	1975-77
Nescochague Creek at Pleasant Mills, NJ	01409411	43.8	1975-77
Springers Brook near Indian Mills, NJ	01409450	12.6	1959-63,1977
Springers Brook near Atsion, NJ	01409460	21.2	1975-77
Landing Creek at Philadelphia Ave at Egg Harbor City, NJ	01409575	4.86	1974-77
West Branch Wading River near Chatsworth, NJ	01409730	44.8	1975-77
Tulpehocken Creek near Jenkins, NJ	01409780	21.9	1975-77
West Branch Wading River near Harrisville, NJ	01409800	83.9	1957-63
Oswego River at Oswego Lake, NJ	01409970	61.4	1975-77

DISCONTINUED LOW-FLOW STATIONS--Continued

Station name	Station number	Drainage area (mi²)	Period of record (water years)
West Branch Bass River near New Gretna, NJ	01410200	6.54	1969-74
Clarks Mill Stream at Port Republic, NJ	01410215	8.61	1986-93
Morses Mill Stream at Port Republic, NJ	01410225	8.25	1986-93
Great Egg Harbor River at Berlin, NJ	01410775	1.88	1964-74
Great Egg Harbor River near Sicklerville, NJ	01410784	15.1	1971-77
Fourmile Branch near Williamstown, NJ	01410800	5.34	1959-64,1971
Penny Pot Stream near Folsom, NJ	01411020	5.35	1968-72
Hospitality Branch near Cecil, NJ	01411040	8.30	1990-92
Whitehall Branch near Cecil, NJ	01411042	2.21	1990-92
Hospitality Branch at Berryland, NJ	01411053	20.0	1976-86
Deep Run at Weymouth, NJ	01411140	20.0	1976-86
Babcock Creek at Mays Landing, NJ	01411200	20.0	1959-63
English Creek near Scullville, NJ	01411250	3.80	1986-93
Tarkiln Brook near Head of River, NJ	01411299	7.40	1990-92
Mill Creek near Steelmantown, NJ	01411302	3.82	1990-91
Mill Branch near Northfield, NJ	01411305	7.47	1986-93
Mill Creek at outlet Magnolia Lk at Ocean View, NJ	01411351	2.28	1991-92
Mill Creek at Cold Spring, NJ	01411388	1.34	1991-92
Fishing Creek at Rio Grande, NJ	01411400	2.29	1965-72,1990-92
Green Creek at Green Creek, NJ	01411404	2.49	1965-72
Dias Creek near Cape May Court House, NJ	01411408	1.27	1965-73,1991-92
Bidwell Creek tributary near Cape May Court House, NJ	01411410	.41	1967-73,1990-92
Bidwell Creek trib. No. 2 near Cape May Court House, NJ	01411412	.19	1967-72
Goshen Creek at Goshen, NJ	01411418	.33	1967-72,1990-92
Dennis Creek trib No. 2 at Dennisville, NJ	01411428	4.00	1990-92
Sluice Creek at Clermont, NJ	01411430	.67	1967-72,1990-91
Sluice Creek near South Dennis, NJ	01411434	8.47	1991-92
Dennis Creek trib. No. 1 near Dennisville, NJ	01411438	2.74	1990-92
East Creek near Eldora, NJ	01411442	8.10	1990-92
West Creek at outlet Pickle Factory Pond near Eldora, NJ	01411445	11.9	1990-92
Still Run at Aura, NJ	01411450	3.21	1976-90
Scotland Run near Williamstown, NJ	01411460	3.96	1966,1990-92
Scotland Run at Fries Mill, NJ	01411461	9.25	1990-92
Scotland Run at Franklinville, NJ	01411462	14.8	1976-90
Muddy Run at Centerton, NJ	01411700	37.7	1976-84
Maurice River near Millville, NJ	01411800	191.0	1966-72
Mill Creek near Millville, NJ	01411850	15.1	1973-79
Buckshutem Creek near Laurel Lake, NJ	01411950	16.1	1976-84
Muskee River near Port Elizabeth, NJ	01412120	13.1	1969,1976-84
Cohansey River near Beals Mill, NJ	01412405	9.44	1976-84
Barrett Run near Bridgeton, NJ	01413010	7.02	1966,1976-84
Indian Fields Branch at Bridgeton, NJ	01413020	4.64	1976-84
Stow Creek at Jericho, NJ	01413050	8.00	1966-74
Canton Ditch near Canton, NJ	01413060	2.50	1959-63
Raccoon Ditch at Davis Mill, NJ	01413080	3.19	1976-84

DISCONTINUED LOW-FLOW STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Shimers Brook near Montague, NJ	01438400	7.07	1958-64,1966
Big Flat Brook near Hainesville, NJ	01439800	22.6	1959-64,1966
Big Flat Brook at Tuttles Corner, NJ	01439830	28.2	1963,1970-73
Little Flat Brook at Hainesville, NJ	01439900	7.73	1959-64
Vancampens Brook near Millbrook, NJ	01440100	7.27	1958-68
Stony Brook near Columbia, NJ	01442800	3.51	1958-68
Paulins Kill at Lafayette, NJ	01443300	33.0	1959-64,1966
Culvers Creek at Branchville, NJ	01443400	11.2	1959-64
Paulins Kill near Newton, NJ	01443450	69.0	1973-77
Paulins Kill at Paulins Kill, NJ	01443460	72.9	1973-77
Trout Brook near Middletown, NJ	01443475	24.0	1979-89
Honey Run near Ramseysburg, NJ	01445800	2.21	1982-90
Honey Run near Hope, NJ	01445900	10.3	1966-72
Pohatcong Creek at Carpentersville, NJ	01455300	57.1	1932,1952-64
Weldon Brook near Woodport, NJ	01455350	3.27	1965-69,1971-72
Beaver Brook near Woodport, NJ	01455360	2.79	1966-72
Weldon Brook at Hurdtown, NJ	01455370	8.10	1973-77
Musconetcong River at Stanhope, NJ	01455550	29.7	1973-76
Lubbers Run at Lockwood, NJ	01455780	16.3	1982-90, 1995
Hatchery Brook at Hackettstown, NJ	01456100	1.81	1966-72
Hakihokake Creek at Milford, NJ	01458100	17.2	1944,1958-64
Harihokake Creek near Frenchtown, NJ	01458400	9.75	1944,1958-65
Nishisakawick Creek at Frenchtown, NJ	01458600	11.0	1958-64
Little Nishisakawick Creek at Frenchtown, NJ	01458700	3.50	1958-65
Lockatong Creek near Raven Rock, NJ	01460900	23.2	1944,1958-64
Alexauken Creek near Lambertville, NJ	01461900	14.9	1944,1958-64
Moore Creek near Titusville, NJ	01462200	10.2	1958-64
Jacobs Creek at Somerset, NJ	01462800	13.3	1957-64
Shipetaukin Creek at Lawrenceville, NJ	01463650	4.48	1963-67
Shipetaukin Creek at Bakersville, NJ	01463670	8.96	1963-67
Shabakunk Creek at Ewingville, NJ	01463750	5.00	1963-67
West Branch Shabakunk Creek near Ewingville, NJ	01463790	4.56	1963-72
Miry Run at Robbinsville, NJ	01463830	4.02	1963-67
Miry Run at Mercerville, NJ	01463860	12.4	1963-67
Pond Run at Trenton, NJ	01463980	8.94	1963-69,1971-72
Crosswicks Creek near Cookstown, NJ	01464300	24.9	1966,1969-74
North Run at Cookstown, NJ	01464380	7.17	1966,1969-74
Lahaway Creek near Hornerstown, NJ	01464460	21.4	1966,1969-74
Miry Run at Holmes Mills, NJ	01464480	3.15	1966,1969-74
Doctors Creek at Allentown, NJ	01464515	17.2	1966,1968-72,1991-92
Blacks Creek at Mansfield Square, NJ	01464530	19.7	1966-72
Crafts Creek at Hedding, NJ	01464540	10.6	1959-63
Assiscunk Creek at Columbus, NJ	01464580	8.28	1959-63
Assiscunk Creek near Burlington, NJ	01464590	37.2	1966-74
Southwest Branch Rancocas Creek at Medford, NJ	01465880	47.2	1961-66,1973

DISCONTINUED LOW-FLOW STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Sharps Run at Medford, NJ	01465884	4.41	1982-90
Little Creek near Lumberton, NJ	01465898	19.2	1982-90
Southwest Branch Rancocas Creek at Eayrestown, NJ	01465900	76.2	1959-61
Parkers Creek near Mount Laurel, NJ	01467010	2.66	1964-72
Mill Creek at Willingboro, NJ	01467020	7.73	1959-64,1976
Pompeston Creek at Cinnaminson, NJ	01467057	5.74	1964-72
North Branch Pennsauken Creek at Maple Shade, NJ	01467070	13.0	1959-63
South Branch Pennsauken Creek at Maple Shade, NJ	01467080	8.13	1964-67
Newton Creek at Collingswood, NJ	01467305	1.32	1964-72
Newton Creek at West Collingswood, NJ	01467312	3.48	1964-72
S. Br. Newton Creek at Glover Ave at Haddon Heights, NJ	01467315	.52	1968-74
S. Br. Newton Creek at Haddon Heights, NJ	01467317	.63	1964-67
N. Br. Big Timber Creek at Laurel Springs, NJ	01467350	6.55	1959-71
Mantua Creek at Glassboro, NJ	01474950	1.20	1965-66,1974-77
Mantua Creek at Greentree Road, at Glassboro, NJ	01474970	2.78	1965-66,1974-77
Raccoon Creek near Mullica Hill, NJ	01477100	10.1	1959-63
South Branch Raccoon Creek near Mullica Hill, NJ	01477118	8.30	1966-72
Salem River at Sharptown, NJ	01482520	27.3	1966-72,1974-75
Major Run at Sharptown, NJ	01482530	3.04	1966-72,1974-75
Deep Run near Alloway, NJ	01483010	5.30	1977-84

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with Federal, State, and local agencies, collects a large amount of data pertaining to the water resources of New Jersey each water year. These data, accumulated over 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 USGS, the data are published annually in this report series, titled "Water Resources Data-New Jersey."

This report series includes records of stage, discharge, and water quality in streams; stage, contents, and water quality in lakes and reservoirs; and water levels and water quality in ground-water wells. This volume contains records of water discharge at 92 gaging stations; tide summaries at 7 gaging stations; stage-only at 15 gaging stations; stage and contents at 35 lakes and reservoirs; and water quality at 102 surface-water stations. Also included are stage and discharge for 62 crest-stage partial-record stations and stage-only at 17 tidal crest-stage gages. Locations of these sites are shown in figures 11 and 12. Additional water data were collected at various sites that are not part of the systematic data-collection program. Discharge measurements were made at 73 low-flow partial-record stations. Miscellaneous data were collected at 67 discharge measuring sites and 45 water-quality sites. The data in this report represent that part of the National Water Information System (NWIS) data collected by the USGS and cooperating Federal, State, and local agencies in New Jersey.

This series of annual reports for New Jersey began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. For water years 1975 through 1989, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1977 water year, these data were published in two volumes based on drainage basins. Beginning with the 1990 water year, the format was changed to include all surface-water discharge and surface-water quality records in Volume 1 and all ground-water level and ground-water quality records in Volume 2.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for New Jersey were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Part 1B." For water years 1961 through 1970, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for water years 1941 through 1970 were published annually under the title "Quality of Surface Waters of the United States," and water levels for water years 1935 through 1974 were published under the title "Ground-Water Levels in the United States." The above-mentioned Water-Supply Papers can be consulted in the libraries of the principal cities of the United States and can be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, CO 80225-0286, (303) 202-4610.

Publications similar to this report are produced annually by the USGS for all States. These reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NJ-97-1." For archiving and general distribution purposes, the reports for water years 1971 through 1974 also are identified as water-data reports. Water-data reports are available for purchase in paper copy or in microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports can be obtained from the District Chief, USGS, New Jersey District, at the address given on the back of the title page of this report or by telephone ((609) 771-3900).

COOPERATION

The U.S. Geological Survey and agencies of the State of New Jersey have had joint-funding agreements for the collection of water-resource records since 1921. Organizations that assisted in collecting the data in this report through joint-funding agreements with the USGS are--

New Jersey Department of Environmental Protection, Robert C. Shinn, Jr., Commissioner

New Jersey Department of Transportation, John J. Haley, Jr., Commissioner

New Jersey Water Supply Authority, Thomas G. Baxter, Executive Director

North Jersey District Water Supply Commission, Jerry Notte, General Manager

Passaic Valley Water Commission, Joseph A. Bella, Executive Director

City of New Brunswick, Shawn Maloney, Director, Water Utility Department

County of Bergen, Quenten Weist II, Director of Public Works and County Engineer

County of Gloucester, Charles E. Romick, Director of Planning

County of Mercer, James Lambert, Executive Director, Mercer County Improvement Authority

County of Morris, Alexander A. Slavin, Chairman, Morris County Municipal Utilities Authority

County of Somerset, Michael J. Amorosa, County Engineer

Pinelands Commission, Terrance D. Moore, Executive Director

Township of West Windsor, Elaine W. Ballai, Chairman of Environmental Commission

Delaware River Basin Commission, Gerald M. Hansler, Executive Director

Funding assistance was provided by the U.S. Army Corps of Engineers, for the collection of records at 8 surface-water stations, and by the U.S. Army Armament Research and Development Center for the collection of records at 3 surface-water stations. In addition, several stations were operated fully or partially with funds appropriated directly to the USGS. Funding also was supplied by the following Federal Energy Regulatory Commission licensees: Jersey Central Power and Light Company, Passaic Valley Water Commission, and DAI Great Falls, Inc. Assistance was provided by the National Weather Service and the National Ocean Service.

The following organizations aided in collecting records:

New Jersey Department of Environmental Protection; Municipalities of Jersey City, Newark, New Brunswick, and Spotswood; Elizabethtown Water Company; Ewing-Lawrence Sewage Authority; United Water New Jersey; New Jersey-American Water Company; Rockaway Valley Regional Sewerage Authority; and Jersey Central Power and Light Company.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Precipitation and Reservoir Contents

Precipitation in October, November, and December helped to make 1996 the wettest calendar year since records began in 1895 (David Robinson, State Climatologist, Rutgers University, oral commun., 1998). Most of the maximum peak discharges for streams throughout the State occurred on October 20 as a result of the storm of October 19-20. December was the wettest December on record, with a statewide average precipitation of 7.96 inches. Precipitation was near normal in January and February. Spring was highlighted by a significant snowfall on March 31 and April 1, when as much as 20 inches of snow fell over northern portions of the State. The summer dryness was interrupted when central New Jersey received as much as 6 inches of precipitation on July 24-25. The next major storm occurred on August 20-21, when southeastern New Jersey received heavy rains that locally amounted to more than 13 inches. Precipitation in September was below average.

Water-year 1997 precipitation totals were above normal at the Trenton, Newark, and Atlantic City National Weather Service observer stations. The Trenton station recorded 46.7 inches of precipitation, which is 107 percent of the 30-year reference-period (1961-90) mean. The Newark station recorded 48.22 inches, which is 110 percent of the 30-year mean. The Atlantic City station recorded 57.40 inches, which is 142 percent of the 30-year mean. Figure 1 shows monthly precipitation at the three National Weather Service stations compared with the 30-year means.

Combined usable contents of the 13 major water-supply reservoirs in New Jersey were 67.0 billion gallons at the end of September 1996, which is 127 percent of the 30-year mean (normal) contents for the end of September, and 83.3 percent of capacity. Contents increased to a maximum of 85.3 billion gallons by the end of December, which is 142 percent of normal contents for the end of December, and 106 percent of capacity. By September 30, 1997, the contents had declined to the lowest capacity for the water year, 54.5 billion gallons, which is 103 percent of normal contents for the end of September, and 67.9 percent of capacity (fig. 2). The term "usable contents" is used here as a measure of the total volume of water that can be removed from a reservoir without pumping, and does not account for the volume of water below the bottom of the lowest outlet or pipe (sometimes referred to as dead storage).

Streamflow

Most of the maximum peak discharges for New Jersey streams occurred as a result of severe storms after the "nor'easter" of October 19-20. The President declared New Jersey a major disaster area. Property damage and flooding were most severe in Hudson, Middlesex, Morris, Somerset and Union Counties. Federal and local emergency management agencies were activated and the first game of the World Series was postponed. Flooding and property damage also were prevalent in early and mid-December as a result of above-average rainfall. Strong winds and heavy rainfall from Tropical Storm Danny, July 24-25, came after the summer's first heat wave. Flooding occurred and trees were downed in central New Jersey and parts of northern and southern New Jersey; coastal counties experienced minor flooding during high tides. Another storm brought more than 13 inches of rain to some parts of southern New Jersey on August 20-21. Atlantic County was declared a major disaster area after more than 50 million dollars in damage to dams, bridges, roads, and other property was reported. Surrounding counties also reported substantial damage from this storm.

Streamflow at the index station for northern New Jersey (South Branch Raritan River near High Bridge) averaged 161 ft^3/s for the water year, which is 130 percent of the 1919-97 average. Streamflow at the index station for southern New Jersey (Great Egg Harbor River at Folsom) averaged 108 ft^3/s, which is 125 percent of the 1926-97 average. The observed annual mean discharge of the Delaware River at Trenton was 14,680 ft^3/s, which is 125 percent of the 1913-97 average. The Delaware River is highly regulated by reservoirs and diversions. Monthly mean discharge at each of these index gaging stations during the current water year and the long-term normal monthly discharge are shown in figure 3. Annual mean discharge at each of these index gaging stations and the mean annual discharge for the period of record are shown in figure 4. Peak discharges at selected streamflow-gaging stations in the State are listed in table 1.

Water Quality

Normal and above-normal streamflows during October through April at the three index stations -- High Bridge, Folsom, and Trenton -- resulted in generally below-normal concentrations of dissolved solids, which were found to be in the 25th to 50th percentile range of concentrations at those stations. Exceptions were measured at High Bridge and Trenton during January when concentrations of dissolved solids were higher than normal as a result of the presence of roadway de-icing compounds. Normal and below-normal streamflows during May through September at High Bridge and Trenton and during May through July and September at Folsom resulted in above-normal concentrations of dissolved solids which were found to be in the 75th to 95th percentile range of concentrations at those stations. Lower streamflows cause decreased dilution and, in turn, increased concentrations; higher streamflows cause increased dilution and, in turn, decreased concentrations. Dilution of dissolved solids generally indicates an improvement in overall water

Table 1. Instantaneous peak discharge for water year 1997 and maximum instantaneous peak discharge for period of record prior to the 1997 water year at selected sites in New Jersey

[>, greater than; ft^3/s, cubic feet per second]

Station number	Station name	Drainage area (square miles)	Date	Maximum instantaneous peak discharge, water year 1997 (ft^3/s)	Approximate recurrence interval (years)	Date	Maximum instantaneous peak discharge prior to water year 1997 (ft^3/s)
01379000	Passaic River near Millington	55.4	10/20	2,290	>100	08/29/71	2,170
01380500	Rockaway River above Reservoir at Boonton	116	10/20	3,070	>5	04/05/84	5,590
01387500	Ramapo River near Mahwah	120	10/20	3,300	>2	04/05/84	15,500
01389500	Passaic River at Little Falls	762	10/22	8,180	>2	10/10/03	31,700
01396500	South Branch Raritan River near High Bridge	65.3	10/20	4,730	>25	01/25/79	6,910
01400000	North Branch Raritan River near Raritan	190	10/19	29,100	>100	08/28/71	28,600
01402000	Millstone River at Blackwells Mills	258	10/20	13,400	>10	08/28/71	22,200
01403060	Raritan River below Calco Dam at Bound Brook	785	10/20	40,100	>50	08/28/71	46,100
01408000	Manasquan River at Squankum	44.0	10/20	1,480	>5	09/21/38	2,940
01408500	Toms River near Toms River	123	10/21	1,000	>2	09/23/38	2,000
01410150	East Branch Bass River near New Gretna	8.11	08/21	1,130	>100	07/14/91	198
01411000	Great Egg Harbor River at Folsom	57.1	12/16	407	>2	09/03/40	1,440
01411300	Tuckahoe River at Head of River	30.8	08/21	1,340	>500	05/31/84	510
01411500	Maurice River at Norma	112	12/17	660	>2	09/02/40	7,360
01438500	Delaware River at Montague	3,480	12/02	67,100	>2	08/19/55	250,000
01440000	Flat Brook near Flatbrookville	64.0	10/20	1,810	>2	08/19/55	9,560
01445500	Pequest River at Pequest	106	10/20	1,500	>5	01/25/79	2,130
01463500	Delaware River at Trenton	6,780	12/03	101,000	>2	08/20/55	329,000
01464000	Assunpink Creek at Trenton	90.6	10/19	2,770	>10	07/21/75	5,450
01467000	North Branch Rancocas Cr. at Pemberton	118	12/15	775	>2	08/21/39	1,730

quality because concentrations of undesirable substances, such as trace elements, nutrients, organic compounds, bacteria, and nuisance aquatic organisms, typically are decreased as well.

The degree of dilution is apparent when monthly mean values of specific conductance (SC), which is directly related to dissolved-solids concentration, for water year 1997 are compared with mean SC values from an earlier period. Monthly mean SC values at the continuous monitor station on the Delaware River at Trenton, the downstream-most station in a large drainage area in west-central New Jersey and parts of New York and Pennsylvania, in 1997 are compared with the mean monthly SC values for 1968-96 in figure 5. SC values were below long-term mean monthly values during the period of above-normal streamflow, October through April, except during February, when SC values were higher than long-term mean monthly values as a result of the effects of roadway de-icing compounds. December's mean streamflow of 42,900 ft^3/s was a new maximum value for the period of record. December's mean SC of 119 µs/cm was a new minimum value for the period of record. The yearly minimum instantaneous value of 72 µs/cm occurred in November, just after the peak flow caused by a large rainfall. Monthly mean SC values were above long-term values during the period of normal and below-normal streamflow, June through September. During August, a new maximum monthly-mean SC of 243 µs/cm was measured along with the year's minimum monthly-mean streamflow of 3,820 ft^3/s. The yearly maximum instantaneous SC value of 283 µs/cm occurred during August.

All monthly mean water-temperature values for the continuous monitor on the Delaware River at Trenton during water year 1997 were within the range of historical monthly mean values (fig. 6). Streamflow magnitude does not affect water temperature directly, but events that affect streamflow also affect water temperature. Lower than period-of-record mean monthly values of water temperature recorded in October-November and April-May were caused by unseasonably cool fall and spring seasons, respectively. Some air temperatures in May were as low as -2 to 6 °C, with Statewide departures from monthly mean air temperatures in the range of -1.3 to -4.3 °C (National Oceanic and Atmospheric Administration, Climatological Data of New Jersey, Volume 102, Number 05). Higher than period-of-record mean monthly values of water temperature were recorded in December and February. Those in December were caused by the same warm, moist air masses that spawned heavy rainfalls and led to a new maximum monthly mean streamflow. Those in February were caused by week-long spells of unseasonably warm weather with air temperatures in the range of 10 to 22 °C. Water bodies in New Jersey respond almost immediately to changes in ambient air temperatures. Temperatures of large rivers such as the Delaware can change 5 to 10 °C in just a few days when divergent air masses engulf the area.

The Delaware River's yearly minimum instantaneous water temperature of 0.0 °C was measured on several days during January. The yearly maximum of 31.5 °C was measured in July.

Dissolved-oxygen concentration (DO) generally exhibits an immediate inverse relation with water temperature. As water temperature decreases, oxygen concentration increases; as water temperature increases, oxygen concentration decreases. DO varies seasonally in all water bodies in New Jersey, with yearly maximums occurring in winter and yearly minimums occurring in summer. DO extremes (daily, monthly, or yearly) do not necessarily occur at the same time as water-temperature extremes. Photosynthesis is the primary variable affecting the DO-temperature relation; water clarity and strength and duration of sunlight, in turn, affect photosynthesis. The extreme monthly median DO values at the continuous monitor on the Delaware River at Trenton during the 1997 water year were within the range of historical (1968-96) extreme monthly median values (fig. 7). The highest monthly median of the daily maximum DO (14.7 mg/L) and the yearly maximum instantaneous DO (15.9 mg/L) were in February. The monthly median of the daily minimum DO was lowest (7.4 mg/L) in July. The yearly minimum instantaneous DO (6.6 mg/L) occurred on several days in July and August. The greatest difference between the monthly median of daily maximums and daily minimums (3.9 mg/L) was in June as a result of aquatic photosynthesis and respiration.

Whole-Water-Recoverable Metals in New Jersey Streams

Analysis for whole-water-recoverable metals in the surface water of a limited number of New Jersey streams has been ongoing since 1973. In water year 1976 the number of stations at which water was sampled for metals increased to approximately 60 percent of the water-quality stations and the frequency of sampling increased to twice a year. Water at 60 percent of the stations was sampled for whole-water-recoverable metals in the October-November period, and water at a different 60 percent of the stations (with some duplication) was sampled for metals in the May-June period. This selection process and sampling frequency continued through the current water year. Historical data from specific stations can be found in previous volumes of Water Resources Data for New Jersey.

The protocol for the collection of samples for analysis for whole-water-recoverable metals has evolved over the years. The current version, adopted by the New Jersey District during October 1991, requires more thorough cleaning of collection and compositing equipment and requires the use of sampling equipment that will not contribute to the contamination of the sample. (See section *Dissolved Trace-Element Concentrations* under the heading *EXPLANATION OF THE RECORDS.)* The protocol continues to be revised as new equipment and procedures are developed, tested, and adopted.

Water-quality data presented in the graphs in figure 8 are the results of whole-water-recoverable metals analysis of 47 samples collected during October-November 1996 and 47 samples collected during May-June 1997. These 94 samples were collected at 74 of the 98 water-quality-sampling stations distributed throughout the State (fig. 8C). (Refer to *SURFACE WATER STATIONS IN DOWNSTREAM ORDER* in the Contents for the page on which the water-quality records for a particular station can be found; those stations sampled for whole-water-recoverable metals are designated w.) The detection frequency of whole-water-recoverable arsenic, chromium, copper, lead, and nickel are presented in figure 8A. A detected value is one that is reported to be greater than or equal to the USGS National Water-Quality Laboratory's minimum reporting level. There were no detections of beryllium, cadmium, mercury, or selenium -- that is, all values of those constituents were reported to be less than the minimum reporting level (1 μg/L). Boron, iron, manganese, and zinc, although frequently detected, are not shown because they are commonly found in natural waters. Summary statistics were calculated on the measured values and are presented in figure 8B. Concentrations reported at or below the minimum reporting level (1 μg/L) are included in the summary statistics. The median whole-water-recoverable concentrations of arsenic, chromium, and lead are <1 μg/L; those of copper and nickel are 2 μg/L, and 1 μg/L, respectively.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 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 human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO2 emis-

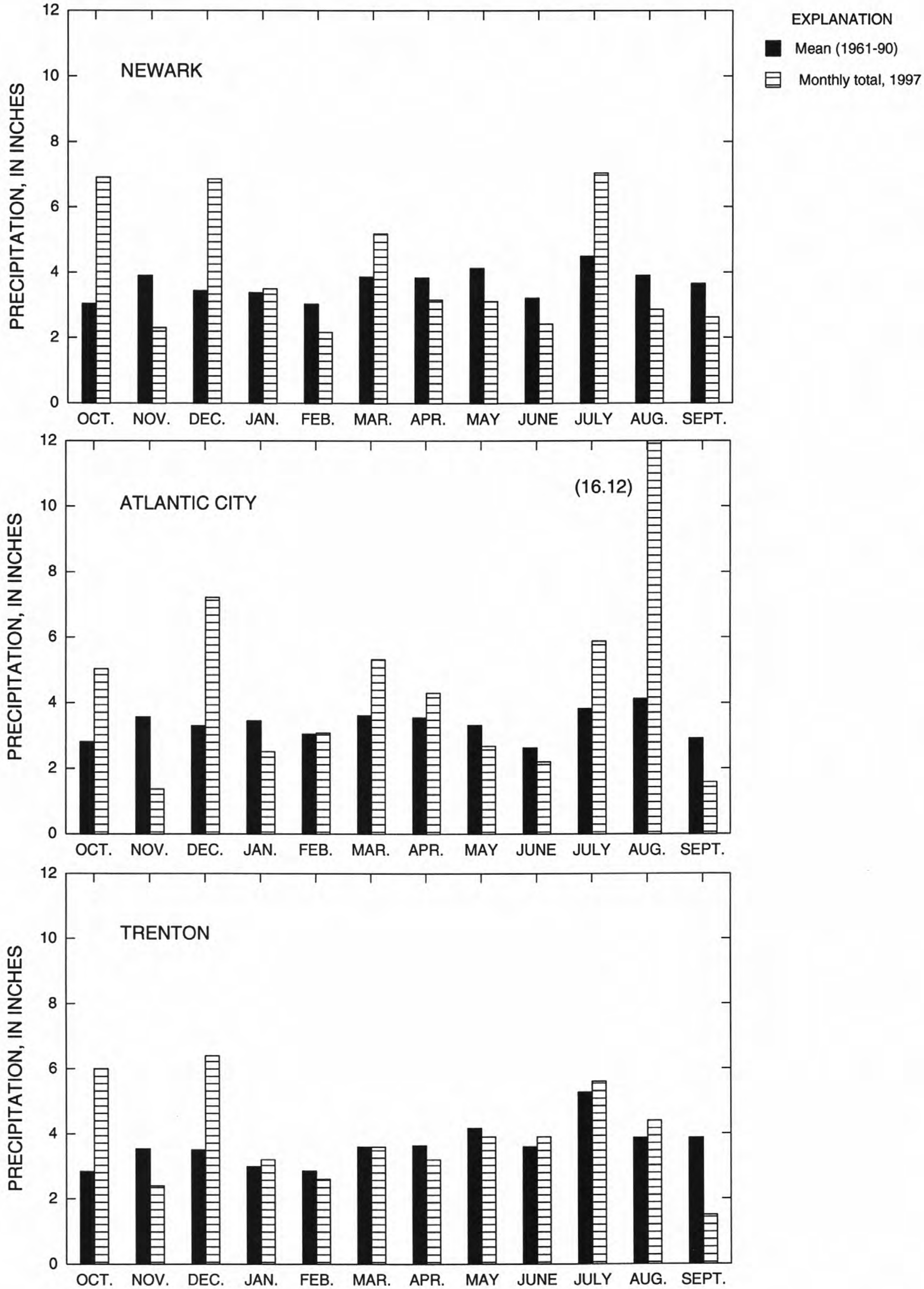
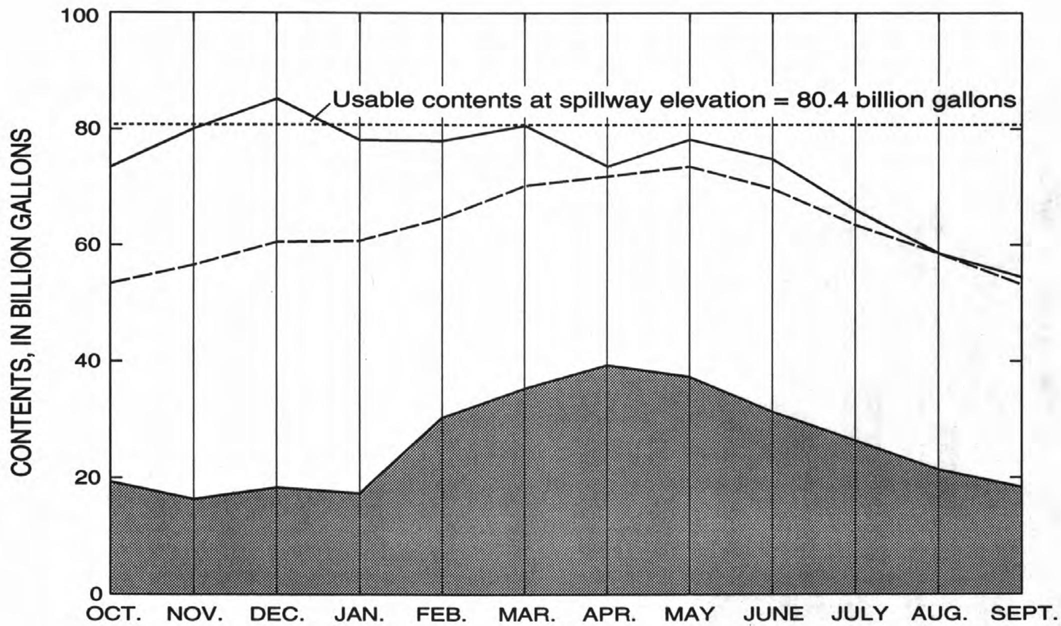


Figure 1. Monthly precipitation at three National Weather Service locations.

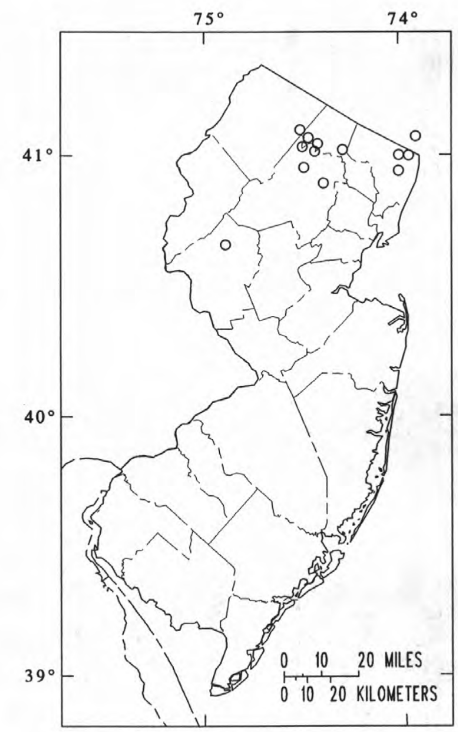


EXPLANATION

Shaded area indicates lowest monthly usable contents for reference period

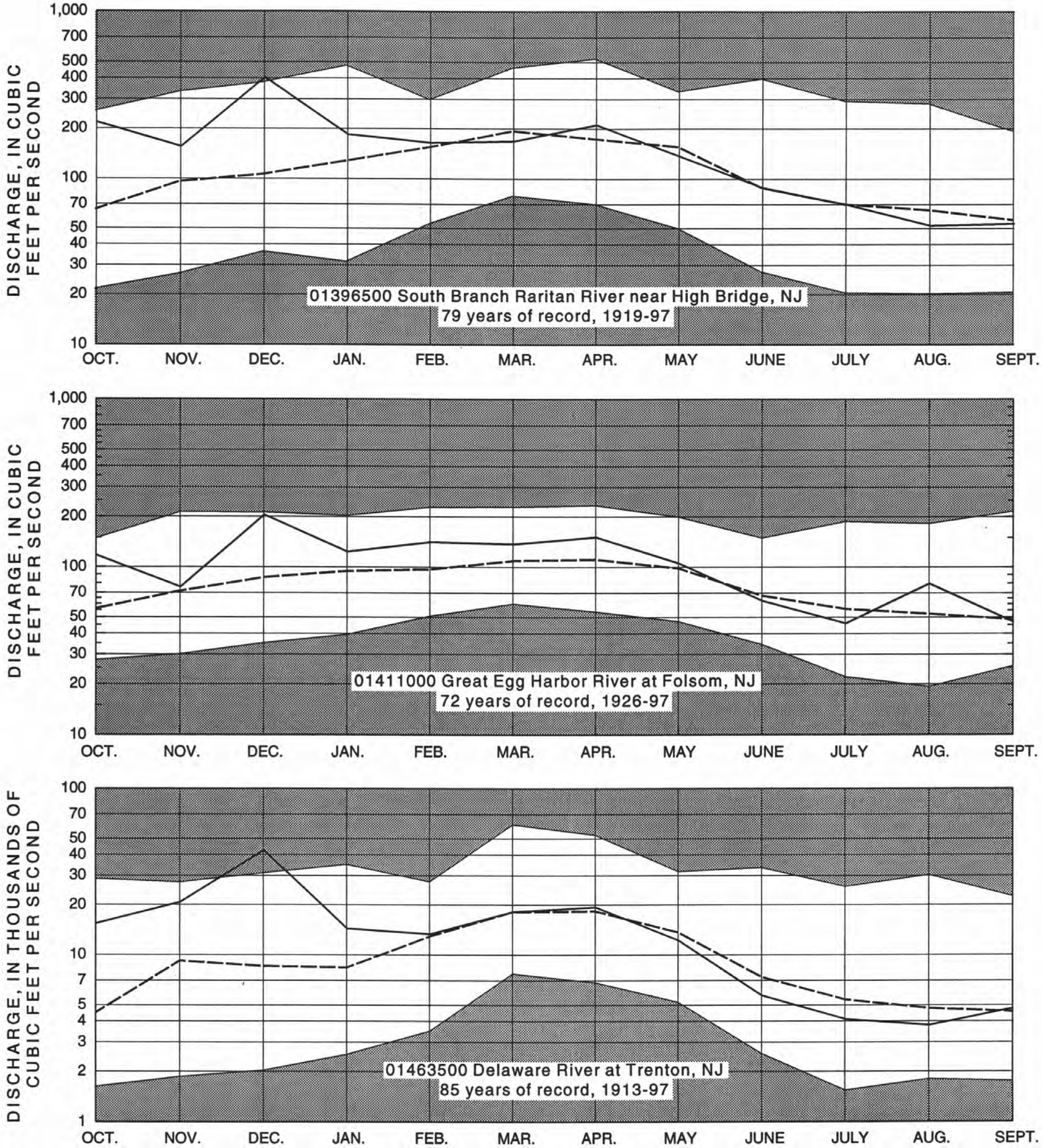
Mean usable contents, 1961-90

Month-end usable contents, 1997 water year



Map showing locations of reservoirs

Figure 2. Combined usable contents of 13 major water-supply reservoirs.



EXPLANATION

UNSHADED AREA--Indicates range between highest and lowest mean recorded for the month, prior to 1997 water year

BROKEN LINE--Indicates normal (median of the monthly means) for the standard reference period, 1961-90

SOLID LINE--Indicates observed monthly mean flow for the 1997 water year

Figure 3. Monthly mean discharge at index gaging stations.

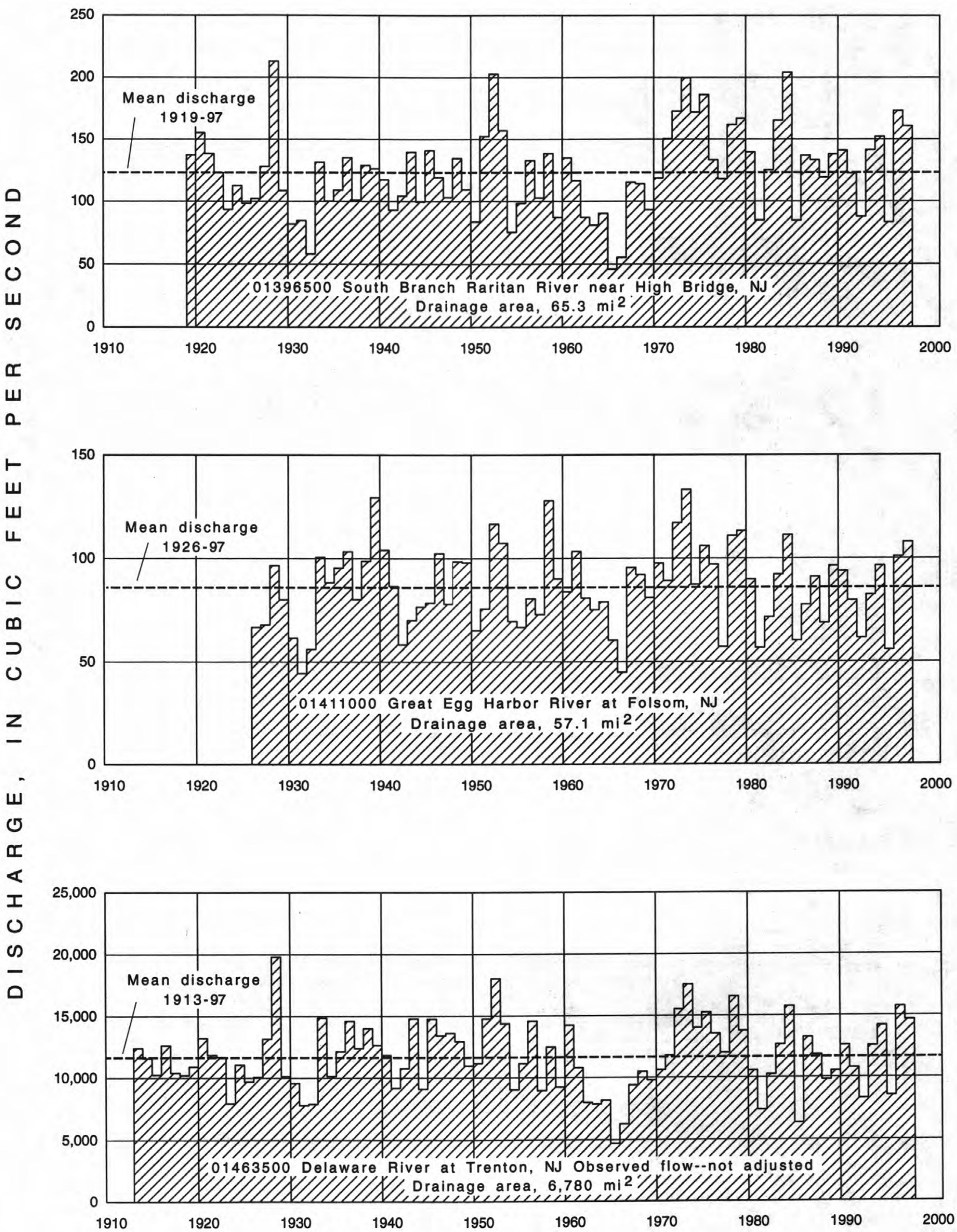
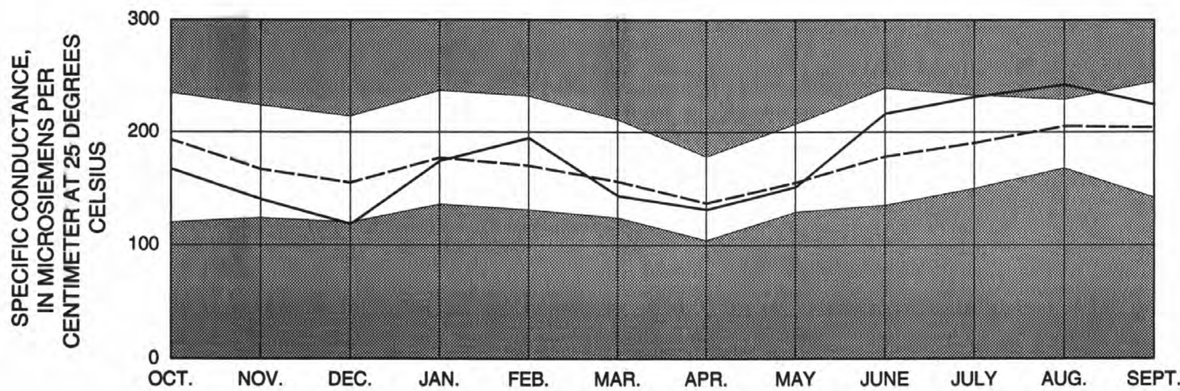


Figure 4. Annual mean discharge at index gaging stations.



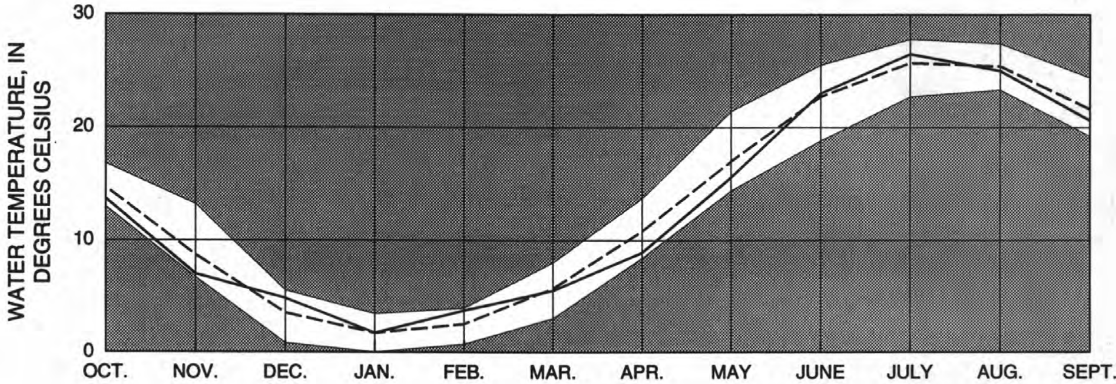
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly mean values and the lowest monthly mean values, water years 1968-96.

SOLID LINE--Indicates the monthly mean values for water year 1997.

BROKEN LINE--Indicates the mean monthly values for water years 1968-96.

Figure 5. Monthly mean specific conductance at Delaware River at Trenton, New Jersey.



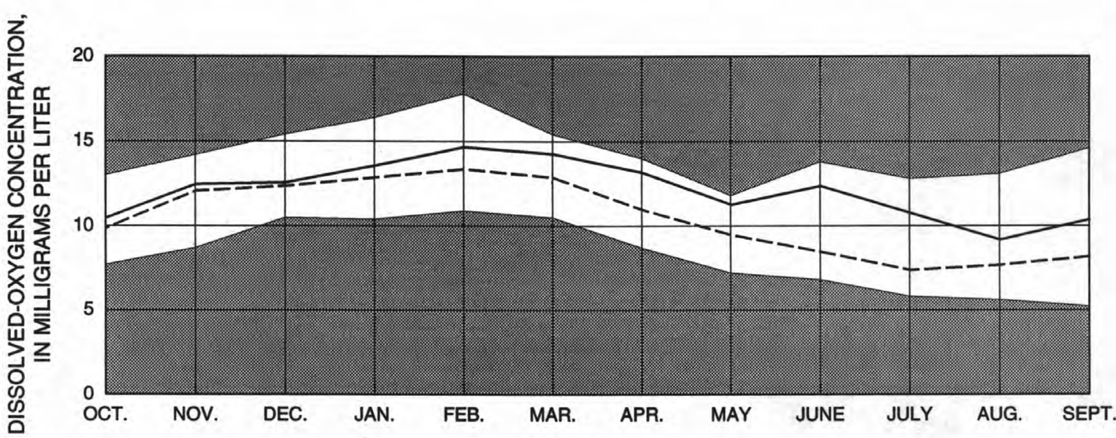
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly mean values and the lowest monthly mean values, water years 1968-96.

SOLID LINE--Indicates the monthly mean values for water year 1997.

BROKEN LINE--Indicates the mean monthly values for water years 1968-96.

Figure 6. Monthly mean water temperature at Delaware River at Trenton, New Jersey.



EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly median of daily maximum values and the lowest monthly median of daily minimum values, water years 1968-96.

SOLID LINE--Indicates the monthly median of daily maximum values for water year 1997.

BROKEN LINE--Indicates the monthly median of daily minimum values for water year 1997.

Figure 7. Monthly medians of daily maximum and minimum dissolved-oxygen concentrations at Delaware River at Trenton, New Jersey.

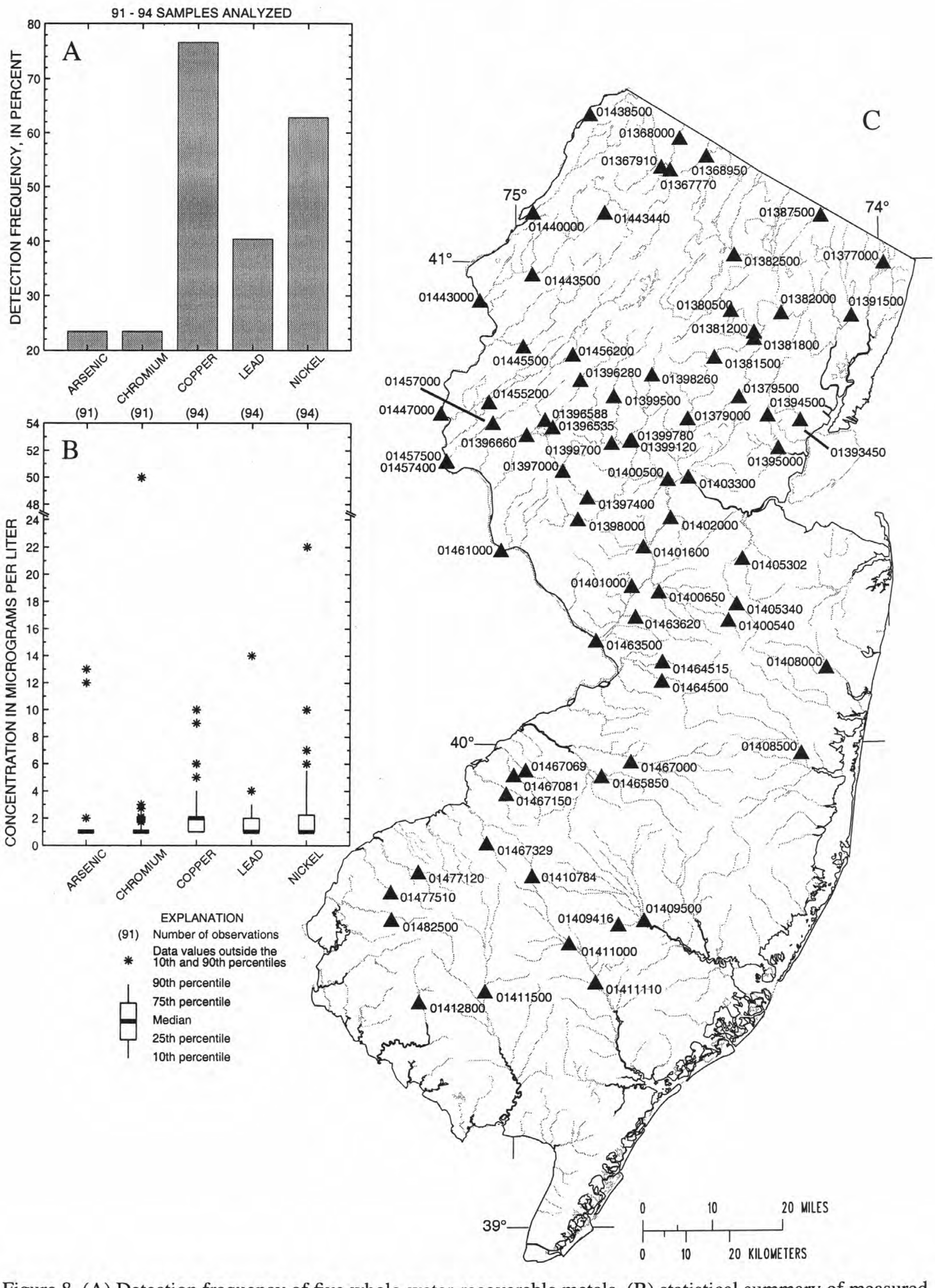


Figure 8. (A) Detection frequency of five whole-water-recoverable metals, (B) statistical summary of measured concentrations of five whole-water-recoverable metals, and (C) locations of whole-water-recoverable metals sampling stations for 74 streams in New Jersey.

sions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO2 and NOx scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

http://nadp.nrel.colostate.edu/NADP

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Long Island-New Jersey Coastal Plain (LINJ) NAWQA fixed stations published in this report are: Passaic River at Two Bridges, NJ (01382000); Saddle River at Ridgewood, NJ (01390500); Neshanic River at Reaville, NJ (01398000); Stony Brook at Princeton, NJ (01401000); Raritan River at Queens Bridge at Bound Brook, NJ (01403300); Bound Brook at Middlesex, NJ (01403900); and Great Egg Harbor River near Sicklerville, NJ (01410784).

Water-quality data collected at 45 additional sites for the LINJ NAWQA study during two synoptic surveys are published in this report in the section titled "Water Quality at Miscellaneous Sites." These sites are Wallkill River near Sussex, NJ (01367770); Passaic River near Millington, NJ (01379000); Passaic River near Chatham, NJ (01379500); Rockaway River at Longwood Valley, NJ (01379680); Rockaway River above reservoir at Boonton, NJ (01380500); Whippany River downstream from Tingley Road near Brookside, NJ (01381295); Whippany River at Morristown, NJ (01381500); Whippany River at Pine Brook, NJ (01381800); Pequannock River at Riverdale, NJ (01382800); Wanaque River near Awosting, NJ (01383505); Wanaque River at Pompton Lakes, NJ (01387041); Pequannock River at Pompton Lakes, NJ (01387042); Saddle River at Upper Saddle River, NJ (01390450); Hohokus Brook downstream from West Cresent Avenue at Allendale, NJ (01390815); Saddle River at Lodi, NJ (01391500); Elizabeth River at Hillside, NJ (01393400); Rahway River near Springfield, NJ (01394500); South Branch Raritan River at Arch Street at High Bridge, NJ (01396535); Spruce Run near Glen Gardner, NJ (01396588); Mulhockaway Creek at Van Syckel, NJ (01396660); South Branch Raritan River upstream from Route 523 at Darts Mills, NJ (01397295); Lamington River near Pottersville, NJ (01399500); Lamington River at Burnt Mills, NJ (01399780); North Branch Raritan River near Raritan, NJ (01400000); Beden Brook near Rocky Hill, NJ (01401600); Bound Brook at Woodbrook Road near South Plainfield, NJ (01403320); Bound Brook tributary at South Plainfield, NJ (01403355); Bound Brook near South Plainfield, NJ (01403360); Bound Brook upstream from Green Brook at Middlesex, NJ (01403390); Green Brook near Berkeley Heights, NJ (01403392); Blue Brook near Mountainside, NJ (01403393); Green Brook at Plainfield, NJ (01403500); Green Brook at Green Brook, NJ (01403800); Toms River near Toms River, NJ (01408500); Great Egg Harbor River at Weymouth, NJ (01411110); Maurice River at Norma, NJ (01411500); Muddy Run at Elmer, NJ (01411650); Parvin Branch at South Orchard Road at Vineland, NJ (01411790); Cohansey River at Seeley, NJ (01412800); Flat Brook at Flatbrookville, NJ (01440010); Paulins Kill upstream from Route 206 at Lafayette, NJ (01443290); Musconetcong River at Hampton, NJ (01456600); Doctors Creek at Allentown, NJ (01464515); South Branch Big Timber Creek at Blackwood Terrace, NJ (01467329); and Mantua Creek at Pitman, NJ (01475000).

Additional information about the NAWQA Program is available through the world wide web at:

http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 1997 water year that began October 1, 1996, and ended September 30, 1997. 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 and surface-water-quality data. The locations of the stations where the data were collected are shown in figures 13 and 14. 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 is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. Generally the "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells.

Downstream Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 01396500, which appears just to the left of the station name, includes the two-digit Part number "01" plus the 6-digit downstream-order number "396500". The Part number designates the major drainage basin; for example, Part "01" covers the North Atlantic slope basins. In some areas where all 8-digit numbers are used up, 10-digit station numbers are assigned between the 8-digit numbers.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (fig. 9).

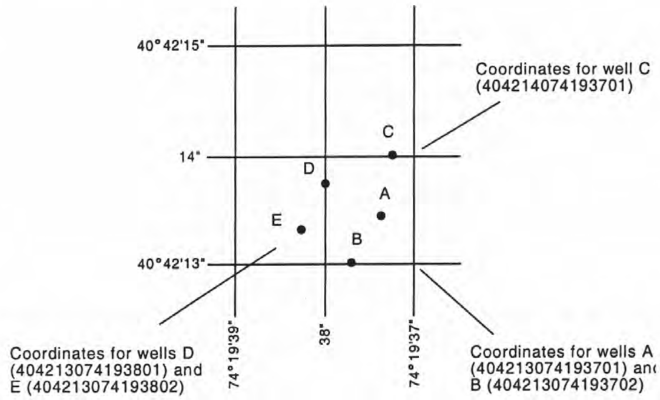


Figure 9.--System for numbering wells and miscellaneous sites (latitude and longitude)

Records of Stage and Water Discharge

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

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records. Location of all complete-record and crest-stage partial-record stations for which data are given in this report are shown in figures 11 and 12.

Data Collection and Computation

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

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage, with digital recorders that punch stage values on paper tapes at selected time intervals or electronic data loggers, or with data collection platforms (DCP) that electronically record and then transmit the data via satellite to ground receiving stations. At some gaging stations, acoustic velocity meter (AVM) systems are used to compute discharges. The AVM system measures the stream's velocity at one or more paths in the cross section. Coefficients are developed to relate this path velocity to the mean velocity in the cross section. Because the AVM sensors are fixed in position, the adjustment coefficients generally vary with stage. Cross-sectional area curves are developed to relate stage, recorded as noted above, to cross section area. Discharge is computed by multiplying path velocity by the appropriate stage related coefficient and area. Measurements of discharge are made with current meters using methods adopted by the U.S. 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 A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

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

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

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

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

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

Data Presentation

The records published for each continuous-record surface-water discharge station (gaging station) consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

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 information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gaging station 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 records have been published 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 flow at it can reasonably be considered equivalent to flow at the present station.

REVISED RECORDS.--Because of new information, published records 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 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 paragraph 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, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir station, 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 U.S. 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 (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station 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.

PEAK DISCHARGES FOR CURRENT YEAR.--For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. All peaks greater than the base discharge are listed with the maximum for the year footnoted by an asterisk (*). Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man or at locations where the instantaneous peak discharge does not exceed the mean daily discharge by 10 percent. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330.

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

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."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) 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 mean 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 records 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 the 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 of in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve 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.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow 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 for 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. Secondary instantaneous peak discharges above a selected base discharge are given in the station manuscript under the heading "PEAK DISCHARGES FOR CURRENT YEAR."

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.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time 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. Following the listings of measurements at miscellaneous sites is a table of maximum elevations at tidal crest-stage stations.

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

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

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

Other Records Available

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

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 13.

Classification of Records

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

A careful distinction needs to be made between "continuing records", as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values logged at short intervals by electronic data loggers. 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.

Arrangement of Records

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

On-site Measurements and Sample Collection

Water-quality data must represent the in-situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on-site when the samples are collected. In addition, specific procedures must be used in collecting, treating, and shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. These references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

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

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

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

Water Temperature

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

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

Sediment

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

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

Samples for biochemical-oxygen demand and for fecal coliform and enterococcus bacteria are analyzed at the District laboratory or at the New Jersey Department of Health, Public Health and Environmental Laboratories. Samples for nutrients are analyzed at the New Jersey Department of Health or at the U.S. Geological Survey Laboratory in Arvada, Colorado. Sediment samples are analyzed in the U.S. Geological Survey Laboratories in Iowa City, Iowa. All other samples are analyzed in the U.S. Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the U.S. Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Analyses of pesticides in surface-water samples (schedule 2001)

REMARKS.--Selected surface water samples from Long Island-New Jersey National Water-Quality Assessment Program (LINJ NAWQA) study sites were analyzed for pesticides on schedule 2001 during the 1997 water year. This table lists the pesticides on the schedule, the unit of measure (micrograms per liter, µg/L), the U.S. Geological Survey National Water Information System parameter code, and the reporting level. **Only pesticides measured at or above the reporting level for one or more samples are listed in the water-quality tables.**

SCHEDULE DESCRIPTION.--Pesticides in filtered water extracted on C-18 Solid Phase Extraction (SPE) cartridge and analyzed by Gas Chromatography/ Mass Spectrometry (GC/MS).

SAMPLE REQUIREMENTS.--1 liter of water filtered through 0.7-micron glass-fiber depth filter, chilled at 4° C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC) from NWQL.

PCODE.--The USGS/EPA parameter code.

COMPOUND NAME.--IUPAC nomenclature.

COMMON NAME.--Common or trade name(s) for constituent.

PCode	Compound Name/(Common Name)	MRL* (µg/L)
49260	Acetochlor (Harness Plus, Surpass)	0.002
46342	Alachlor (Lasso, Bullet)	0.002
39632	Atrazine (Atrex, Atred)	0.001
04040	Atrazine,Desethyl- (Metabolite of Atrazine)	0.002
82686	Azinphos,Methyl- (Guthion, Gusathion)	0.001
82673	Benfluralin (Benefin, Balan)	0.002
04028	Butylate (Genate Plus, Suntan+)	0.002
82680	Carbaryl (Sevin, Denapan)	0.003
82674	Carbofuran (Furandan, Curaterr)	0.003
38933	Chlorpyrifos (Brodan, Dursban)	0.004
04041	Cyanazine (Bledex, Fortrol)	0.004
82682	DCPA (Dacthal, Chlorthal-dimethyl)	0.002
34653	DDE,p,p-	0.006
39572	Diazinon (Basudin, Diazatol)	0.002
39381	Dieldrin (Panoram D-31, Octalox)	0.001
82660	Diethylanaline (Metabolite of Alachlor)	0.003
82677	Disulfoton (Disyston, Frumin AL)	0.017
82668	EPTC (Eptam, Farmarox)	0.002
82663	Ethalfluralin (Sonalan, Curbit)	0.004
82672	Ethoprop (Mocap, Ethoprophos)	0.003
04095	Fonofos (Dyfonate, Capfos)	0.008
34253	HCH,alpha- (alpha-BHC, alpha-lindane)	0.002
39341	HCH,gamma- (Lindane, gamma-BHC)	0.004
82666	Linuron (Lorex, Linex)	0.002
39532	Malathion	0.005
39415	Metolachlor (Dual, Pennant)	0.002
82630	Metribuzin (Lexon, Sencor)	0.004
82671	Molinate (Ordram)	0.004
82684	Napropamide (Devrinol)	0.003
39542	Parathion, Ethyl- (Roethyl-P, Alkron)	0.004
82667	Parathion, Methyl- (Penncap-M)	0.006
82669	Pebulate (Tillam, PEBL)	0.004
82683	Pendimethalin (Prowl, Stomp, Pre-M)	0.004
82687	Permethrin,cis- (Ambush, Astro)	0.005
82664	Phorate (Thimet, Granutox)	0.002
04037	Prometon (Pramitol, Princep)	0.018
82676	Pronamide (Kerb) (Propyzamid)	0.003
04024	Propachlor (Ramrod, Satecid)	0.007
82679	Propanil (Stampede, Stam)	0.004
82685	Propargite (Omite, Alkyl sulfite)	0.013
04035	Simazine (Princep, Caliber 91)	0.005
82670	Tebuthiuron (Spike, Tebusan)	0.010
82665	Terbacil (Sinbar)	0.007
82675	Terbufos (Counter, Contraven)	0.013
82681	Thiobencarb (Bolero, Saturn)	0.002
82678	Triallate (Avadex BW, Far-Go)	0.001
82661	Trifluralin (Treflan, Gowan)	0.002

Analyses of pesticides in surface-water samples (schedule 2050)

REMARKS.--Selected surface water samples from LINJ NAWQA study sites were analyzed for pesticides on schedule 2050 during the 1997 water year. This table lists the pesticides on the schedule, the unit of measure (micrograms per liter, µg/L), the U.S. Geological Survey National Water Information System parameter code, and the reporting level. **Only pesticides measured at or above the reporting level for one or more samples are listed in the water-quality tables.**

SCHEDULE DESCRIPTION.--Pesticides in filtered water extracted using a 0.5-gram graphitized carbon-based solid phase cartridge, eluted from the cartridge into two analytical fractions, and analyzed using high-performance liquid chromatography with photo-array detection.

SAMPLE REQUIREMENTS.--1 liter of water filtered through a 0.7 micron glass-fiber depth filter, and chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC) from NWQL.

PCODE.--The USGS/EPA parameter code.

COMPOUND NAME.--IUPAC nomenclature.

COMMON NAME.--Common or trade name(s) for constituent.

PCode	Compound Name/(Common Name)	MRL* (µg/L)
49315	Acifluorfen (Blazer, Tackle 2S)	0.035
49312	Aldicarb (Temik, Ambush)	0.016
49313	Aldicarb Sulfone (Standak, Aldoxycad)	0.016
49314	Aldicarb Sulfoxide	0.021
38711	Bentazo (Basagran, Bentazone)	0.014
04029	Bromacil (Bromax, Urox B)	0.035
49311	Bromoxynil (Torch, Buctril)	0.035
49310	Carbaryl (Sevin, Denapan)	0.008
49309	Carbofuran (Furandan, Curaterr)	0.028
49308	3-hydrxy-carbofuran	0.014

PCode	Compound Name/(Common Name)	MRL* (µg/L)
49307	Chloramben (Amiben,methyl)	0.011
38482	4-Chloro-2-methylphenoxy acetic acid (MCPA) (Metaxon)	0.050
49306	Chlorothalonil (Bravo, Daconil 2787)	0.030
49305	Chlorpyralid (Stringer)	0.050
40304	Dacthal (DCPA, chlorthal-dimethyl)	0.017
38442	Dicamba (Banval, Dianat)	0.035
49303	Dichlobenil (Barrier, Casoron)	0.020
39732	2,4-Dichlorophenoxy acetic acid (2,4 D, AquaKleen)	0.035
38746	2,4-Dichlorophenoxy butyric acid (2,4 DB, Butyrac)	0.035
49302	Dichlorprop (2,4-DP, Seritux 50)	0.032
49299	Dinitrocresol (DNOC, Trifocide)	0.035
49301	Dinoseb (DNPB, Dinosebe)	0.035
49300	Diuron (DCMU, Crisuron)	0.020
49298	Esfenvalerate (Asana, Sumi-alpha)	0.019
49297	Fenuron (Beet-Klean, Fenulon)	0.013
38811	Fluometuron (Flo-Met, Cotoron)	0.035
38478	Linuron (Linurex, Lorex)	0.018
38501	Methiocarb (Mesurol, Slug-Geta)	0.026
49296	Methomyl (Lannate, Lanox)	0.017
38487	4-2-Methyl-4-chlorophenoxy butyric acid (MCPB, Tropotox)	0.050
49295	1-Naphthol (Alpha Napthol)	0.007
49294	Neburon (Neburea, Neburyl)	0.015
49293	Norflurazon (Euitol, Predict)	0.024
49292	Oryzalin (Surflan, Dirimal)	0.019
38866	Oxyamyl (Vydate, Pratt)	0.018
49291	Picloram (Grazon, Tordon)	0.035
49236	Propham (Tuberite)	0.035
38538	Propoxur (Baygon, Blattanex)	0.035
39762	Silvex (2,4,5-TP, Fenoprop)	0.021
39742	2,4,5-Trichlorophenoxy acetic acid (2,4,5 T)	0.035
49235	Triclopyr (Garlon, Grandstand)	0.050

Analyses of volatile organic compounds in surface-water samples (schedule 2020)

REMARKS.--Selected surface water samples from LINJ NAWQA study sites were analyzed for volatile organic compounds (VOCs) in 1997. The National Water Quality Lab (NWQL) created a method for accurate determination of VOCs in water in the nanogram per liter range, schedule 2020. The method described in USGS Open-File Report 97-829 (Connor and others) is similar to USEPA method 524-2 (Mund, 1995) and the method described by Rose and Schroeder (1995). Minor improvements to instrument operating conditions include the following: additional compounds, quantitation ions that are different from those recommended in USEPA Method 524.2 because of interferences from the additional compounds, and a data reporting strategy for measuring detected compounds extrapolated at less than the lowest calibration standard or measured at less than the reporting limit. The non-detection value (NDV) is introduced as a statistically defined reporting limit designed to limit false positives and false negatives to less than 1 percent.

This table lists the volatile organic compounds on the schedule, the unit of measure (micrograms per liter (µg/L), the U.S. Geological Survey National Water Information System parameter code, the Union of Pure and Applied Chemistry (IUPAC) compound name, and the National Water Quality Laboratory compound name. Positive detections measured at less than NDV are reported as estimated concentrations (E) to alert the data user to decreased confidence in accurate quantitation. Values for analytes in the 2020 schedule are preceded by an "E" in the following situations:

1. When the calculated concentration is less than the lowest calibration standard. The analyte meets all identification criteria to be positively identified, but the amount detected is below where it can be reliably quantified.

2. If a sample is diluted for any reason. The method reporting level is multiplied by the dilution factor to obtain the adjusted method reporting level. Values below the lowest calibration standard, multiplied by the dilution factor are qualified with an "E". For example, a value of 0.19 in a 1:2 dilution is reported as E0.1.

3. If the set spike has recoveries out of the specified range (60-140%).

4. If the analyte is also detected in the set blank. If the value in the sample is less than five times the blank value and greater than the blank value plus the long term method detection limit, the value is preceded by an "E" to indicate that the analyte is positively identified but not positively quantified because the analyte was also detected in the blank.

Only VOCs measured at or above the reporting level for one or more samples are listed in the water-quality tables.

SCHEDULE DESCRIPTION.--The sample water is actively purged with helium to extract the volatile organic compounds. The volatile compounds are trapped onto a sorbent trap, thermally desorbed, separated by a megabore gas chromatographic capillary column, and finally determined by a full scan quadropole mass spectrometer. Compound identification is confirmed by the gas chromatographic retention time and by the resultant mass spectrum, typically identified by three unique ions. An unknown compound detected in a sample can be tentatively identified by comparing the unknown mass spectrum to reference spectra in the mass-spectra computer-data system library compiled by the National Institute of Standards and Technology.

SAMPLE REQUIREMENTS.--Water collected in vials placed in stainless steel VOC sampler. Hydrochloric acid is used for preservation. Chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--40 milliliter baked amber septum glass vial, from OCALA Quality Water Service Unit.

PCODE.--The EPA/USGS parameter code

COMPOUND NAME.--IUPAC nomenclature

COMMON NAME.--NWQL nomenclature

PCode	Compound Name	Common Name	NDV (µg/L)
77353	(1,1-Dimethyl-ethyl)benzene	*tert*-butylbenzene	0.05
77223	(1-Methylethyl)benzene	Isopropylbenzene	0.05
77350	(1-Methylpropyl)benzene	*sec*-butylbenzene	0.05
34396	1,1,1,2,2,2-Hexachloroethane	Hexachloroethane	0.05
77562	1,1,1,2-Tetrachloroethane	1,1,2-tetrachloroethane	0.05
34506	1,1,1-Trichloroethane	1,1,1-trichloroethane	0.05
34516	1,1,2,2-Tetrachloroethane	1,1,2,2-tetrachloroethane	0.10
77652	1,1,2-Trichloro-1,2,2-trifluoroethane	Freon-113	0.05
34511	1,1,2-Trichloroethane	1,1,2-trichloroethane	0.10
34496	1,1-Dichloroethane	1,1-dichloroethane	0.05
34501	1,1-Dichloroethene	1,1-dichloroethene	0.10
77168	1,1-Dichloropropene	1,1-dichloropropene	0.05
49999	1,2,3,4-Tetramethylbenzene	Preh-nitene	0.05
50000	1,2,3,5-Tetramethylbenzene	Isodurence	0.05
77613	1,2,3-Trichlorobenzene	1,2,3-trichlorobenzene	0.20
77443	1,2,3-Trichloropropane	1,2,3-trichloropropane	0.20
77221	1,2,3-Trimethylbenzene	1,2,3-trimethylbenzene	0.05
34551	1,2,4-Trichlorobenzene	1,2,4-trichlorobenzene	0.20
77222	1,2,4-Trimethylbenzene	1,2,4-trimethylbenzene	0.05
82625	1,2-Dibromo-3-chloropropane	1,2-dibromo-3-chloropropane (DBCP)	0.50
77651	1,2-Dibromoethane	1,2-dibromoethane	0.10
34536	1,2-Dichlorobenzene	1,2-dichlorobenzene	0.05
32103	1,2-Dichloroethane	1,2-dichloroethane	0.05
34541	1,2-Dichloropropane	1,2-dichloropropane	0.05
77135	1,2-Dimethylbenzene	*o*-xylene	0.05
85795	1,3 & 1,4-Dimethylbenzene	*m & p*-xylene	0.05
77226	1,3,5-Trimethylbenzene	1,3,5-trimethylbenzene	0.05
34566	1,3-Dichlorobenzene	1,3-dichlorobenzene	0.05
77173	1,3-Dichloropropane	1,3-dichloropropane	0.05
34571	1,4-Dichlorobenzene	1,4-dichlorobenzene	0.05
77275	1-Chloro-2-methylbenzene	2-chlorotoluene	0.05
77277	1-Chloro-4-methylbenzene	4-chlorotoluene	0.05
77356	1-Isopropyl-4-methylbenzene	*p*-Isopropyltoluene	0.05
77170	2,2-Dichloropropane	2,2-dichloropropane	0.05
81595	2-Butanone	Methyl-ethyl ketone	5.00
77220	2-Ethyltoluene	2-ethyl toluene	0.05
77103	2-Hexanone	2-hexanone	5.00
34210	2-Propenal	Acrolein	2.00
34215	2-Propenenitrile	Acrylonitrile	2.00
78109	3-Chloro-1-propene	3-chloro-1-propene	0.10
78133	4-Methyl-2-pentanone	Methyl isobutyl ketone	5.00
81552	Acetone	Acetone	5.00
34030	Benzene	Benzene	0.05
81555	Bromobenzene	Bromobenzene	0.05
77297	Bromochloromethane	Bromochloromethane	0.10
32101	Bromodichloromethane	Bromodichloromethane	0.10
50002	Bromoethene	Vinyl Bromide	0.10
34413	Bromomethane	Methyl bromide	0.10
77041	Carbon disulfide	Carbon Disulfide	0.05
34301	Chlorobenzene	Chlorobenzene	0.05
34311	Chloroethane	Chloroethane	0.10
39175	Chloroethene	Vinyl Chloride	0.10
34418	Chloromethane	Methyl chloride	0.20
77093	*cis*-1,2-Dichloroethene	*cis*-1,2-dichloroethene	0.05
34704	*cis*-1,3-Dichloropropene	*cis*-1,3-dichloropropene	0.10
32105	Dibromochloromethane	Dibromochloromethane	0.10
30217	Dibromomethane	Dibromomethane	0.10
34668	Dichlorodifluoromethane	Dichlorodifluoromethane	0.20
34423	Dichloromethane	Methylene Chloride	0.10
81576	Diethyl ether	Diethyl ether	0.10
77128	Ethenylbenzene	Styrene	0.05
73570	Ethyl methacrylate	Ethyl Methacrylate	1.00
50004	Ethyl *tert*-butyl ether	Ethyl-*t*-butyl ether (ETBE)	0.10
34371	Ethylbenzene	Ethylbenzene	0.05
39702	Hexachlorobutadiene	Hexachlorobutadiene	0.20
77424	Iodomethane	Methyl iodide	0.05
49991	Methyl acrylate	Methyl Acrylate	2.00
81593	Methyl acrylonitrile	Methyl Acrylonitrile	2.00
81597	Methyl methacrylate	Methyl Methacrylate	1.00
78032	Methyl *tert*-butyl ether	Methyl-*t*-butyl ether (MTBE)	0.10
34010	Methylbenzene	Toluene	0.05
77342	*n*-Butylbenzene	*n*-butylbenzene	0.05
77224	*n*-Propylbenzene	*n*-propylbenzene	0.05
34696	Naphthalene	Naphthalene	0.20
50005	*tert*-Amyl methyl ether	*tert*-amyl methyl ether (TAME)	0.10
34475	Tetrachloroethene	Tetrachloroethene	0.05
32102	Tetrachloromethane	Carbon tetrachloride	0.05
81607	Tetrahydrofuran	Tetrahydrofuran	5.00
34546	*trans*-1,2-Dichloroethene	*trans*-1,2-dichloroethene	0.05
34699	*trans*-1,3-Dichloropropene	*trans*-1,3-dichloropropene	0.10
73547	*trans*-1,4-Dichloro-2-butene	*trans*-1,4-dichloro-2-butene	5.00
32104	Tribromomethane	Bromoform	0.20
39180	Trichloroethene	Trichloroethene	0.05
34488	Trichlorofluoromethane	Trichlorofluoromethane	0.10
32106	Trichloromethane	Chloroform	0.05
77057	Vinyl Acetate	Vinyl Acetate	5.00

Methylene blue active substances

MBAS determinations made from January 1, 1970 through August 29, 1993, at the National Water Quality Laboratory in Denver (Analyzing Agency Code 80020) are positively biased. These data can be corrected by using the following equation, if concentrations of dissolved nitrate plus nitrite, as nitrogen, and dissolved chloride, determined concurrently with the MBAS data, are applied:

$$MBASCOR = M - 0.0088N - 0.00019C$$

where:

MBASCOR = corrected MBAS concentration, in mg/L;
M = reported MBAS concentration, in mg/L;
N = dissolved nitrate plus nitrite, as nitrogen, concentration, in mg/L; and
C = dissolved chloride concentration, in mg/L.

The detection limit of the new method is 0.02 mg/L, whereas the detection limit for the old method was 0.01 mg/L. A detection limit of 0.02 mg/L should be used with corrected MBAS data from January 1, 1970 through August 29, 1993.

Analysis of acid neutralizing capacity (ANC)

The names of all analyses of total alkalinity have been changed to acid neutralizing capacity (ANC) unfiltered, to be consistent with the terminology used in other U.S. Geological Survey publications. In this volume, ALKALINITY, LAB is now listed as ANC, UNFILTERED, TITRATION TO 4.5, LAB.

Analysis of inorganic carbon in bottom material

Prior to October 1996, the analysis of total inorganic carbon in bottom material by the National Water Quality Laboratory (NWQL) was subject to a systematic positive bias of 3 percent. That is, results calculated before this date were found to be about 3 percent higher than results calculated correctly with a new computer system. The average agreement between analysis results for duplicate samples (a measure of the NWQL's precision for this analysis) is 98 percent. The 3-percent bias, therefore, approximates the precision of the analytical method. The overall effect on historical data from New Jersey is minor. Ninety-three percent of the reported concentrations for this analysis were less than 1.7 grams per kilogram; values of this magnitude are unaffected because the difference is obscured by rounding prior to publication of the analysis results. The magnitude of the error is such that the 3 percent difference, effective October 1, 1996, is indiscernible in the relatively small data set for any station.

Data Presentation

The column headings for water-quality constituents include 5-digit EPA Storet parameter codes. The codes are included to permit accurate cross reference to data from other data bases using the same code system.

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

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

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

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

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

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

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

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

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

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

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

Remark codes

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

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

Quality-control data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this district are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

BLANK SAMPLES.--Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Source solution blank - a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank - a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Field blank - a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank - a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank - a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Pump blank - a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank - a blank solution that is poured from the containment vessel (standpipe) before the pump is inserted to obtain the pump blank.

Filter blank - a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank - a blank solution that is treated with the sampler preservatives used for an environmental sample.

Cannister blank - a blank solution that is taken directly from a stainless steel cannister just before the VOC sampler is submerged to obtain a field blank sample.

REFERENCE SAMPLES.--Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

REPLICATE SAMPLES.--Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent sample - a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

Sequential sample - a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample - a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

SPIKE SAMPLES.--Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Concurrent sample - a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample - a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Dissolved Trace-Element Concentrations

Note.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (μg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Present data above the μg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols in water year 1994. Full implementation of the protocols took place during the 1995 water year.

CURRENT WATER RESOURCES PROJECTS IN NEW JERSEY

The Geological Survey is currently involved in a number of hydrologic investigations in the State of New Jersey. The following is a list of these investigations. Results are published at the conclusion of short-term projects or periodically in the case of long-term projects. Hydrologic data from these projects are entered into the NWIS data base.

A Watershed-Based Method for Relating Water Quality to Flow Characteristics

Barnegat Bay Non-Point Source

Compositional Modeling of Organic Transport and Biodegradation of Organic Compounds in the Unsaturated Zone and Ground Water

Distribution and Sources of Arsenic in Soils near the Imperial Oil Site, Monmouth County, New Jersey

EPA Technical Assistance Program

Flood Characteristics of New Jersey Streams

Geohydrology of the Naval Air Warfare Center, West Trenton, New Jersey

Ground-Water Contamination with Chlorinated Volatile Organic Compounds at Picatinny Arsenal, Morris County, New Jersey

Ground-Water Data Collection Network

Ground-Water Levels and Chloride Concentrations in Major Aquifers of the Coastal Plain

High-Flow Water Quality Management Objectives

Hydrologic Controls on Well-Contributing Areas in New Jersey

Hydrology of Surficial Aquifer Systems

Hydrogeologic Support to Fort Dix, Burlington County, New Jersey

Hydrogeologic Support to McGuire A.F.B., Burlington County, New Jersey

Hydrogeologic Support to Picatinny Arsenal, Morris County, New Jersey

Investigation of Contaminant Transport in a Fractured Rock Aquifer, Rutgers University, Busch Campus

Investigation of Water Quality in the Wanaque South Diversion Area, Morris and Passaic Counties, New Jersey

Lake Herbicides

Low Flow Characteristics of New Jersey Streams

Modeling and Experimental Investigation of Hydrocarbon Transport and Biodegradation in the Unsaturated Zone

Movement of Chromium in the Ground Water of Pennsauken Township, Camden County

Multispecies Transport in Ground Water

New Jersey-Long Island National Water Quality Assessment

New Jersey Tide Telemetry System

Pascack Brook Flood Warning System

Passaic Flood Warning System

Program to Maintain and Update Ground-Water Models to Evaluate Continued Water-Supply Development

Quality of Water Data Collection Network

Radium and Trace Metal Leaching in the Kirkwood-Cohansey Aquifer System

Rahway Flood Warning System

Reconstruction of Natural Streamflow Records, Passaic and Hackensack River Basins

Relations Between Streamflow, Salinity, and Water Quality in Estuaries of the Toms and Metedeconk Rivers, New Jersey

Removal of Volatile Ground-Water Contaminants by Inducing Air-Phase Transport

Review of Remedial Investigation for the Vineland Chemical Superfund Site

Small-Scale Watershed Delineation for GIS (14-Digit Hydrologic Unit Codes)

Small Watershed Flood Data Collection

Somerset County Flood-Information System

Strategic Environmental Research Development Program, Biodegradation, Picatinny Arsenal

Surface Water Data Collection Network

Surfactant Sorption to Soil and its Effect on the Distribution of Anthropogenic Organic Compounds

Trends in the Water Quality of Streams in New Jersey

Vulnerability Assessment of the Kirkwood-Cohansey Aquifer System to Radium, Mercury, and Trace Metals

Vulnerability of Community Water-Supply Wells in New Jersey to Contamination by Volatile Organic Compounds and Disinfection By-Products

Water-Supply Availability in Salem and Gloucester Counties, New Jersey

WATER-RELATED REPORTS FOR NEW JERSEY COMPLETED BY THE GEOLOGICAL SURVEY IN RECENT YEARS

Barringer, J.L., 1994, Interactions of metallic substances and acidic ground water in the New Jersey Coastal Plain: U.S. Geological Survey Water-Resources Investigations Report 90-4095, 68 p.

Barringer, J.L., and Johnsson, P.A., 1996, Theoretical considerations and a simple method for measuring alkalinity and acidity in low-pH waters by gran titration: U.S. Geological Survey Water-Resources Investigations Report 89-4029, 44 p.

Barringer, J.L., MacLeod, C.L., and Galagher, R.A., 1997, Mercury in ground water, soils, and sediments of the Kirkwood-Cohansey aquifer system in the New Jersey Coastal Plain: U.S. Geological Survey Open-File Report 95-475, 260 p.

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ACCESS TO USGS WATER DATA

The U.S. Geological Survey provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

http://water.usgs.gov.

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. 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 District Offices (see address on the back of the title page).

DEFINITION OF TERMS

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

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point.

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

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

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

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

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid.

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria which produce pink to red colonies with black or reddish-brown precipitate after incubation at 41°C on mE agar and subsequent transfer to EIA medium. Enterococci include Streptococcus feacalis, Streptococcus feacium, Streptococcus avium, and their variants.

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

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

Benthic invertebrates are invertebrate animals inhabiting the bottoms of lakes, streams, and other water bodies. They are useful as indicators of water quality.

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 mile (g/m^2).

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

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

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

Bottom material: See Bed material.

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

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

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

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

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

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

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

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

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

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

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

Cubic foot per second (FT^3/S, 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.

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

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

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

Annual 7-day minimum is 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.)

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

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

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

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

Extractable organic halides (EOX) are organic compounds which contain halogen atoms such a chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried stream bottom sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the stream bottom sediments.

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 ($CaCO_3$).

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

Hydrologic Benchmark Network is a network of 50 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 human activities.

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

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

Mean high tide is the average of all high tides over a specified period.

Mean low tide is the average of all low tides over a specified period.

Mean water level is the average of all tides over a specified period.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

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

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

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

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

Microsiemens per centimeter (μS/cm, US/CM) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

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

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. It is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic-invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

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) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/ National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO_2 emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO_2 and NOx scheduled to begin in 2000.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

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

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

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

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

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

Picocurie (PC, pCi) is one trillionth (1 x 10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7 x 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 ar commonly known as algae.

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

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

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

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

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

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

Milligrams of carbon per area or volume per unit time [mg C/(m2/time)] for periphyton and macrophytes and [mg C/(m^3/time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O /(m2/time)] for periphyton and macrophytes and [mg O /(m^3/ time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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

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

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

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

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

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level 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). The entire sample is used for the analysis.

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

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

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

Suspended total residue at 105 Deg. C concentration is the concentration of suspended sediment in the sampled zone expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). A small aliquot of the sample is used for the analysis.

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.

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

Solute is any substance that is dissolved in water.

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

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

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

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

Synoptic Studies Short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

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

Kingdom .... Animal
Phylum .... Arthropoda
Class .... Insecta
Order .... Ephemeroptera
Family .... Ephemeridae
Genus .... Hexagenia
Species .... Hexagenia Limbata

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

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

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

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

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

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

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

Volatile Organic Compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are man-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

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

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

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

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

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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, Branch of Information Services, Box 25286, Federal Center, 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."

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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 p.

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 p.

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

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3-Al0. *Discharge ratings at gaging stations,* by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 p.

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

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

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

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

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

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6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L. J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 p.

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PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

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

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

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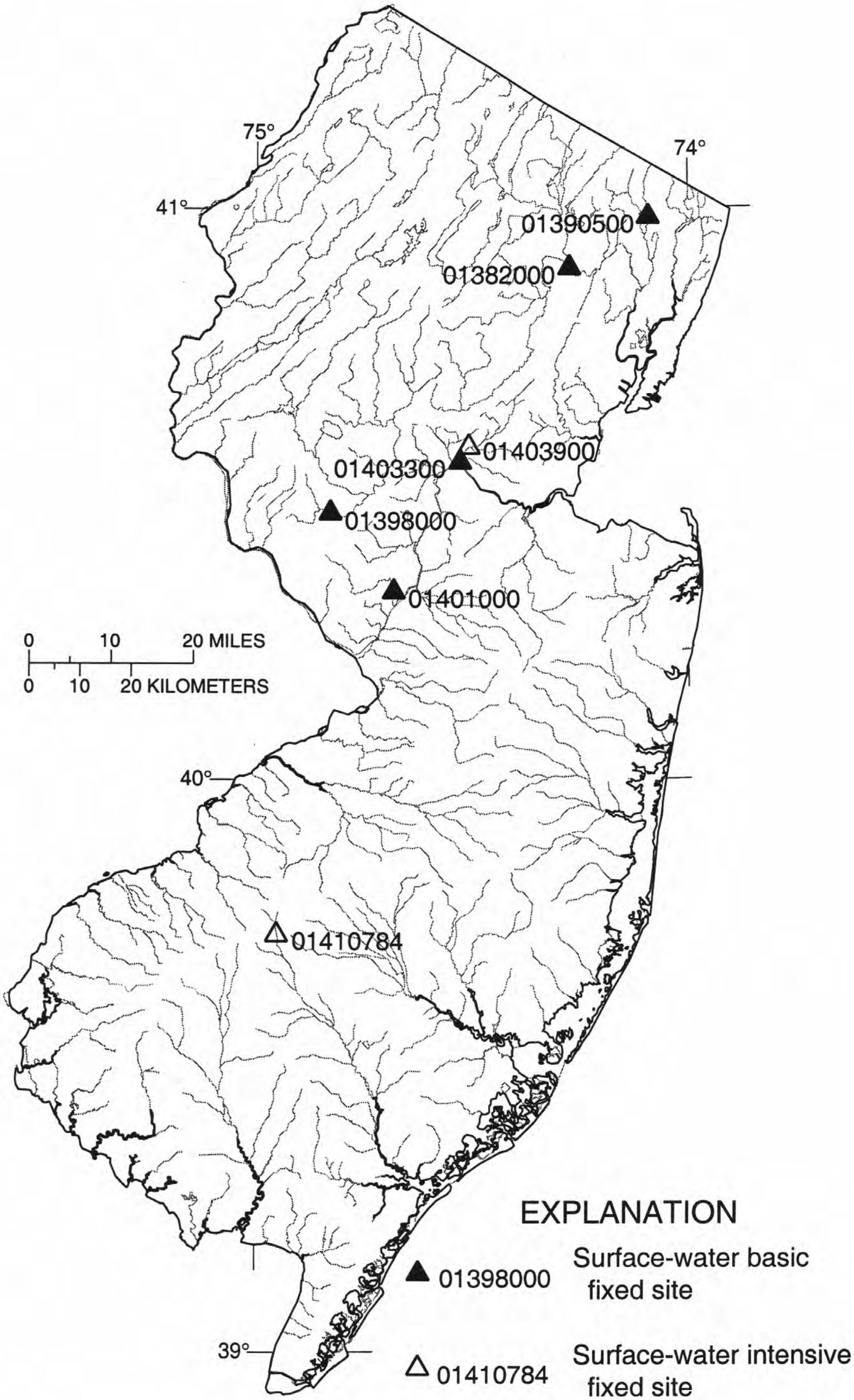
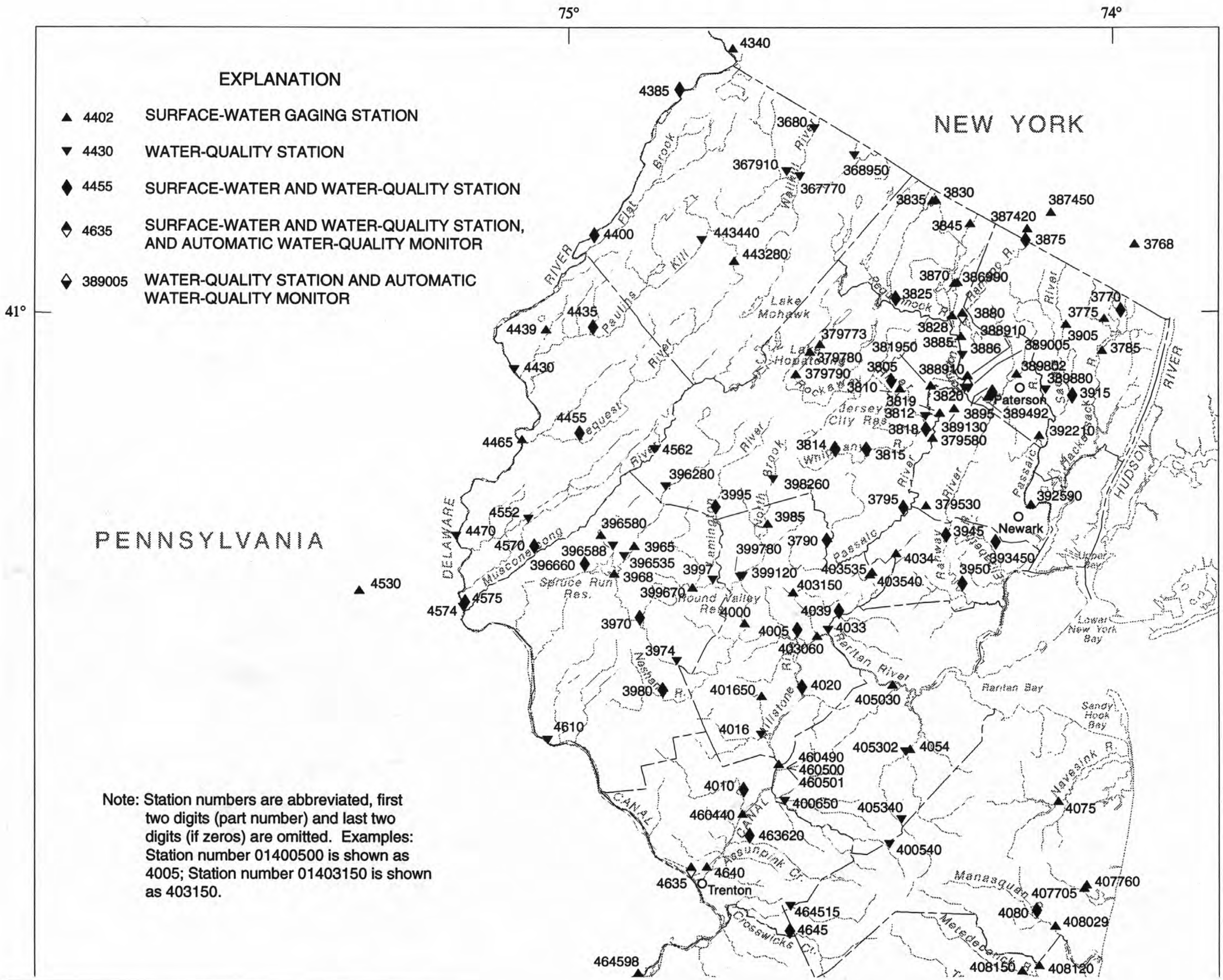


Figure 10. Map showing location of Long Island-New Jersey National Water Quality Assessment Program surface-water fixed site network.


75°
74°
41°
EXPLANATION
▲ 4402 SURFACE-WATER GAGING STATION
▼ 4430 WATER-QUALITY STATION
◆ 4455 SURFACE-WATER AND WATER-QUALITY STATION
◆ 4635 SURFACE-WATER AND WATER-QUALITY STATION, AND AUTOMATIC WATER-QUALITY MONITOR
◆ 389005 WATER-QUALITY STATION AND AUTOMATIC WATER-QUALITY MONITOR
NEW YORK
PENNSYLVANIA
Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01400500 is shown as 4005; Station number 01403150 is shown as 403150.
DELAWARE RIVER
HUDSON RIVER
Paterson
Newark
Trenton
Raritan River
Raritan Bay
Lower New York Bay
Sandy Hook Bay
Navesink R.
Manasquan
Crosswicks Cr.
Assunpink Cr.
CANAL
Spruce Run Res.
Round Valley Res.
Lake Mohawk
Lake Hopatcong
Jersey City Res.
Passaic
Musconetcong
Millstone R.
4340
4385
3680
367910
368950
367770
3835
3830
387450
387420
3845
3875
3768
4400
443440
443280
3870
386990
3825
3880
3770
3775
4439
4435
3828
388910
3905
379773
381950
3885
3886
389005
3785
4430
379780
3805
388910
389802
379790
3810
389880
3820
Paterson
3915
3819
3812
3895
389492
4455
3818
389130
392210
4465
379580
3814
3815
4562
396280
398260
3995
3795
379530
392590
4552
3985
4470
396580
3945
4570
3790
396588
3965
399780
4034
396660
396535
393450
403535
3997
399120
3950
3968
403540
4530
403150
399670
4575
4574
4000
4039
3970
4005
4033
403060
3974
4020
3980
401650
405030
4610
4016
405302
4054
460490
460500
460501
4010
400650
405340
4075
460440
463620
400540
4640
4635
407760
407705
464515
4080
4645
408029
464598
408150
408120

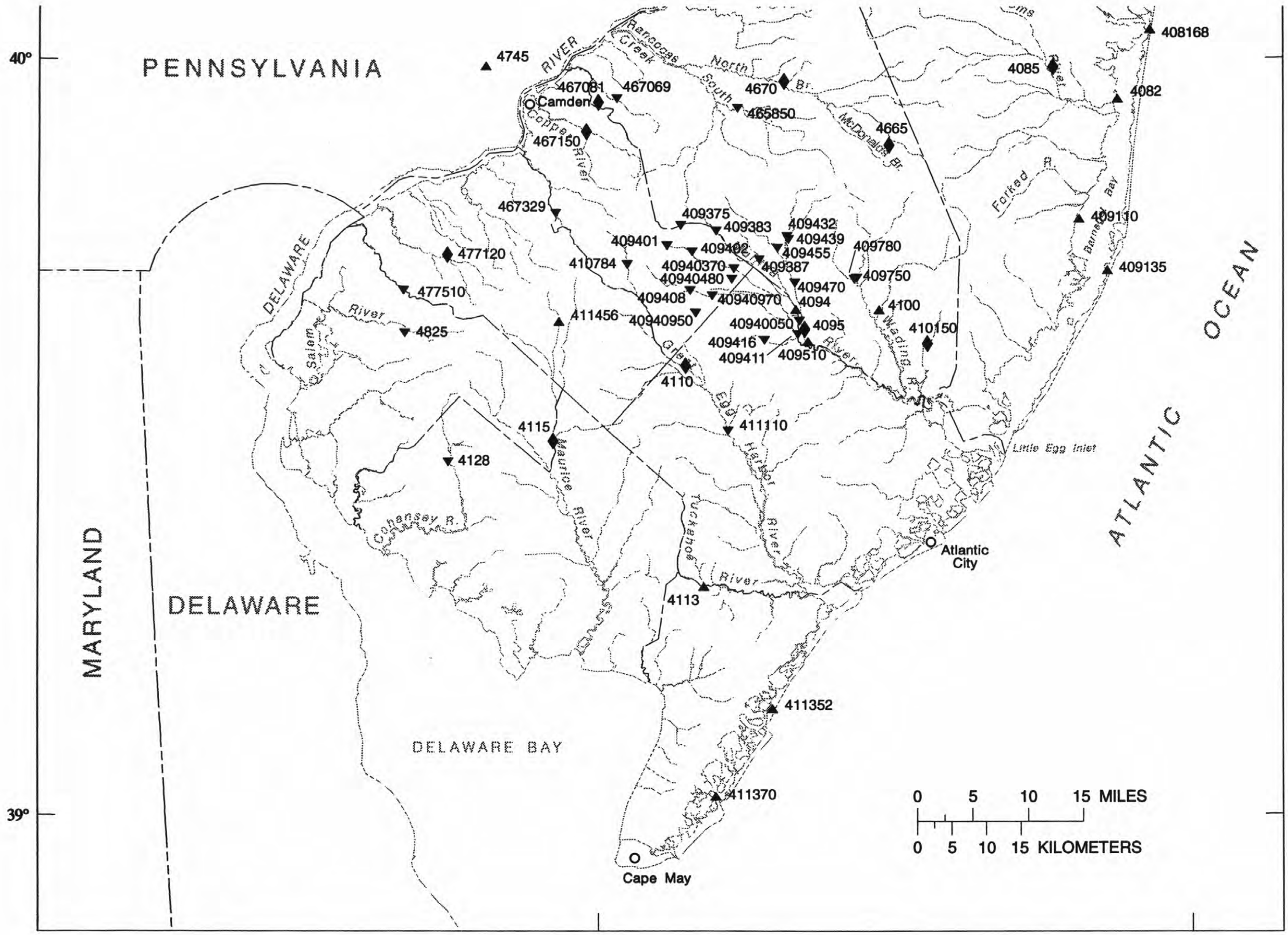


Figure 11. Map showing location of gaging stations and surface-water quality stations.


75°
74°
41°
EXPLANATION
443510 LOW-FLOW STATION
4450 CREST-STAGE STATION
4067 TIDAL CREST-STAGE STATION
378590 LOW-FLOW AND CREST-STAGE STATION
NEW YORK
PENNSYLVANIA
Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01390900 is shown as 3909: Station number 01411320 is shown as 411320
Trenton
Paterson
Newark
DELAWARE
RIVER
HUDSON
RIVER
Flat Brook
Paulins Kill
Wallkill River
Lake Mohawk
Lake Hopatcong
Pequest River
Musconetcong
Spruce Run Res.
Round Valley Res.
Lamington
North Branch
Rockaway River
Jersey City Res.
Whippany R.
Passaic River
Pequannock R.
Ramapo R.
Saddle R.
Hackensack R.
Raritan River
Raritan Bay
Lower New York Bay
Upper Bay
Sandy Hook Bay
Navesink R.
Manasquan R.
Metedeconk R.
Assunpink Cr.
Crosswicks Cr.
Millstone River
Neshanic R.
CANAL
368950
382890
387450
387490
390450
387880
3909
382550
390810
378385
3827
389765
378500
389030
3887
389005
3899
3785
378590
3820
3812
379845
389534
381550
3891
389140
389492
392170
379525
378690
3944
3946
393350
403395
403570
4035
4036
4032
4039
400360
400010
4067
401870
407030
443275
443260
443510
4452
455780
445520
456080
399190
3992
396220
3993
446520
456210
446568
445490
396240
399295
446564
4551
396570
399525
4575
3975
401595
459010
398045
4016
401301
462197
400930
400730
381490
400950
401160
400630
407290
407618
400795
400775
463812
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464538
464533
464405

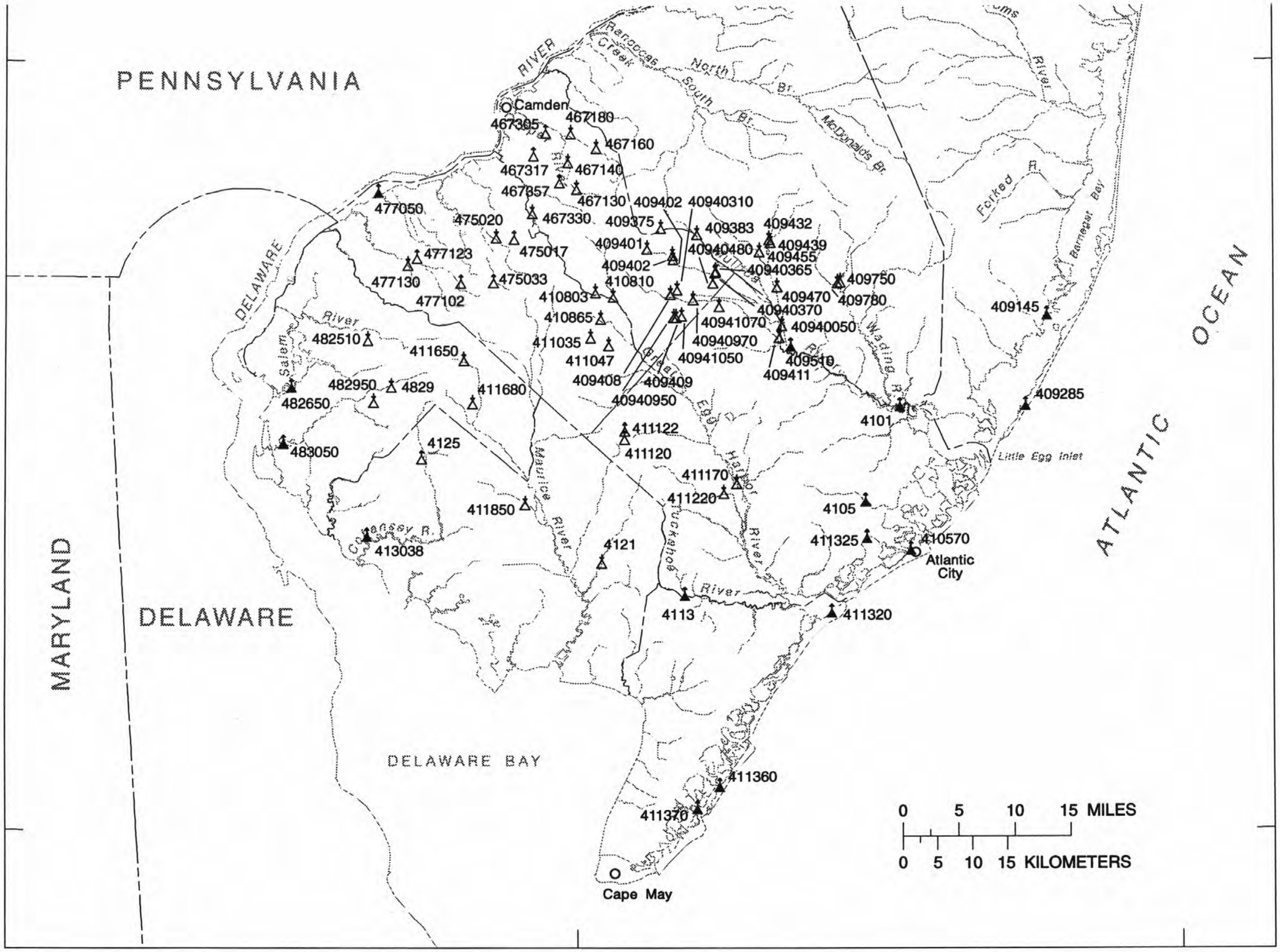


Figure 12. Map showing location of low-flow and crest-stage partial-record stations.

01367770 WALLKILL RIVER NEAR SUSSEX, NJ

LOCATION.--Lat 41°11'38", long 74°34'32", Sussex County, Hydrologic Unit 02020007, at bridge on Glenwood Road, 0.8 mi upstream from Papakating Creek, 1.7 mi southwest of Independence Corner, 2.0 mi southeast of Sussex, and 2.1 mi northwest of McAfee.

DRAINAGE AREA.--60.8 mi^2.

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

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
21...	1115	730	249	7.6	11.5	746	7.8	73	2.6	>24000	1900	82
JAN 1997												
15...	1145	92	546	7.8	0.0	757	13.1	90	<1.0	20	<10	210
APR												
17...	1100	160	431	7.8	11.0	744	9.6	89	E1.1	20	<10	160
MAY												
20...	1130	130	454	8.0	16.0	746	7.6	79	2.3	2200	700	170
JUL												
23...	1200	48	587	7.9	20.0	756	7.1	79	2.1	1300	500	210

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
21...	20	7.7	16	2.0	70	9.8	27	<.1	6.6	136	132	4
JAN 1997												
15...	48	21	30	1.4	165	19	55	<.1	8.4	288	287	4
APR												
17...	38	16	26	1.4	131	15	49	<.1	3.5	232	230	<1
MAY												
20...	40	17	28	1.3	144	13	49	.1	5.2	249	242	14
JUL												
23...	45	23	35	3.0	176	17	64	.1	7.8	341	314	3

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
21...	.003	.13	<.03	<.03	.4	.29	.53	.42	.04	.01	7.7	.6
JAN 1997												
15...	.036	1.2	<.03	<.03	.2	.14	1.4	1.3	.02	<.01	2.2	.5
APR												
17...	.007	.66	<.03	<.03	.3	.30	.96	.96	.01	<.01	3.4	.3
MAY												
20...	.007	.59	<.03	<.03	.4	.30	.95	.89	.02	<.01	4.3	.6
JUL												
23...	.012	2.7	<.03	<.03	.5	.48	3.3	3.2	.05	.03	3.9	.4

01367770 WALLKILL RIVER NEAR SUSSEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1996								
21...	1115	18	2	<10	20	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT 1996							
21...	380	<1	30	<.1	<1	<1	20

01367910 PAPAKATING CREEK AT SUSSEX, NJ

LOCATION.--Lat 41°12'02", long 74°35'59", Sussex County, Hydrologic Unit 02020007, at bridge on State Route 23 in Sussex, 0.7 mi downstream from Clove Brook, 2.6 mi southwest of Independence Corner, and 3.4 mi northwest of McAfee.

DRAINAGE AREA.--59.4 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
21...	1130	E600	161	7.3	11.5	747	7.9	74	3.1	5400	100	46
JAN 1997												
15...	1130	E50	303	7.9	0.0	755	13.4	93	E1.2	460	10	96
APR												
17...	1130	E90	252	7.9	10.0	743	10.0	91	E1.4	220	<10	74
MAY												
19...	1130	E40	261	7.9	14.0	744	8.5	85	2.2	1300	800	85
JUL												
23...	1100	E45	362	7.8	22.0	755	5.8	67	2.1	1300	290	130

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
21...	14	2.6	9.9	2.8	33	12	16	<.1	6.2	94	86	6
JAN 1997												
15...	31	4.6	16	1.4	62	22	29	<.1	8.5	162	156	1
APR												
17...	23	3.7	18	1.3	48	16	31	<.1	3.2	136	128	2
MAY												
19...	27	4.0	16	1.2	61	15	28	<.1	4.3	159	136	8
JUL												
23...	43	6.0	19	1.9	98	23	35	<.1	4.3	220	193	19

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
21...	.003	.51	<.03	.04	.5	.37	1.0	.88	.08	.05	7.7	.6
JAN 1997												
15...	.003	1.5	<.03	<.03	.1	.12	1.6	1.6	.02	.01	1.8	.3
APR												
17...	.009	.64	<.03	<.03	.3	.23	.91	.86	.03	<.01	3.0	.5
MAY												
19...	.011	.66	<.03	<.03	.3	.25	.97	.91	.03	.01	3.4	.6
JUL												
23...	.011	.62	<.03	<.03	.4	.21	1.1	.84	.09	.03	3.1	.6

01367910 PAPAKATING CREEK AT SUSSEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1996								
21...	1130	20	<1	<10	10	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT 1996							
21...	530	<1	30	<.1	1	<1	<10

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'58", Sussex County, New Jersey, Hydrologic Unit 02020007, on right bank on downstream side of bridge on Quarryville-Milton Road, 2.0 mi south of New York-New Jersey State line, and 3.0 mi south of Unionville.

DRAINAGE AREA.--140 mi^2.

PERIOD OF RECORD.--Water years 1963-78, 1991 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
23...	1130	E390	238	7.1	11.5	747	--	--	E1.8	1300	110	78
JAN 1997												
16...	1130	E230	443	8.1	0.0	737	12.7	90	2.8	70	<10	140
APR												
16...	1130	E230	363	7.8	10.0	753	10.0	90	<1.0	70	10	120
MAY												
20...	1130	E180	375	7.8	16.0	747	7.4	77	2.0	3500	310	140
JUL												
23...	1045	E40	571	7.7	23.0	757	6.0	71	E1.9	790	110	210

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
23...	21	6.3	14	2.2	65	13	24	<.1	7.9	124	129	4
JAN 1997												
16...	35	13	22	1.5	119	20	41	<.1	8.3	226	218	3
APR												
16...	32	11	21	1.2	93	16	41	<.1	3.7	195	185	1
MAY												
20...	38	11	20	1.2	108	15	39	<.1	4.5	203	196	10
JUL												
23...	49	22	32	2.8	173	20	62	<.1	6.3	340	308	12

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
23...	.006	.29	<.03	<.03	.5	.41	.79	.70	.06	.04	7.4	.5
JAN 1997												
16...	.014	1.3	<.03	<.03	.3	.15	1.6	1.5	.01	<.01	2.3	.4
APR												
16...	.006	.52	<.03	<.03	.3	.31	.85	.83	.02	<.01	3.6	.6
MAY												
20...	.009	.71	<.03	<.03	.3	.21	1.1	.91	.01	<.01	4.0	.5
JUL												
23...	.030	2.1	<.03	<.03	.5	.37	2.6	2.5	.08	.03	4.0	.7

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
OCT 1996								
23...	1130	22	1	<10	20	<1	<1.0	2
MAY 1997								
20...	1130	20	<1	<10	20	<1	<1.0	2

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1996							
23...	260	<1	20	<.1	2	<1	<10
MAY 1997							
20...	500	<1	80	<.1	1	<1	<10

01368950 BLACK CREEK NEAR VERNON, NJ

LOCATION.--Lat 41°13'21", long 74°28'33", Sussex County, Hydrologic Unit 02020007, at bridge on Maple Grange Road, 0.6 mi upstream from confluence with Wawayanda Creek, 0.7 mi northwest of Maple Grange, and 1.7 mi northeast of Vernon.

DRAINAGE AREA.--17.3 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
21...	1200	E200	207	7.2	11.0	749	7.1	66	2.6	9200	1000	78
JAN 1997												
15...	1100	28	636	7.5	0.5	760	10.9	76	2.1	490	30	250
APR												
16...	1145	66	520	7.7	10.0	753	9.1	82	<1.0	<20	<10	210
MAY												
20...	1130	30	586	7.7	16.5	743	6.6	69	2.5	3500	1300	220
JUL												
23...	1145	3.6	645	7.9	20.0	754	6.5	72	2.4	2800	310	240

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
21...	18	8.1	11	2.2	72	9.1	19	<.1	6.3	122	118	14
JAN 1997												
15...	59	25	36	1.4	214	19	69	.1	8.7	356	351	2
APR												
16...	49	20	29	1.2	173	13	57	<.1	4.0	282	279	<1
MAY												
20...	51	23	34	1.2	197	13	59	.2	6.3	325	308	15
JUL												
23...	52	26	37	1.6	206	17	67	.1	7.4	368	336	6

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
21...	<.003	.26	<.03	<.03	.5	.34	.76	.60	.09	.04	7.4	1.0
JAN 1997												
15...	.010	1.0	<.03	<.03	.3	.22	1.3	1.2	<.01	.01	3.1	.5
APR												
16...	.006	.34	<.03	<.03	.3	.30	.69	.64	<.01	<.01	3.9	.4
MAY												
20...	.019	.48	<.03	<.03	.5	.34	1.0	.81	.03	<.01	4.4	.8
JUL												
23...	.022	.79	<.03	<.03	.4	<.03	1.2	--	.06	.02	3.0	.8

01368950 BLACK CREEK NEAR VERNON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1996								
21...	1200	24	<1	<10	20	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT 1996							
21...	610	<1	50	<.1	<1	<1	10

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft upstream from State Highway 59, and 1.0 mi downstream from DeForest Lake.

DRAINAGE AREA.--30.7 mi^2.

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

REVISIONS.--WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder, stop-log control, and crest-stage gage. Datum of gage is 53.50 ft above sea level (levels by United Water New Jersey).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Diversions in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft^3/s, Feb. 3, 1973, gage height, 9.38 ft, from floodmarks, from rating curve extended above 840 ft^3/s; maximum gage height, 10.52 ft, May 30, 1984; minimum daily discharge, about 2.2 ft^3/s, Jan. 13, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 766 ft^3/s, Dec. 2, gage height, 8.26 ft; minimum daily, 11 ft^3/s, July 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	19	e150	48	53	20	445	40	16	16	14	16
2	19	16	e550	35	53	22	205	36	15	16	14	15
3	20	16	e220	36	49	23	127	78	14	15	13	15
4	19	17	115	37	47	26	96	178	16	13	13	15
5	19	15	83	36	186	25	74	73	15	13	14	15
6	19	15	263	34	138	34	66	68	16	14	13	18
7	19	20	262	32	77	32	62	68	15	15	13	32
8	34	21	395	29	63	28	56	47	14	14	13	37
9	42	48	186	24	52	27	49	43	16	33	13	37
10	26	e70	107	25	43	33	38	41	15	21	13	38
11	21	e50	91	25	39	42	30	34	16	13	13	43
12	20	e45	114	22	33	42	37	27	15	13	14	39
13	20	e40	112	19	32	35	77	25	93	14	15	40
14	20	e30	237	17	40	62	71	22	62	15	16	39
15	20	e30	213	17	57	218	50	20	15	17	14	40
16	21	e20	104	65	55	92	40	18	18	16	13	39
17	21	e20	86	82	49	62	36	20	15	14	22	39
18	20	e20	82	51	38	53	50	20	21	14	37	39
19	69	e17	85	37	35	46	57	19	39	14	12	38
20	95	e15	85	28	35	39	41	29	31	14	14	39
21	85	e18	65	24	32	35	34	24	22	14	18	39
22	94	e17	55	21	32	36	30	20	19	23	15	39
23	66	e17	49	27	31	29	26	17	16	11	15	39
24	53	e17	48	26	28	24	27	16	14	16	15	39
25	42	e17	86	327	24	20	22	19	16	19	15	38
26	32	e60	68	137	20	32	20	21	20	14	15	38
27	27	e100	58	68	21	30	18	17	18	15	14	38
28	28	e60	49	169	22	27	63	15	15	24	16	38
29	29	e35	49	138	---	26	72	14	16	14	14	48
30	25	e25	64	70	---	26	51	15	16	13	15	38
31	22	---	58	55	---	337	---	16	---	14	15	---
TOTAL	1065	910	4189	1761	1384	1583	2070	1100	649	491	470	1027
MEAN	34.4	30.3	135	56.8	49.4	51.1	69.0	35.5	21.6	15.8	15.2	34.2
MAX	95	100	550	327	186	337	445	178	93	33	37	48
MIN	18	15	48	17	20	20	18	14	14	11	12	15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	31.0	31.4	39.1	44.1	50.2	69.9	73.4	51.9	34.6	34.1	28.0	33.3
MAX	84.2	88.6	135	125	152	151	204	162	162	127	83.3	100
(WY)	1990	1976	1997	1978	1973	1961	1983	1989	1972	1984	1966	1975
MIN	7.27	7.59	5.63	8.95	10.3	6.95	9.61	7.04	12.7	11.6	12.3	9.34
(WY)	1967	1967	1967	1967	1967	1981	1966	1965	1981	1977	1981	1962

01376800 HACKENSACK RIVER AT WEST NYACK, NY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1959 - 1997	
ANNUAL TOTAL	21479.0		16699			
ANNUAL MEAN	58.7		45.8		43.6	
HIGHEST ANNUAL MEAN					74.1	1984
LOWEST ANNUAL MEAN					13.4	1981
HIGHEST DAILY MEAN	550	Dec 2	550	Dec 2	1320	Feb 3 1973
LOWEST DAILY MEAN	2.2	Jan 13	11	Jul 23	2.2	Jan 13 1996
ANNUAL SEVEN-DAY MINIMUM	6.7	Jan 10	13	Aug 3	3.1	Sep 25 1966
10 PERCENT EXCEEDS	115		85		86	
50 PERCENT EXCEEDS	38		28		24	
90 PERCENT EXCEEDS	15		14		12	

e Estimated.

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi upstream from Pascack Brook, 4.6 mi upstream from Oradell Dam, and 27.2 mi upstream from mouth.

DRAINAGE AREA.--58.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WDR-NJ-80-1: 1968-79(M).

GAGE.--Water-stage recorder, crest-stage gages, and concrete control. Datum of gage is 22.51 ft above sea level.

REMARKS.--Records good. Flow regulated by De Forest Lake (since Feb. 1956) and Lake Tappan (since 1965), see Hackensack River basin, reservoirs in. Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River basin, diversions). Water occasionally diverted from Oradell Reservoir to Lake Tappan. Several measurements of water temperature, other than those published, were made during the year. United Water New Jersey (formerly Hackensack Water Co.) gage-height telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with United Water New Jersey (formerly Hackensack Water Co.).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

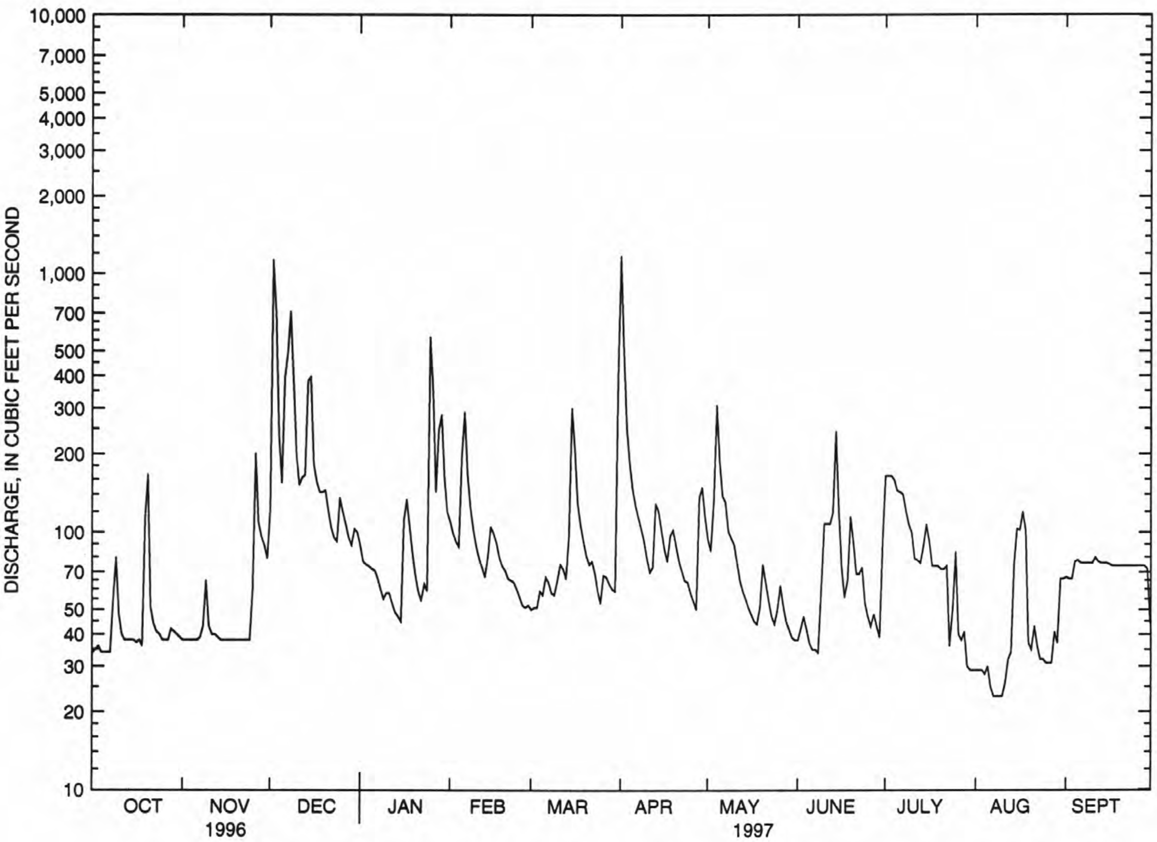
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	38	123	89	110	50	1170	94	38	165	29	67
2	35	38	1130	77	99	51	495	85	42	165	29	66
3	36	38	698	75	92	51	253	133	47	165	29	66
4	34	38	234	74	88	59	186	309	42	159	28	77
5	34	38	155	72	195	57	148	187	37	145	30	78
6	34	38	393	71	290	67	127	138	35	143	25	76
7	34	39	486	66	167	64	114	131	35	140	23	76
8	54	43	710	60	125	58	103	101	34	121	23	76
9	80	65	367	55	103	57	92	95	61	107	23	76
10	48	43	196	58	88	65	79	90	108	100	23	76
11	40	40	152	58	79	75	70	77	108	79	26	80
12	38	40	162	53	73	72	73	65	108	78	32	77
13	38	39	166	49	67	66	129	59	119	76	34	76
14	38	38	383	47	80	97	121	55	244	88	75	76
15	38	38	395	45	105	301	101	51	123	107	103	76
16	37	38	183	111	99	210	86	48	73	92	102	75
17	38	38	157	134	91	130	77	45	56	74	120	74
18	36	38	143	105	80	107	97	44	65	74	102	74
19	114	38	143	83	74	92	102	51	115	74	37	74
20	167	38	145	68	71	81	89	75	91	72	35	74
21	51	38	121	59	66	75	78	64	69	72	43	74
22	44	38	104	54	65	77	71	54	69	74	36	74
23	41	38	95	63	64	69	65	47	73	36	32	74
24	40	38	92	59	60	59	64	44	53	50	32	74
25	38	60	136	566	56	53	58	50	47	84	31	74
26	38	201	120	350	52	68	54	62	43	40	31	74
27	38	109	107	143	51	67	50	52	48	38	31	74
28	42	96	95	247	52	63	136	45	43	41	41	74
29	41	89	89	283	---	60	149	42	39	30	37	72
30	40	79	103	160	---	59	115	39	92	29	66	44
31	39	---	100	120	---	390	---	38	---	29	66	---
TOTAL	1459	1589	7683	3554	2642	2850	4552	2470	2157	2747	1374	2198
MEAN	47.1	53.0	248	115	94.4	91.9	152	79.7	71.9	88.6	44.3	73.3
MAX	167	201	1130	566	290	390	1170	309	244	165	120	80
MIN	34	38	89	45	51	50	50	38	34	29	23	44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	59.7	70.3	80.9	89.8	92.5	136	140	102	74.2	78.6	70.5	63.8
MAX	312	240	248	251	221	379	438	310	319	339	197	177
(WY)	1956	1956	1997	1949	1951	1953	1983	1989	1972	1945	1955	1975
MIN	12.1	16.6	12.6	22.6	23.0	11.2	14.5	20.4	13.4	11.6	11.4	7.87
(WY)	1942	1996	1981	1982	1967	1981	1981	1981	1957	1954	1944	1953

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1942 - 1997	
ANNUAL TOTAL	42915		35275			
ANNUAL MEAN	117		96.6		88.2	
HIGHEST ANNUAL MEAN					156	1952
LOWEST ANNUAL MEAN					30.9	1981
HIGHEST DAILY MEAN	1140	Jul 14	1170	Apr 1	2190	May 31 1984
LOWEST DAILY MEAN	27	Jun 1	23	Aug 7	4.4	Oct 10 1995
ANNUAL SEVEN-DAY MINIMUM	33	May 27	25	Aug 5	5.0	Oct 7 1995
INSTANTANEOUS PEAK FLOW			1620	Dec 2	2530	May 17 1989
INSTANTANEOUS PEAK STAGE			5.77	Dec 2	8.08	May 17 1989
INSTANTANEOUS LOW FLOW			22	Aug 10	.00	Jan 16 1970
10 PERCENT EXCEEDS	202		159		171	
50 PERCENT EXCEEDS	82		72		60	
90 PERCENT EXCEEDS	38		37		21	



——— 01377000 HACKENSACK RIVER AT RIVERVALE, NJ, DAILY MEAN DISCHARGE

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1964 to current year.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
31...	1125	40	407	7.8	12.0	757	7.9	74	E1.6	110	100	120
JAN 1997												
21...	1200	58	404	7.9	1.5	770	13.3	94	E1.4	80	10	110
MAR												
17...	1115	131	487	7.9	4.5	771	11.9	91	E2.2	49	10	110
MAY												
19...	1145	58	478	7.7	14.5	756	7.9	78	E1.6	1300	800	120
JUL												
15...	1130	108	445	7.8	25.5	758	5.7	70	3.4	80	190	110

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
31...	37	6.6	33	1.9	86	15	59	<.1	5.4	218	211	2
JAN 1997												
21...	34	6.3	33	1.8	79	15	58	<.1	3.7	232	202	4
MAR												
17...	33	6.1	49	1.6	74	14	91	<.1	2.5	262	244	10
MAY												
19...	36	6.6	44	1.7	83	16	85	<.1	2.9	280	244	2
JUL												
15...	33	5.8	41	1.7	82	12	76	<.1	4.1	258	224	18

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
31...	.016	.41	.10	.06	.5	.34	.91	.75	.03	<.01	4.8	.9
JAN 1997												
21...	.010	.70	<.03	<.03	.5	.39	1.2	1.1	.02	<.01	4.2	.4
MAR												
17...	.009	.48	.04	.04	.4	.29	.88	.77	.01	<.01	4.0	.4
MAY												
19...	.019	.58	<.03	.04	.4	.31	.98	.89	.04	.01	4.1	.4
JUL												
15...	.013	.12	<.03	<.03	.7	.53	.86	.65	.05	<.01	5.7	2.0

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1996								
31...	1125	12	<1	<10	50	<1	<1.0	6

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT 1996							
31...	250	<1	110	<.1	<1	<1	<10

01377500 PASCACK BROOK AT WESTWOOD, NJ

LOCATION.--Lat 40°59'33", long 74°01'19", Bergen County, Hydrologic Unit 02030103, on right bank 75 ft upstream from Harrington Avenue in Westwood, 500 ft downstream from Musquapsink Brook, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--29.6 mi^2.

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WDR NJ-87-1: 1984 (P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 28.62 ft above sea level.

REMARKS.--Records fair. Flow regulated by Woodcliff Lake 3.0 mi above station (see Hackensack River basin, reservoirs in). Water diverted for municipal supply by United Water New York (formerly Spring Valley Water Company), by pumpage from well fields in headwater area of Pascack Brook in vicinity of Spring Valley, NY, and by Park Ridge Water Department by pumping from wells above Woodcliff Lake probably reduces flow past this station. Several measurements of water temperature were made during the year. United Water New Jersey gage-height telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with United Water New Jersey.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0330	*1,120	*4.74	Jan. 25	0800	906	4.38
Dec. 2	0900	1,080	4.68	Mar. 31	1645	810	4.20
Dec. 8	0115	483	3.49				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	32	127	44	93	35	283	38	33	24	22	25
2	51	31	577	53	81	36	155	50	43	25	22	28
3	50	31	131	93	54	36	105	135	42	26	22	42
4	43	30	102	89	54	39	101	120	34	25	21	36
5	44	30	98	47	102	37	98	100	33	24	24	34
6	44	30	171	36	63	41	96	94	33	23	24	34
7	40	30	186	34	58	36	69	40	33	23	27	33
8	87	32	282	33	56	35	42	38	32	23	19	32
9	175	104	119	33	56	35	41	42	31	51	19	32
10	75	83	103	36	54	42	40	38	31	44	18	33
11	44	39	101	34	54	39	40	37	30	22	18	49
12	35	31	102	33	53	36	49	37	29	21	18	39
13	33	30	98	32	48	35	55	36	35	21	18	39
14	32	30	171	32	54	70	42	36	34	22	20	34
15	31	30	123	32	48	117	40	36	30	33	32	31
16	30	30	76	140	40	58	66	36	29	34	31	31
17	30	30	62	80	66	75	93	35	30	30	68	30
18	55	30	89	44	89	62	97	35	47	28	123	29
19	242	30	99	35	88	38	88	42	90	33	108	28
20	592	30	45	35	68	37	62	68	78	26	97	27
21	124	29	48	35	37	37	42	43	29	27	101	25
22	103	29	51	36	37	39	41	38	45	60	70	23
23	96	29	51	47	37	37	41	35	53	35	24	29
24	83	29	68	58	36	31	42	35	26	84	22	28
25	35	29	93	486	36	31	36	45	26	158	22	27
26	33	161	58	87	36	52	35	51	25	61	21	26
27	33	79	47	79	36	46	34	38	24	33	21	26
28	35	42	45	174	35	38	93	34	24	26	39	26
29	39	38	49	97	---	37	42	34	24	25	24	52
30	47	57	63	96	---	39	38	34	24	23	22	27
31	38	---	50	93	---	408	---	34	---	23	21	---
TOTAL	2463	1265	3485	2283	1569	1734	2106	1514	1077	1113	1138	955
MEAN	79.5	42.2	112	73.6	56.0	55.9	70.2	48.8	35.9	35.9	36.7	31.8
MAX	592	161	577	486	102	408	283	135	90	158	123	52
MIN	30	29	45	32	35	31	34	34	24	21	18	23

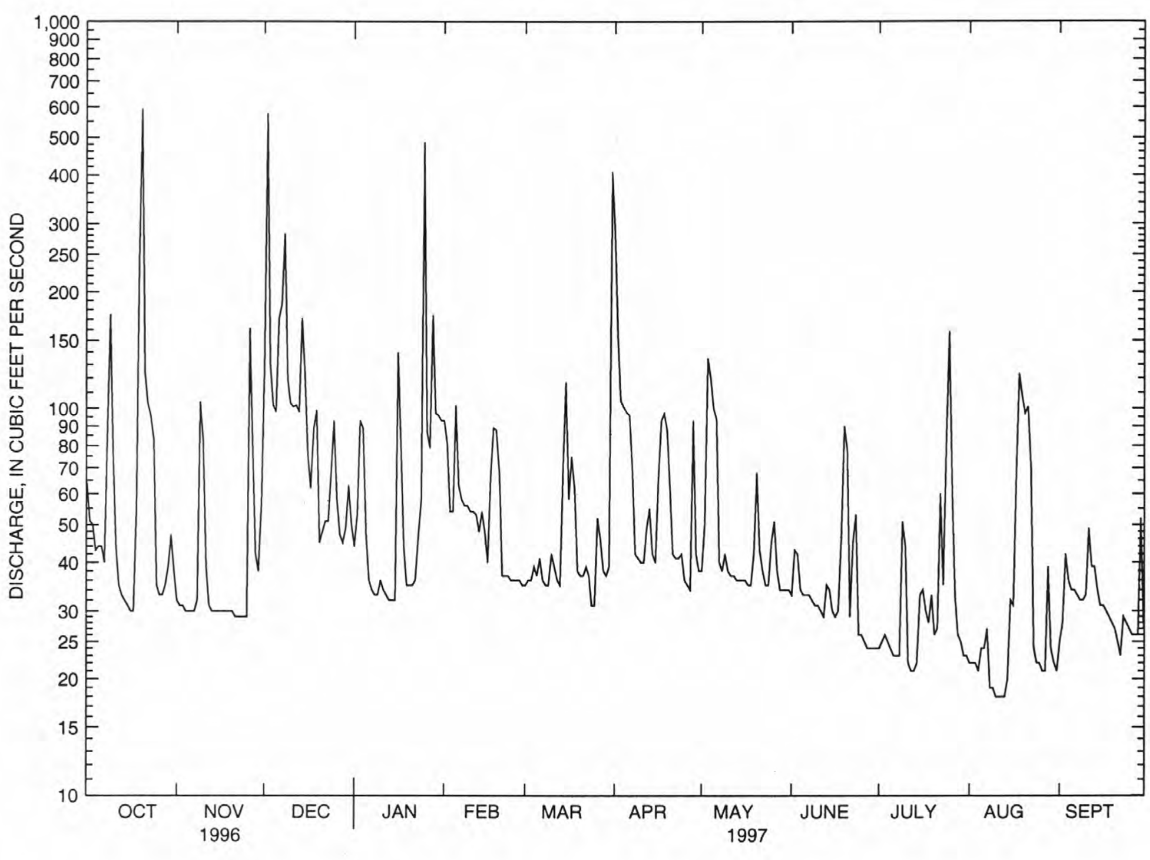
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	39.3	49.1	52.6	54.5	58.6	79.3	79.2	62.3	49.5	45.8	42.5	39.7
MAX	143	131	129	151	135	197	198	155	175	180	127	157
(WY)	1956	1978	1984	1979	1973	1953	1983	1989	1972	1945	1971	1971
MIN	10.2	9.83	15.9	10.8	15.7	34.8	28.9	21.2	18.2	14.2	10.1	9.52
(WY)	1942	1950	1940	1954	1954	1965	1991	1992	1939	1944	1935	1939

01377500 PASCACK BROOK AT WESTWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1935 - 1997	
ANNUAL TOTAL	25036		20702			
ANNUAL MEAN	68.4		56.7		54.3	
HIGHEST ANNUAL MEAN					88.6	1952
LOWEST ANNUAL MEAN					27.6	1965
HIGHEST DAILY MEAN	592	Apr 16	592	Oct 20	1770	Aug 28 1971
LOWEST DAILY MEAN	23	Jan 16	18	Aug 10	.45	Apr 26 1991
ANNUAL SEVEN-DAY MINIMUM	28	Jan 11	19	Aug 8	6.3	Oct 19 1949
INSTANTANEOUS PEAK FLOW			1120	Oct 20	2440	Sep 12 1971
INSTANTANEOUS PEAK STAGE			4.74	Oct 20	7.57	Sep 12 1971
INSTANTANEOUS LOW FLOW			18	Many days	.05a	Apr 23 1991
10 PERCENT EXCEEDS	105		100		96	
50 PERCENT EXCEEDS	48		37		39	
90 PERCENT EXCEEDS	30		24		18	

a Also occurred Sep. 28, 1993.



01377500 PASCACK BROOK AT WESTWOOD, NJ, DAILY MEAN DISCHARGE

01378500 HACKENSACK RIVER AT NEW MILFORD, NJ

LOCATION.--Lat 40°56'52", long 74°01'34", Bergen County, Hydrologic Unit 02030103, on right bank upstream from two masonry dams and two lift gates at former pumping plant of United Water New Jersey (formerly known as Hackensack Water Co.), New Milford, 4.0 mi downstream from Pascack Brook, 0.6 mi downstream from Oradell Reservoir Dam, and 21.8 mi upstream from mouth.

DRAINAGE AREA.--113 mi^2.

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

REVISED RECORDS: WSP 601: Drainage area. WSP 711: 1927-28(M). WRD-NJ 1970: 1969. WDR-NJ 1977: 1975(M). WDR-NJ 1984: 1983. WDR-NJ 1991: 1990.

GAGE.--Water-stage recorder, crest-stage gage above south dam, and tidal crest-stage gage downstream from south dam. Datum of gage is 6.25 ft above sea level. October 1921 to November 23, 1923, nonrecording gage and Nov. 23, 1923, to Sept. 25, 1934, water-stage recorder at same site at datum 0.05 ft lower.

REMARKS.-- Records good except those below 20 ft^3/s, which are fair. Flow regulated by DeForest Lake, Lake Tappan, Woodcliff Lake 9.0 mi upstream from station, and Oradell Reservoir 0.6 mi upstream from station (see Hackensack River basin, reservoirs in). Water pumped into basin above gage from Sparkill Creek (Hudson River basin), Saddle River and Ramapo River (Passaic River basin) by United Water New Jersey for municipal supply (see Hackensack River basin, diversions). Water diverted from Oradell Reservoir at Haworth Plant, De Forest Lake, and West Nyack, NY, for municipal supply (see Hackensack River basin, diversions). Diversion at gage was discontinued on May 30, 1990. Several measurements of water temperature were made during the year. National Weather Service telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with United Water New Jersey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

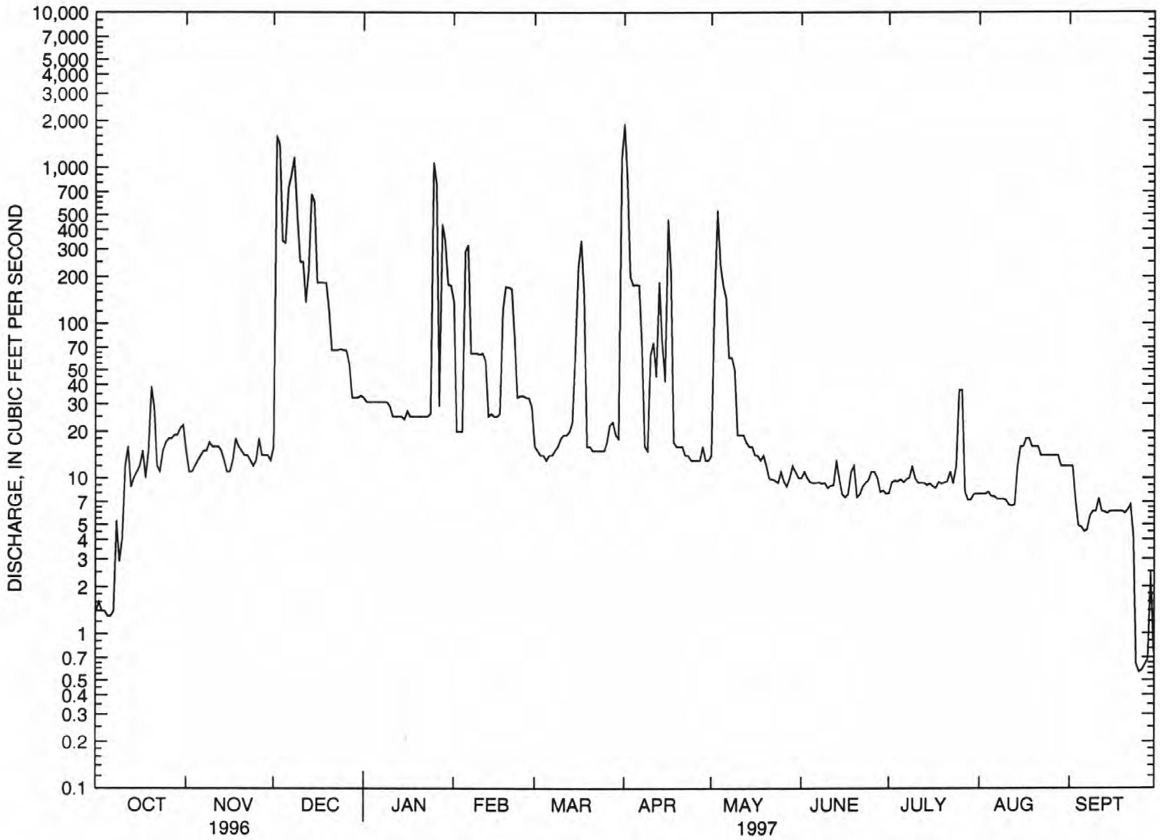
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	15	16	33	138	16	1930	14	10	8.0	7.9	12
2	1.6	11	1600	31	20	15	803	132	11	9.4	7.9	12
3	1.4	11	1400	31	20	14	200	531	10	9.6	7.9	7.2
4	1.4	12	339	31	20	14	177	239	9.4	9.5	8.1	4.9
5	1.3	13	329	31	290	13	178	175	9.3	9.8	7.6	4.8
6	1.3	14	732	31	319	14	177	146	9.3	9.4	7.6	4.5
7	1.4	15	894	31	64	14	71	60	9.4	9.8	7.3	4.6
8	5.3	15	1160	31	64	15	16	60	9.2	10	7.3	5.7
9	2.9	17	485	31	64	16	15	50	9.3	12	7.3	6.1
10	4.1	16	249	29	63	18	63	19	8.6	9.9	7.2	6.1
11	12	16	248	25	64	19	75	19	8.9	9.3	6.7	7.4
12	16	16	136	25	57	19	45	19	9.0	9.3	6.6	6.1
13	8.7	15	217	25	25	20	185	17	13	9.3	6.7	6.0
14	10	13	674	25	26	23	76	16	9.8	9.0	12	5.9
15	11	11	600	24	25	66	42	16	7.8	9.2	16	6.1
16	12	11	183	27	25	231	467	14	7.5	8.8	16	6.1
17	15	13	183	25	26	341	208	14	7.8	8.6	18	6.1
18	10	18	183	25	122	155	17	13	11	9.4	18	6.1
19	15	16	183	25	173	16	16	14	12	9.2	16	6.1
20	39	15	121	25	171	16	16	12	7.5	9.3	16	5.9
21	28	14	67	25	167	15	16	9.9	7.8	9.5	16	6.2
22	12	14	67	25	82	15	14	9.8	8.8	11	14	6.7
23	11	13	67	25	33	15	14	9.6	9.3	9.2	14	4.2
24	15	12	68	26	34	15	13	9.3	9.7	12	14	.63
25	17	13	67	1080	34	15	13	11	11	37	14	.56
26	18	18	67	774	33	17	13	9.5	11	37	14	.58
27	18	14	54	29	33	22	13	8.8	10	8.1	14	.63
28	19	14	33	434	29	23	16	10	8.1	7.2	14	.68
29	19	14	33	337	---	19	13	12	8.3	7.2	12	2.5
30	21	13	33	178	---	18	13	11	7.9	7.8	12	.75
31	22	---	34	176	---	1140	---	10	---	7.9	12	---
TOTAL	370.8	422	10522	3670	2221	2369	4915	1690.9	281.7	342.7	358.1	153.13
MEAN	12.0	14.1	339	118	79.3	76.4	164	54.5	9.39	11.1	11.6	5.10
MAX	39	18	1600	1080	319	1140	1930	531	13	37	18	12
MIN	1.3	11	16	24	20	13	13	8.8	7.5	7.2	6.6	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	35.0	64.0	88.3	103	125	210	198	122	60.1	45.8	39.0	41.5
MAX	480	356	339	359	396	651	774	528	612	543	373	385
(WY)	1956	1928	1997	1937	1939	1936	1983	1989	1972	1945	1927	1927
MIN	.000	.000	.000	.000	.000	.000	.000	.39	.000	.000	.000	.000
(WY)	1922	1924	1932	1971	1977	1981	1981	1985	1977	1954	1924	1923

01378500 HACKENSACK RIVER AT NEW MILFORD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	37452.8		27316.33			
ANNUAL MEAN	102		74.8		94.1	
HIGHEST ANNUAL MEAN					263	1928
LOWEST ANNUAL MEAN					.40	1981
HIGHEST DAILY MEAN	1690	Apr 16	1930	Apr 1	4230	May 31 1984
LOWEST DAILY MEAN	1.2	Sep 9	.56	Sep 25	.00	Oct 1 1921
ANNUAL SEVEN-DAY MINIMUM	1.3	Sep 5	.90	Sep 24	.00	Oct 1 1921
INSTANTANEOUS PEAK FLOW			2090	Apr 1	4630	May 17 1989
INSTANTANEOUS PEAK STAGE			4.81	Apr 1	8.23	May 17 1989
INSTANTANEOUS LOW FLOW			.42	Many days	.00	Many days
10 PERCENT EXCEEDS	285		177		276	
50 PERCENT EXCEEDS	18		15		16	
90 PERCENT EXCEEDS	1.8		6.7		.00	



01378500 HACKENSACK RIVER AT NEW MILFORD, NJ, DAILY MEAN DISCHARGE

RESERVOIRS IN HACKENSACK RIVER BASIN

01376700 DE FOREST LAKE.--Lat 41°06'23", long 73°58'01, Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.8 mi north of West Nyack, NY. DRAINAGE AREA, 27.5 mi^2. PERIOD OF RECORD, February 1956 to current year. REVISED RECORDS.--WDR NJ-84-1: Drainage area. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Crest of dam topped by two 50 ft Bascule Gates, 5 ft high. Capacity 5,670,000,000 gal, elevation, 85.00 ft, top of Bascule gates. Flow regulated by 12-inch Howell-Bunger valve at elevation, 59.25 ft and 24-inch Howell-Bunger valve at elevation, 61.25 ft. Reservoir used for storage and water released by United Water New Jersey, for municipal water supply.

COOPERATION.--Records provided by United Water New Jersey (formerly Hackensack Water Company).

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.5 mi north of Old Tappan. DRAINAGE AREA, about 49.0 mi^2. PERIOD OF RECORD, October 1966 to current year. REVISED RECORDS, WDR NJ-89-1: Capacity. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam, completed in 1966. Capacity, 3,853,000,000 gal, elevation, 55.00 ft at top of Bascule gates. Flow regulated by four Bascule gates and one sluice gate. Water is released for diversion at New Milford (diversion discontinued May 1990) and Haworth by United Water New Jersey, for municipal water supply.

COOPERATION.--Records provided by United Water New Jersey (formerly Hackensack Water Company).

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.7 mi north of Hillsdale. DRAINAGE AREA, 19.4 mi^2. PERIOD OF RECORD, December 1929 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. REVISED RECORDS, WDR NJ-89-1: Capacity. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam, completed about 1905. The dam was modified in 1984, which increased capacity, 871,000,000 gal, elevation, 95.00 ft at top of Bascule gates. Flow is regulated by two Bascule gates 85 ft long and 6 ft high each and one 24-inch Ball valve. Water is released for diversion at New Milford (diversion discontinued May 1990) and Haworth by United Water New Jersey, for municipal supply.

COOPERATION.--Records provided by United Water New Jersey (formerly Hackensack Water Company).

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi^2. PERIOD OF RECORD, December 1922 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. REVISED RECORDS.--WDR NJ-84-1: Spillway elevation, WDR NJ-89-1: Capacity. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 3,507,000,000 gal, elevation, 23.16 ft. Flow regulated by seven sluice gates (7 by 9 ft). Prior to May 1990, water was released for diversion by United Water New Jersey, 1 mi downstream from dam for municipal supply. Water is diverted from reservoir at Haworth by United Water New Jersey, for municipal supply.

COOPERATION.--Records provided by United Water New Jersey (formerly Hackensack Water Company).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01376700 DE FOREST LAKE			01376950 LAKE TAPPAN		
Sept. 30.........	83.89	5,313	--	50.66	2,404	--
Oct. 31.........	85.08	5,697	19.2	54.15	3,550	57.2
Nov. 30.........	85.15	5,720	1.2	55.24	3,939	20.1
Dec. 31.........	85.22	5,742	1.1	55.29	3,958	.9
CAL YR 1996	--	--	2.6	--	--	5.5
Jan. 31.........	85.21	5,740	-.1	55.27	3,950	-.4
Feb. 28.........	85.07	5,694	-2.5	55.09	3,886	-3.5
Mar. 31.........	85.33	5,780	4.3	55.60	4,070	9.2
Apr. 30.........	85.23	5,745	-1.8	55.29	3,959	-5.7
May 31.........	84.93	5,646	-4.9	55.05	3,871	-4.4
June 30.........	84.98	5,663	.9	54.86	3,804	-3.5
July 31.........	84.34	5,434	-11.4	52.50	2,990	-40.6
Aug. 31.........	83.73	5,261	-8.6	52.05	2,842	-7.4
Sept. 30.........	81.01	4,420	-43.4	49.93	2,185	-33.9
WTR YR 1997	--	--	-3.8	--	--	-.9

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01377450 WOODCLIFF LAKE			01378480 ORADELL RESERVOIR		
Sept. 30.........	91.20	663	--	20.55	2,833	--
Oct. 31.........	89.24	562	-5.0	21.21	2,998	8.2
Nov. 30.........	90.54	629	3.5	21.32	3,026	1.4
Dec. 31.........	91.03	654	1.2	21.81	3,149	6.1
CAL YR 1996			.6			3.5
Jan. 31.........	89.65	583	-3.5	21.63	3,103	-2.3
Feb. 28.........	88.81	541	-2.3	21.56	3,084	-1.0
Mar. 31.........	91.72	691	7.5	23.39	3,570	24.3
Apr. 30.........	90.40	621	-3.6	22.94	3,446	-6.4
May 31.........	90.63	633	.6	20.90	2,920	-26.3
June 30.........	92.72	745	5.8	19.26	2,526	-20.3
July 31.........	93.55	790	2.2	22.11	3,227	35.0
Aug. 31.........	91.79	695	-4.7	19.32	2,541	-34.2
Sept. 30.........	90.42	622	-3.8	19.87	2,670	6.7
WTR YR 1997			-.2			-.7

† Elevation at 2400 of the last day of each month.

DIVERSIONS INTO AND FROM HACKENSACK RIVER BASIN

01376272 United Water New Jersey, diverts water from Sparkill Creek (Hudson River basin) at foot of Danny Lane in Northvale, 300 ft south of New York-New Jersey state line and 0.6 mi upstream from Sparkill Brook. Water is diverted into Oradell Reservoir on the Hackensack River, for municipal supply. Records provided by United Water New Jersey (formerly Hackensack Water Company).

01376699 United Water New York (formerly Spring Valley Water Company), diverts water from De Forest Lake for municipal supply in Rockland County, NY. Records provided by United Water New York (formerly Spring Valley Water Company).

01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft downstream from gaging station on Hackensack River at West Nyack, NY (station 01376800, measured flow includes diversions) for municipal supply. Records provided by Board of Water Commissioners of Nyack, NY.

01378490 United Water New Jersey, diverts water for municipal supply from Oradell Reservoir at Haworth pumping station (station 01378478) 2.0 mi upstream from gaging station on Hackensack River at New Milford and prior to May 1990 from Hackensack River, at New Milford pumping station just upstream from gaging station on Hackensack River at New Milford, NJ (station 01378500). Diversion from the New Milford pumping station was discontinued in May 1990. Records provided by United Water New Jersey (formerly Hackensack Water Company).

01378520 United Water New Jersey, diverts water from Hirshfeld Brook, a tributary of the Hackensack River, below the gaging station on Hackensack River at New Milford, NJ, for municipal supply. Records provided by United Water New Jersey (formerly Hackensack Water Company).

01380280 The town of Boonton diverts water from a tributary of Stony Brook about 1 mi downstream from Taylortown Reservoir for Municipal Water Supply. Records furnished by town of Boonton.

01388981 United Water New Jersey, diverts water from the Wanaque South pumping station on the Pompton River at Two Bridges, 750 ft upstream from the Passaic River, to Oradell Reservoir. Water can also be diverted from Wanaque Reservoir to Oradell Reservoir in the Hackensack River basin. Figures given herein include diversion from both sources. Formerly diversion was from the Ramapo River (see station 01387991). Records provided by United Water New Jersey (formerly Hackensack Water Company).

01390520 (revised) United Water New Jersey, diverts water from Saddle River (Passaic River basin) 0.3 mi downstream from Grove Street in Paramus, and 0.3 mi upstream from Hohokus Brook. Water is diverted into Oradell Reservoir on the Hackensack River via Musquapsink and Pascack Brooks for municipal supply. Records provided by United Water New Jersey (formerly Hackensack Water Company).

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

MONTH	01376699 UNITED WATER NEW YORK.	01376810 WEST NYACK, NY	01378490 UNITED WATER NEW JERSEY
October	11.7	2.65	133
November	11.7	2.32	123
December	12.1	2.15	133
CAL YR 1996	11.30	2.38	146
January	11.29	2.17	147
February	12.11	2.18	131
March	7.91	2.16	114
April	12.87	2.22	126
May	13.20	2.41	137
June	16.94	2.60	165
July	18.32	2.72	177
August	17.28	2.67	162
September	13.75	2.78	155
WTR YR 1997	13.26	2.42	142

The following are diversions by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above (station 01378490).

MONTH	01376272 SPARKILL CREEK (HUDSON RIVER BASIN)	01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	01380280 STONY BROOK TRIB. (TAYLOR-TOWN, NJ)	01388981 POMPTON RIVER (PASSAIC RIVER BASIN)	01390520 SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October	0	1.01	0.610	.04	4.21	0.40
November	0	0	.525	0	0	.21
December	0	0	.770	0	0	.35
CAL YR 1996	0	.25	.784	5.41	2.69	.41
January	0	0	.776	0	0	.21
February	0	0	.739	0	0	.14
March	0	0	.651	0	0	.16
April	0	0	.718	0	0	.32
May	0	0	.924	0	0	.51
June	0	0	.697	9.58	0	.40
July	0	0	.817	42.73	4.47	.50
August	0	0	.759	22.43	2.52	.46
September	0	0	.827	34.80	14.2	.45
WTR YR 1997	0	.08	.734	9.13	2.12	.34

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ

LOCATION.--Lat 40°40'48", long 74°31'45", Somerset County, Hydrologic Unit 02030103, on right bank 200 ft downstream from Davis Bridge on Maple Avenue, 0.7 mi northwest of Millington, and 1.8 mi downstream from Black Brook.

DRAINAGE AREA.--55.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1903 to June 1906 (published as "at Millington"), October 1921 to current year. Monthly discharge only for some periods published in WSP 1302.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1905(M). WDR NJ-96-1: 1936 (M), 1949 (M), 1971 (M), 1975 (M), 1979 (M), 1984 (M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete-block control. Datum of gage is 215.60 ft above sea level (levels from New Jersey Geological Survey bench mark). Nov. 25, 1903 to July 15, 1906, nonrecording gage at bridge 0.8 mi downstream at different datum. Nov. 10, 1921 to Sept. 1, 1923, nonrecording gage at site 200 ft downstream at present datum. Oct. 31, 1923 to July 3, 1925, nonrecording gage and concrete control at present site and datum.

REMARKS.--Records good. Diversion from Osborn Pond by Commonwealth Water Co., Bernards Division, was discontinued in April 1979 and the installation dismantled. Several measurements of water temperature, other than those published, were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	1515	*2,290	*9.89	Dec. 15	0115	582	6.90
Dec. 2	2015	788	7.33	Apr. 2	0500	511	6.73
Dec. 8	1115	722	7.20				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

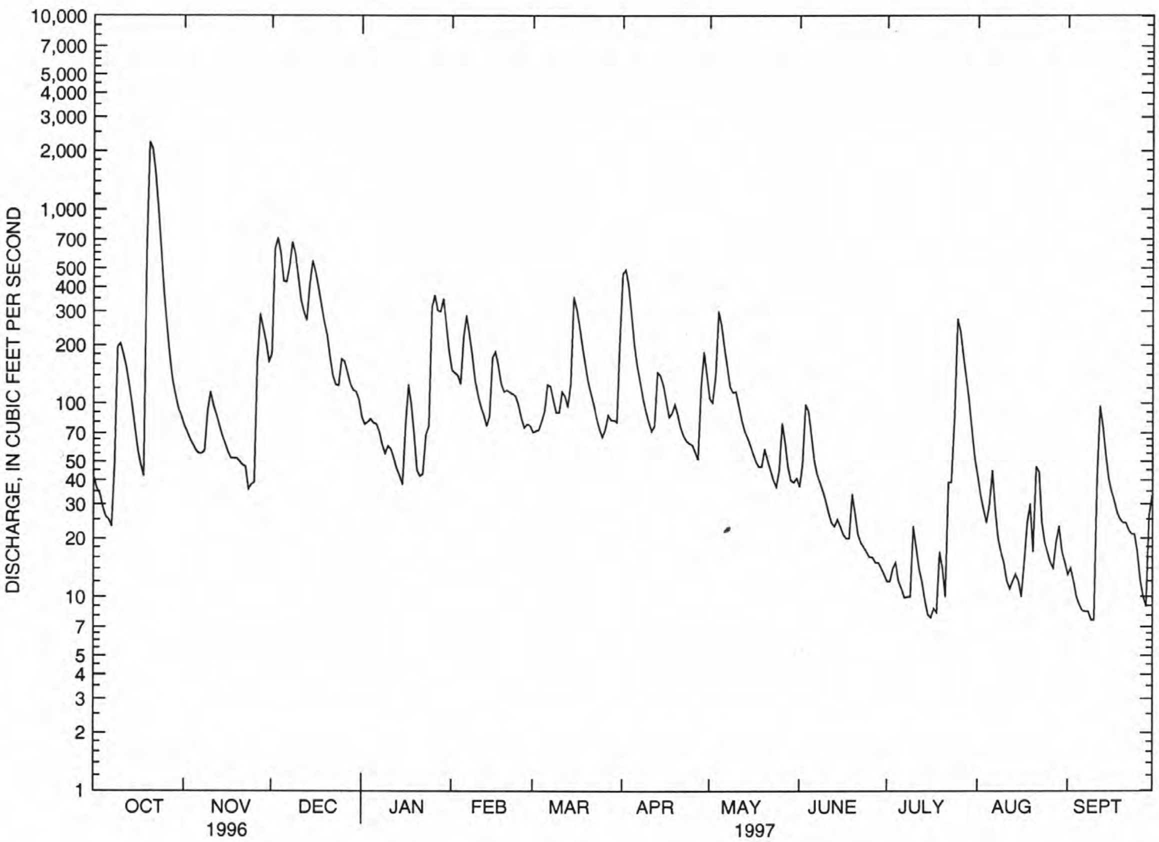
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	77	180	85	149	71	470	106	37	12	42	13
2	36	71	625	78	144	72	492	101	49	12	33	14
3	34	65	718	80	140	73	406	141	99	14	28	12
4	29	61	593	83	126	81	289	300	91	15	24	10
5	26	57	429	79	220	91	201	253	69	12	30	9.1
6	25	55	425	78	285	125	155	194	51	11	45	8.5
7	23	55	512	71	227	123	129	155	43	9.9	28	8.4
8	49	57	680	61	178	105	106	122	39	10	20	8.4
9	197	91	589	55	132	90	91	114	35	10	17	7.6
10	204	115	453	60	110	90	80	115	31	23	15	7.6
11	179	97	343	58	96	115	72	98	27	18	12	40
12	154	87	297	52	87	109	76	82	24	14	11	97
13	125	77	268	46	76	96	145	72	23	12	12	76
14	99	68	410	42	86	127	140	67	25	9.7	13	55
15	74	62	548	38	173	355	124	61	23	8.1	12	41
16	57	56	477	77	185	310	103	55	21	7.8	10	35
17	48	52	398	125	157	252	85	50	20	8.7	15	31
18	42	52	321	98	127	198	89	47	20	8.3	24	27
19	591	52	263	68	115	158	99	47	34	17	30	25
20	2230	50	225	45	117	129	87	58	27	14	17	24
21	2060	48	173	42	114	112	75	51	21	10	47	24
22	1550	47	139	43	112	98	68	45	19	39	44	22
23	1020	36	125	69	109	84	64	40	18	39	24	21
24	598	38	124	76	98	74	62	37	17	85	19	21
25	367	39	169	313	84	67	61	45	16	274	17	17
26	249	166	165	364	75	73	56	79	16	235	15	12
27	173	291	144	302	78	87	51	63	15	175	14	10
28	131	246	126	299	77	82	122	47	15	135	19	8.9
29	110	209	117	348	---	82	185	40	14	102	23	26
30	94	165	115	258	---	80	141	39	13	72	17	33
31	86	---	104	188	---	217	---	41	---	52	15	---
TOTAL	10701	2642	10255	3681	3677	3826	4324	2765	952	1464.5	692	744.5
MEAN	345	88.1	331	119	131	123	144	89.2	31.7	47.2	22.3	24.8
MAX	2230	291	718	364	285	355	492	300	99	274	47	97
MIN	23	36	104	38	75	67	51	37	13	7.8	10	7.6
CFSM	6.23	1.59	5.97	2.14	2.37	2.23	2.60	1.61	.57	.85	.40	.45
IN.	7.19	1.77	6.89	2.47	2.47	2.57	2.90	1.86	.64	.98	.46	.50

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997, BY WATER YEAR (WY)

MEAN	49.5	87.0	107	113	129	188	145	92.4	57.2	45.7	49.7	50.9
MAX	345	340	335	463	380	439	420	365	292	307	398	380
(WY)	1997	1933	1984	1905	1904	1994	1983	1989	1972	1975	1942	1971
MIN	3.56	7.47	8.18	6.78	26.1	64.2	25.9	20.3	3.95	1.25	1.37	.73
(WY)	1964	1966	1966	1981	1934	1981	1985	1965	1965	1965	1966	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1904 - 1997	
ANNUAL TOTAL	56796		45724.0			
ANNUAL MEAN	155		125		91.7	
HIGHEST ANNUAL MEAN					163	1984
LOWEST ANNUAL MEAN					32.3	1965
HIGHEST DAILY MEAN	2230	Oct 20	2230	Oct 20	2230	Oct 20 1996
LOWEST DAILY MEAN	13	Sep 4	7.6	Sep 9	.30	Sep 13 1966
ANNUAL SEVEN-DAY MINIMUM	14	Aug 31	8.5	Sep 4	.47	Sep 11 1964
INSTANTANEOUS PEAK FLOW			2290	Oct 20	2290	Oct 20 1996
INSTANTANEOUS PEAK STAGE			9.89	Oct 20	9.89	Oct 20 1996
INSTANTANEOUS LOW FLOW			6.4	Sep 10	.20	Sep 12 1966
ANNUAL RUNOFF (CFSM)	2.80		2.26		1.65	
ANNUAL RUNOFF (INCHES)	38.14		30.70		22.48	
10 PERCENT EXCEEDS	362		287		225	
50 PERCENT EXCEEDS	85		72		48	
90 PERCENT EXCEEDS	28		14		9.0	



—— 01379000 PASSAIC RIVER NEAR MILLINGTON, NJ, DAILY MEAN DISCHARGE

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1962 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to June, 1997.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 100 ft downstream from bridge.

REMARKS.--Continuous records of water temperature were collected as part of the LINJ NAWQA study. Interruptions in the daily record were due to instrument malfunction, June 11 to Sept. 30. Additional water-quality data collected as part of the NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bateria by the membrane filtration method, dissolved nitrate, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
30...	1015	92	200	7.1	10.5	746	5.8	53	<1.0	350	60	61
JAN 1997												
15...	1100	35	375	7.1	0.5	762	10.9	76	<1.0	17	<10	94
MAR												
20...	1030	129	272	7.3	5.5	753	10.4	84	E1.7	17	30	61
MAY												
20...	1030	59	268	7.4	19.0	750	5.4	59	E2.0	2100	270	86
JUL												
30...	1030	72	292	6.7	20.5	761	3.4	38	E1.6	170	180	88

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
30...	15	5.6	14	2.3	39	12	25	<.1	17	136	115	6
JAN 1997												
15...	23	8.8	33	1.7	50	22	66	<.1	19	212	207	2
MAR												
20...	15	5.8	25	1.4	34	15	48	<.1	6.2	160	138	9
MAY												
20...	21	7.8	18	1.2	52	14	38	<.1	10	152	143	10
JUL												
30...	23	7.5	19	1.6	34	55	27	<.1	14	215	168	22

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
30...	.004	.14	<.03	<.03	.5	.41	.64	.55	.06	.03	11	.7
JAN 1997												
15...	.010	.84	<.03	<.03	.2	.21	1.0	1.0	.01	<.01	3.0	.2
MAR												
20...	.005	.27	<.03	<.03	.4	.30	.67	.57	.02	.01	5.4	.4
MAY												
20...	.015	.31	<.03	<.03	.5	.31	.80	.62	.07	.02	5.5	.5
JUL												
30...	.009	.053	.13	.07	1.0	.90	1.0	.95	.09	.06	16	1.5

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
20...	1030	20	<1	<10	60	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
20...	1100	<1	130	<.1	1	<1	<10

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

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

01379500 PASSAIC RIVER NEAR CHATHAM, NJ

LOCATION.--Lat 40°43'31", long 74°23'23", Morris County, Hydrologic Unit 02030103, on left bank 150 ft downstream from Stanley Avenue bridge in Chatham, and 3.0 mi upstream from Canoe Brook.

DRAINAGE AREA.--100 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1903 to December 1911, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR NJ-86-1: 1984 (M).

GAGE.--Water-stage recorder. Concrete control since Sept. 19, 1938. Datum of gage is 193.51 ft above sea level. Prior to Dec. 31, 1911, nonrecording gage at bridge 150 ft upstream at different datum.

REMARKS.--Records good except for estimated discharges, which are fair. Diversion from Osborn Pond by Commonwealth Water Co., Bernards Division, during water years 1903-79. Several measurements of water temperature, other than those published, were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 21	1300	*2,080	*7.49	Dec. 14	1000	1,070	5.81
Dec. 3	2030	1,030	5.75	Apr. 1	1530	880	5.49
Dec. 7	2115	1,230	6.08	July 25	0100	1,140	5.93

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	131	415	157	331	127	825	226	63	26	70	30
2	71	118	846	135	269	126	855	185	128	25	57	28
3	65	105	1010	130	239	129	791	308	229	26	48	28
4	57	97	987	134	224	146	666	485	189	27	43	26
5	51	93	861	130	408	180	505	475	134	25	50	25
6	47	88	916	128	466	250	381	410	99	24	74	24
7	45	83	983	120	440	241	289	338	77	23	70	24
8	165	89	1110	106	372	200	211	256	66	23	48	24
9	435	218	1070	e88	300	170	166	223	59	27	38	23
10	484	217	932	e80	224	181	140	219	55	35	32	22
11	405	176	775	e64	174	235	125	183	50	36	29	137
12	316	142	660	e64	153	213	154	148	46	30	28	158
13	231	124	562	e100	136	181	297	125	51	25	27	130
14	170	110	842	e88	201	308	272	113	45	23	28	88
15	128	102	950	77	340	571	217	104	42	22	29	61
16	103	93	900	e170	356	619	180	93	39	21	28	45
17	86	84	777	e310	315	518	152	84	37	20	31	38
18	73	81	646	e260	261	416	172	77	37	26	54	34
19	870	85	542	e175	217	334	196	75	63	31	59	30
20	1820	86	454	e140	200	262	171	97	55	30	60	29
21	2050	80	369	e91	190	210	140	94	44	26	130	29
22	1990	74	297	e83	191	177	122	80	37	63	102	27
23	1810	69	239	121	189	150	111	69	33	69	68	25
24	1550	60	224	e150	171	128	107	62	32	446	44	25
25	1260	59	292	545	152	115	105	86	31	988	35	25
26	965	310	290	e600	131	164	97	173	31	810	32	24
27	688	503	264	e570	134	175	87	135	30	621	29	24
28	460	502	231	635	136	145	290	94	29	444	39	23
29	313	412	206	e630	---	152	360	72	27	266	46	42
30	211	339	198	e560	---	176	306	64	26	142	41	33
31	155	---	183	429	---	504	---	65	---	95	31	---
TOTAL	17158	4730	19031	7070	6920	7503	8490	5218	1884	4495	1500	1281
MEAN	553	158	614	228	247	242	283	168	62.8	145	48.4	42.7
MAX	2050	503	1110	635	466	619	855	485	229	988	130	158
MIN	45	59	183	64	131	115	87	62	26	20	27	22
CFSM	5.53	1.58	6.14	2.28	2.47	2.42	2.83	1.68	.63	1.45	.48	.43
IN.	6.38	1.76	7.08	2.63	2.57	2.79	3.16	1.94	.70	1.67	.56	.48

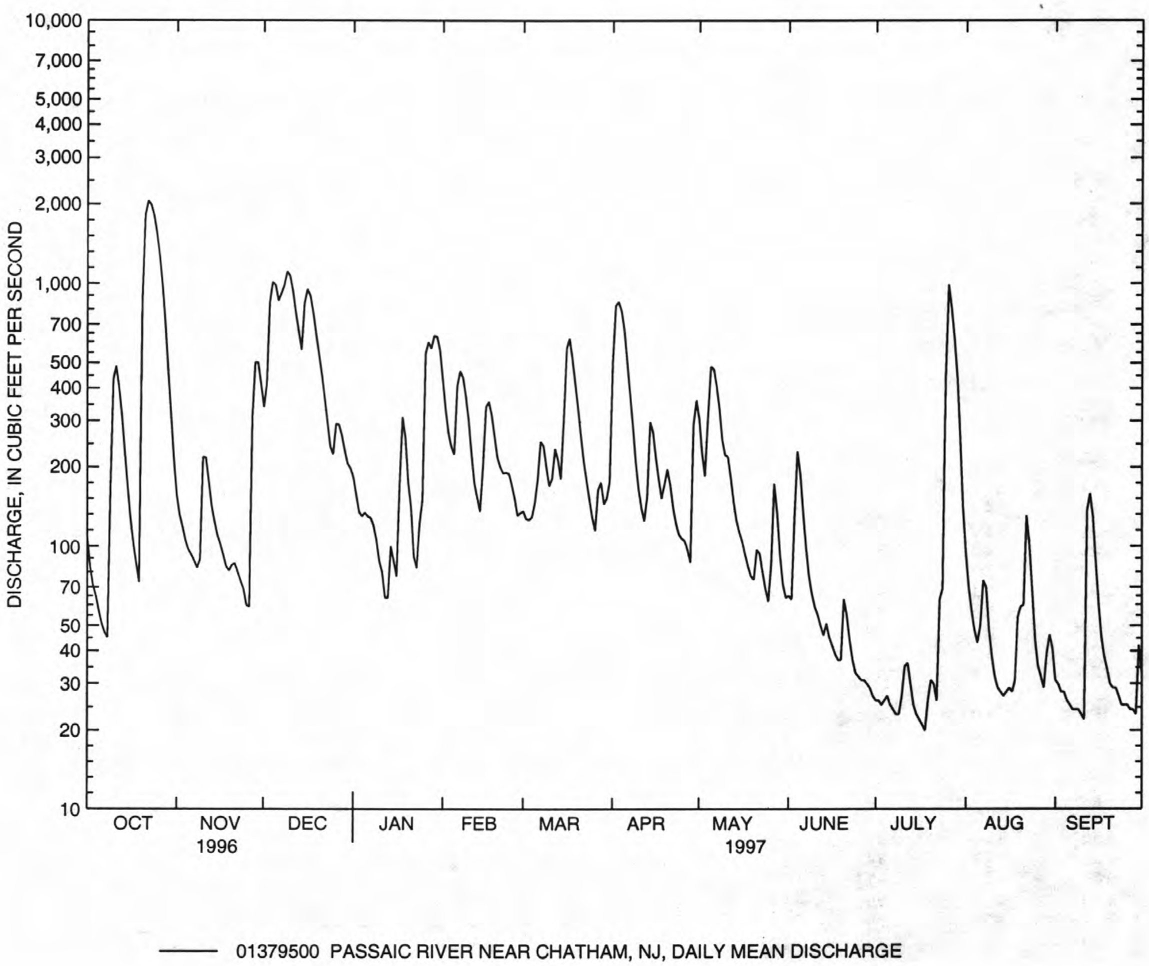
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	95.3	159	206	227	238	342	265	173	114	85.6	94.6	93.2
MAX	576	590	655	735	493	719	711	637	533	539	664	713
(WY)	1904	1973	1984	1979	1908	1994	1983	1989	1972	1975	1942	1971
MIN	8.05	13.8	32.3	21.5	63.2	94.5	54.3	7.52	13.6	7.74	7.35	4.70
(WY)	1965	1950	1940	1981	1980	1911	1985	1903	1965	1966	1957	1906

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1903 - 1997	
ANNUAL TOTAL	103825		85280			
ANNUAL MEAN	284		234		173	
HIGHEST ANNUAL MEAN					305	1984
LOWEST ANNUAL MEAN					67.7	1965
HIGHEST DAILY MEAN	2050	Oct 21	2050	Oct 21	2990	Jan 9 1905
LOWEST DAILY MEAN	26	Sep 2	20	Jul 17	2.0	May 15 1903
ANNUAL SEVEN-DAY MINIMUM	27	Aug 30	24	Jul 12	2.0	May 15 1903
INSTANTANEOUS PEAK FLOW			2080	Oct 21	3380	Aug 2 1973
INSTANTANEOUS PEAK STAGE			7.49	Oct 21	9.36a	Aug 2 1973
INSTANTANEOUS LOW FLOW			20	Jul 17	2.0	Many days
ANNUAL RUNOFF (CFSM)	2.84		2.34		1.73	
ANNUAL RUNOFF (INCHES)	38.62		31.72		23.52	
10 PERCENT EXCEEDS	727		583		462	
50 PERCENT EXCEEDS	163		130		84	
90 PERCENT EXCEEDS	52		28		17	

a From floodmark.
e Estimated.



01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1966 to September 1968.
SUSPENDED-SEDIMENT DISCHARGE: July 1963 to September 1968.

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)
OCT 1996										
30...	1300	207	274	7.1	11.5	744	6.4	60	E1.5	170
JAN 1997										
16...	1215	E170	592	7.0	0.5	739	13.6	97	3.3	3500
MAR										
20...	1315	257	353	7.4	5.5	752	12.4	100	E1.8	130
MAY										
20...	1330	97	393	7.6	18.0	751	7.0	75	3.3	>24000
JUL										
30...	1300	135	323	7.2	22.5	761	5.5	64	E1.7	500

DATE	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
OCT 1996										
30...	70	73	18	6.8	22	2.7	49	21	35	.1
JAN 1997										
16...	15400	36	10	2.6	96	2.0	--	6.1	160	<.1
MAR										
20...	10	75	19	6.8	36	1.5	41	18	64	<.1
MAY										
20...	4300	100	26	9.4	36	2.0	62	20	64	<.1
JUL										
30...	400	88	23	7.6	24	2.0	42	47	37	<.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 1996									
30...	17	158	155	--	.006	.64	<.03	.05	.6
JAN 1997									
16...	2.3	304	--	76	.017	.42	.07	.06	1.0
MAR									
20...	8.9	201	182	11	.006	.86	<.03	<.03	.4
MAY									
20...	11	217	214	34	.036	1.8	<.03	.03	.7
JUL									
30...	15	218	184	27	.017	.79	.13	.12	1.0

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996									
30...	.44	1.2	1.1	.17	.11	10	.8	6	3.1
JAN 1997									
16...	.14	1.4	.56	.30	.11	2.6	.3	--	--
MAR									
20...	.31	1.3	1.2	.10	.07	4.9	.4	--	--
MAY									
20...	.38	2.5	2.2	.32	.18	5.2	1.2	--	--
JUL									
30...	.80	1.8	1.6	.33	.19	11	1.1	--	--

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
20...	1330	20	<1	<10	80	<1	1.9	6

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
20...	1400	3	150	<.1	3	<1	20

01379580 PASSAIC RIVER NEAR HANOVER NECK, NJ

LOCATION.--Lat 40°49'39", long 74°20'07", Morris County, Hydrologic Unit 02030103, on downstream left abutment of bridge on Eagle Rock Avenue, 1.9 mi upstream from Whippany River, and 1.1 mi southeast of Hanover Neck.

DRAINAGE AREA.--132 mi^2.

PERIOD OF RECORD.--December 1992 to September 1997 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 160.73 ft above sea level.

REMARKS.--Records good. Data is stage-only and is collected in cooperation with the U.S. Army Corps of Engineers. Days of no gage-height record are not estimated and are noted by dashed lines (---).

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 10.92 ft, Oct. 21; minimum recorded, 1.56 ft, July 18.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 10.92 ft, Oct. 21, 1996; minimum recorded, 1.29 ft, many days in September 1995.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of April 5-7, 1984, reached a stage of 11.8 feet, present datum, from floodmarks, discharge not determined.

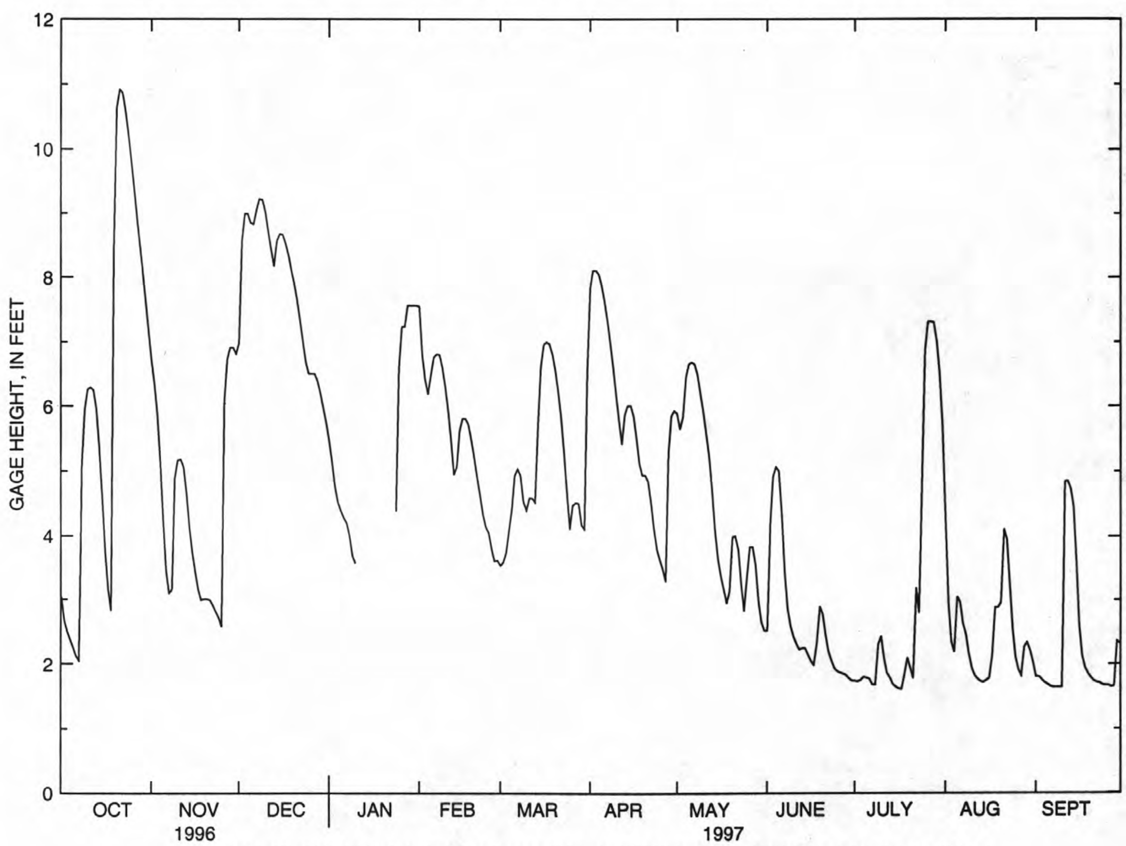
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3.04	2.67	6.72	6.34	6.98	6.51	5.48	5.15	7.55	6.80	3.54	3.45
2	2.67	2.50	6.34	5.87	8.57	6.98	5.15	4.78	6.80	6.42	3.59	3.48
3	2.50	2.38	5.87	5.16	8.99	8.57	4.78	4.53	6.42	6.19	3.74	3.59
4	2.38	2.26	5.16	4.23	8.99	8.85	4.53	4.39	6.19	5.92	4.09	3.74
5	2.26	2.12	4.23	3.45	8.85	8.58	4.39	4.28	6.48	5.92	4.42	4.09
6	2.12	2.05	3.45	3.10	8.83	8.55	4.28	4.20	6.76	6.48	4.94	4.42
7	2.05	2.01	3.10	2.97	9.05	8.81	4.20	3.99	6.81	6.76	5.04	4.94
8	5.10	1.98	3.15	2.98	9.22	9.05	4.00	3.69	6.80	6.61	4.94	4.54
9	5.95	5.10	4.89	3.14	9.21	9.02	3.69	3.46	6.61	6.31	4.54	4.09
10	6.26	5.95	5.17	4.89	9.02	8.72	3.58	3.44	6.31	5.94	4.40	3.98
11	6.29	6.25	5.18	5.06	8.72	8.43	---	---	5.94	5.49	4.59	4.40
12	6.25	5.96	5.06	4.66	8.43	8.17	---	---	5.49	4.95	4.59	4.53
13	5.96	5.38	4.66	4.12	8.17	7.95	---	---	4.95	4.36	4.53	4.34
14	5.38	4.59	4.12	3.73	8.57	7.95	---	---	5.07	4.15	5.69	4.23
15	4.59	3.74	3.73	3.43	8.68	8.57	---	---	5.63	5.07	6.61	5.69
16	3.74	3.16	3.43	3.16	8.67	8.53	---	---	5.81	5.63	6.96	6.61
17	3.16	2.83	3.16	2.99	8.53	8.33	---	---	5.81	5.73	7.00	6.96
18	2.83	2.63	2.99	2.94	8.33	8.10	---	---	5.73	5.50	6.97	6.80
19	8.42	2.59	3.01	2.95	8.10	7.90	---	---	5.50	5.21	6.80	6.55
20	10.63	8.42	3.01	2.98	7.90	7.64	---	---	5.21	4.91	6.55	6.22
21	10.92	10.63	2.99	2.91	7.64	7.33	---	---	4.91	4.63	6.22	5.83
22	10.87	10.60	2.91	2.80	7.33	7.00	---	---	4.64	4.34	5.83	5.29
23	10.60	10.22	2.81	2.72	7.00	6.68	---	---	4.34	4.14	5.29	4.69
24	10.22	9.81	2.72	2.58	6.68	6.47	4.39	3.90	4.14	3.99	4.69	4.11
25	9.81	9.37	2.58	2.51	6.50	6.46	6.59	4.39	4.05	3.80	4.11	3.71
26	9.37	8.91	6.08	2.52	6.50	6.48	7.23	6.59	3.80	3.59	4.48	3.66
27	8.91	8.48	6.73	6.08	6.50	6.39	7.23	7.23	3.61	3.47	4.52	4.48
28	8.48	8.08	6.91	6.73	6.39	6.20	7.56	7.23	3.62	3.50	4.51	4.17
29	8.08	7.63	6.91	6.81	6.20	5.97	7.56	7.56	---	---	4.17	3.95
30	7.63	7.17	6.81	6.56	5.97	5.75	7.56	7.56	---	---	4.11	4.02
31	7.17	6.72	---	---	5.75	5.48	7.56	7.55	---	---	6.54	4.04
MONTH	10.92	1.98	6.91	2.51	9.22	5.48	---	---	7.55	3.47	7.00	3.45

01379580 PASSAIC RIVER NEAR HANOVER NECK, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.83	6.54	5.89	5.65	2.52	2.47	1.74	1.71	4.31	2.94	1.81	1.77
2	8.11	7.83	5.65	5.21	4.17	2.45	1.73	1.71	2.94	2.35	1.81	1.76
3	8.11	8.05	5.84	4.99	4.92	4.17	1.75	1.72	2.35	2.15	1.76	1.72
4	8.05	7.88	6.44	5.84	5.07	4.92	1.80	1.74	2.19	2.08	1.72	1.68
5	7.88	7.62	6.65	6.44	5.01	4.35	1.79	1.77	3.05	2.19	1.69	1.66
6	7.62	7.32	6.68	6.64	4.35	3.44	1.77	1.67	2.96	2.63	1.66	1.64
7	7.32	6.97	6.65	6.49	3.44	2.87	1.68	1.66	2.63	2.47	1.64	1.62
8	6.97	6.59	6.49	6.20	2.87	2.59	1.68	1.65	2.47	2.17	1.64	1.62
9	6.59	6.18	6.20	5.92	2.59	2.43	2.31	1.65	2.17	1.95	1.64	1.62
10	6.18	5.78	5.92	5.59	2.43	2.32	2.43	2.09	1.95	1.82	1.64	1.61
11	5.78	5.33	5.59	5.22	2.32	2.23	2.09	1.86	1.82	1.77	4.84	1.61
12	5.42	5.08	5.22	4.70	2.23	2.13	1.86	1.79	1.77	1.73	4.85	4.74
13	5.87	5.42	4.70	4.07	2.25	2.12	1.79	1.69	1.73	1.70	4.74	4.46
14	6.01	5.86	4.07	3.64	2.25	2.15	1.69	1.65	1.72	1.70	4.46	3.59
15	6.01	5.85	3.64	3.37	2.15	2.05	1.65	1.62	1.75	1.72	3.59	2.60
16	5.85	5.51	3.37	3.16	2.05	1.99	1.62	1.61	1.78	1.70	2.60	2.12
17	5.51	5.12	3.16	2.95	1.99	1.95	1.61	1.58	2.13	1.78	2.12	1.94
18	5.12	4.88	2.95	2.82	2.33	1.93	1.84	1.56	2.89	1.90	1.94	1.85
19	4.94	4.88	3.14	2.81	2.90	2.33	2.10	1.84	2.89	2.40	1.85	1.79
20	4.94	4.85	3.99	3.14	2.78	2.46	1.94	1.78	2.96	2.18	1.79	1.73
21	4.85	4.53	4.00	3.78	2.46	2.20	1.78	1.71	4.11	2.96	1.74	1.70
22	4.53	4.12	3.78	3.23	2.20	2.04	3.19	1.72	3.95	3.24	1.72	1.70
23	4.12	3.79	3.23	2.83	2.06	1.94	2.80	2.35	3.24	2.55	1.71	1.68
24	3.79	3.63	2.83	2.58	1.94	1.89	4.97	2.36	2.55	2.11	1.68	1.65
25	3.63	3.48	3.35	2.51	1.89	1.86	6.87	4.97	2.11	1.91	1.67	1.65
26	3.48	3.29	3.83	3.35	1.87	1.84	7.31	6.87	1.91	1.82	1.67	1.65
27	3.29	3.06	3.83	3.55	1.85	1.82	7.31	7.23	1.82	1.77	1.65	1.62
28	5.27	3.06	3.55	2.99	1.83	1.78	7.30	7.01	2.27	1.76	1.66	1.61
29	5.85	5.27	2.99	2.66	1.78	1.74	7.01	6.51	2.34	2.16	2.36	1.66
30	5.93	5.85	2.66	2.52	1.74	1.72	6.51	5.69	2.21	2.03	2.32	1.89
31	---	---	2.52	2.48	---	---	5.69	4.31	2.03	1.80	---	---
MONTH	8.11	3.06	6.68	2.48	5.07	1.72	7.31	1.56	4.31	1.70	4.85	1.61



01379580 PASSAIC RIVER NEAR HANOVER NECK, NJ, MAXIMUM DAILY GAGE HEIGHT

01379680 ROCKAWAY RIVER AT LONGWOOD VALLEY, NJ

LOCATION.--Lat 40°57'14", long 74°34'17", Morris County, Hydrologic Unit 02030103, adjacent to Taylor Road, 800 ft downstream from bridge on Berkshire Valley Road, 2.0 mi northwest of Berkshire Valley, and 2.3 mi downstream from Longwood Lake.

DRAINAGE AREA.--22.1 mi^2.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June to September 1997.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 800 ft downstream from bridge.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	23.5	21.5	22.5	22.5	20.0	21.5	22.0	20.0	21.0
2	---	---	---	22.5	21.5	22.0	23.5	21.0	22.0	22.5	21.0	21.5
3	---	---	---	23.0	21.5	22.0	24.0	21.5	22.5	22.5	20.0	21.0
4	---	---	---	23.0	21.5	22.5	22.5	21.0	21.5	20.0	17.5	18.5
5	---	---	---	22.5	20.5	21.5	22.5	20.5	21.5	18.0	16.5	17.5
6	---	---	---	22.0	20.0	21.0	22.0	20.5	21.0	18.0	17.0	17.5
7	---	---	---	22.5	20.5	21.5	21.5	19.5	20.5	18.0	17.0	17.5
8	---	---	---	23.5	21.0	22.0	21.0	19.0	20.0	18.5	17.5	18.0
9	---	---	---	23.5	21.5	22.5	22.5	19.0	20.5	18.0	17.5	17.5
10	---	---	---	24.0	21.0	22.5	23.0	20.0	21.0	17.5	17.0	17.0
11	---	---	---	23.5	21.0	22.5	23.5	20.5	21.5	18.0	17.0	17.5
12	---	---	---	23.5	21.0	22.5	23.5	21.5	22.5	19.5	17.5	18.5
13	22.5	20.5	21.5	24.0	22.0	23.0	22.5	22.0	22.0	20.0	18.0	19.0
14	22.0	20.0	21.0	25.0	23.0	24.0	23.5	21.0	22.0	19.5	18.0	19.0
15	21.5	18.0	20.0	25.5	23.0	24.5	23.0	20.5	21.5	19.5	17.5	18.5
16	21.0	18.0	19.5	26.5	24.5	25.5	24.5	21.5	22.5	19.5	17.5	18.5
17	20.0	18.5	19.0	26.5	24.5	25.5	24.5	23.0	23.5	20.0	17.5	19.0
18	19.0	18.5	18.5	26.0	24.0	25.0	23.5	22.0	23.0	20.0	19.0	19.5
19	22.5	18.5	20.0	25.0	22.5	23.5	22.5	20.5	21.5	20.0	18.0	19.0
20	23.5	19.5	21.5	23.0	20.5	21.5	22.0	19.5	20.0	19.5	18.5	19.0
21	25.0	21.0	23.0	22.0	19.5	21.0	20.0	18.5	19.5	19.0	16.5	17.5
22	25.5	22.5	24.0	22.5	21.0	21.5	21.0	19.5	20.0	16.5	15.0	15.5
23	24.5	22.0	23.5	22.0	21.0	21.5	20.5	18.5	19.5	15.5	15.5	15.5
24	23.5	21.0	22.0	21.0	18.5	20.0	19.5	17.5	19.0	15.5	14.0	14.5
25	24.5	21.5	23.0	21.0	18.0	19.5	20.0	18.5	19.5	14.0	13.0	13.5
26	25.0	24.0	24.5	22.0	20.0	21.0	21.0	19.5	20.0	14.5	13.0	14.0
27	24.0	22.0	23.0	23.5	22.0	22.5	20.5	19.5	20.0	14.5	13.0	13.5
28	23.5	21.0	22.5	24.5	23.0	23.5	20.0	19.5	19.5	14.5	13.5	14.0
29	24.0	21.5	22.5	24.5	21.5	23.0	20.5	19.0	19.5	15.5	14.0	14.5
30	23.5	21.5	22.5	22.5	20.0	21.0	21.0	19.0	20.0	15.5	14.5	15.0
31	---	---	---	23.0	19.0	21.0	21.0	19.5	20.0	---	---	---
MONTH	---	---	---	26.5	18.0	22.0	24.5	17.5	21.0	22.5	13.0	17.0

01379700 ROCKAWAY RIVER AT BERKSHIRE VALLEY, NJ

LOCATION.--Lat 40°55'51", long 74°35'42", Morris County, Hydrologic Unit 02030103, on left bank 60 ft downstream from bridge on Berkshire Valley Road in Berkshire Valley, 2.7 mi upstream from Stephens Brook, and 3.8 mi northwest of Dover.

DRAINAGE AREA.--24.4 mi^2.

PERIOD OF RECORD.--Low-flow partial-record station water years 1960-72. May 1985 to July 21, 1996 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 682.8 ft above sea level.

REMARKS.--Records fair. Some regulation from lakes and reservoirs upstream. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 11, 1936, reached a stage of 6.7 ft, present datum, discharge not determined. Flood of April 5, 1984, reached a stage of 9.05 ft, from floodmarks, discharge 1,290 ft^3/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 22	1815	176	5.29	Feb. 25	0430	190	5.39
Nov. 13	0100	377	6.23	Mar. 21	0100	184	5.35
Nov. 19	0715	161	5.18	Apr. 17	0700	202	5.47
Jan. 20	1545	*1,040	*7.80	May 1	1045	198	5.44
Jan. 25	0900	357	6.16	May 12	1830	150	5.09
Jan. 28	0830	675	7.08	July 14	0915	190	5.39
Feb. 1	2045	167	5.23				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

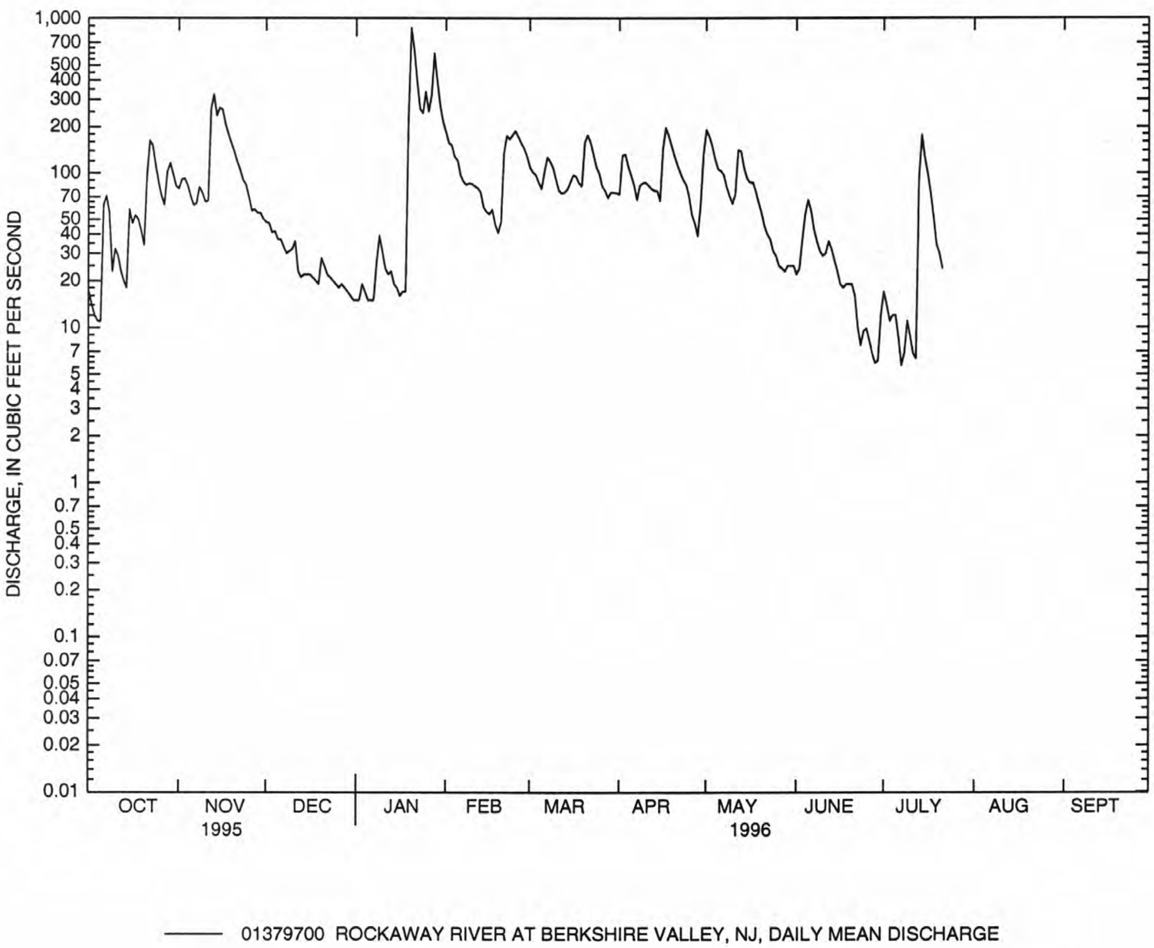
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	79	48	15	186	109	73	191	22	17	---	---
2	7.8	91	47	15	157	101	130	172	24	14	---	---
3	5.9	92	41	19	152	97	133	148	37	11	---	---
4	4.3	83	42	17	128	87	111	122	54	12	---	---
5	13	71	37	15	121	79	97	106	67	12	---	---
6	104	62	37	15	97	102	84	103	57	8.6	---	---
7	113	63	33	15	88	127	67	97	43	5.7	---	---
8	82	81	30	26	84	119	83	81	36	6.8	---	---
9	61	75	31	39	86	108	86	71	31	11	---	---
10	41	65	32	31	85	91	87	63	29	8.8	---	---
11	28	66	36	24	82	77	83	73	30	6.8	---	---
12	21	261	23	22	80	74	79	141	36	6.3	---	---
13	19	323	21	23	75	75	77	138	32	93	---	---
14	24	236	22	19	60	79	77	108	27	177	---	---
15	58	265	22	18	56	88	66	92	23	127	---	---
16	47	258	22	16	54	97	144	87	19	98	---	---
17	53	207	21	17	58	95	197	87	18	73	---	---
18	50	178	20	17	46	86	175	76	19	51	---	---
19	42	157	19	221	41	82	150	64	19	34	---	---
20	34	138	28	875	48	158	128	55	19	30	---	---
21	96	119	25	632	135	177	112	45	16	24	---	---
22	162	105	22	391	175	159	100	40	10	---	---	---
23	151	90	21	261	166	133	90	37	7.7	---	---	---
24	112	84	20	245	177	110	84	31	9.5	---	---	---
25	87	70	19	337	188	100	70	29	9.8	---	---	---
26	71	57	18	251	172	82	53	25	8.2	---	---	---
27	62	58	19	318	157	77	47	24	6.8	---	---	---
28	102	55	18	600	145	69	39	23	5.9	---	---	---
29	116	55	17	395	129	75	63	25	6.1	---	---	---
30	98	50	16	273	---	75	133	25	12	---	---	---
31	82	---	15	215	---	74	---	25	---	---	---	---
TOTAL	1954.8	3594	822	5377	3228	3062	2918	2404	734.0	---	---	---
MEAN	63.1	120	26.5	173	111	98.8	97.3	77.5	24.5	---	---	---
MAX	162	323	48	875	188	177	197	191	67	---	---	---
MIN	4.3	50	15	15	41	69	39	23	5.9	---	---	---
CFSM	2.58	4.91	1.09	7.11	4.56	4.05	3.99	3.18	1.00	---	---	---
IN.	2.98	5.48	1.25	8.20	4.92	4.67	4.45	3.67	1.12	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	36.3	59.7	63.2	63.7	56.4	83.3	94.1	67.0	38.0	25.5	21.4	27.9
MAX	95.2	120	105	173	111	125	190	170	85.2	49.9	59.7	100
(WY)	1990	1996	1991	1996	1996	1994	1993	1989	1992	1990	1990	1987
MIN	12.2	27.3	25.9	28.1	26.4	46.5	35.9	28.3	16.3	6.58	3.38	9.34
(WY)	1989	1992	1989	1989	1987	1989	1995	1995	1993	1993	1993	1995

01379700 ROCKAWAY RIVER AT BERKSHIRE VALLEY, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		WATER YEARS 1985 - 1996	
ANNUAL TOTAL	16095.5			
ANNUAL MEAN	44.1		51.3	
HIGHEST ANNUAL MEAN			61.2	1990
LOWEST ANNUAL MEAN			35.9	1995
HIGHEST DAILY MEAN	323	Nov 13	875	Jan 20 1996
LOWEST DAILY MEAN	2.7	Sep 6	1.8	Aug 16 1993
ANNUAL SEVEN-DAY MINIMUM	3.2	Sep 6	2.3	Aug 10 1993
INSTANTANEOUS PEAK FLOW			1040	Jan 20 1996
INSTANTANEOUS PEAK STAGE			7.80	Jan 20 1996
INSTANTANEOUS LOW FLOW			1.0	Oct 4 1995
ANNUAL RUNOFF (CFSM)	1.81		2.10	
ANNUAL RUNOFF (INCHES)	24.54		28.59	
10 PERCENT EXCEEDS	86		105	
50 PERCENT EXCEEDS	31		38	
90 PERCENT EXCEEDS	7.8		13	



01379773 GREEN POND BROOK AT PICATINNY ARSENAL, NJ

LOCATION.--Lat 40°57'34", long 74°32'24", Morris County, Hydrologic Unit 02030103, on left bank at Picatinny Arsenal, 500 ft upstream from Picatinny Lake, and 0.55 mi downstream from Burnt Meadow Brook.

DRAINAGE AREA.--7.65 mi^2.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 712.54 ft above sea level (U.S. Army, Picatinny Arsenal, bench mark).

REMARKS.--Records fair except for estimated daily discharges and periods when gates were open, which are poor. Discharges given herein includes flow through sluice gates when open. Some regulation by Lake Denmark and Green Pond. Several measurements of water temperature were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 8	2245	*100	*2.55	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	e25	25	24	e17	11	44	14	4.4	2.7	2.6	4.3
2	4.3	e25	61	23	e16	11	47	13	5.9	2.8	2.6	3.9
3	4.1	e20	63	22	e15	11	48	17	8.3	3.1	3.6	3.4
4	3.5	e19	62	21	e15	9.7	51	19	6.6	2.9	4.0	3.1
5	3.3	e19	54	18	e17	9.7	46	19	5.6	2.8	4.1	2.5
6	3.2	19	57	15	e21	12	40	19	5.0	2.7	3.6	2.4
7	3.2	17	63	12	20	12	34	17	4.6	2.9	3.3	2.3
8	5.2	17	83	9.8	19	11	29	16	4.0	2.8	3.1	2.3
9	8.6	19	91	9.3	18	11	26	16	3.7	3.1	2.9	2.4
10	8.5	17	75	9.4	17	12	22	15	3.5	3.5	2.9	2.3
11	7.7	15	64	9.0	15	12	19	14	3.3	3.1	2.8	11
12	6.9	13	60	8.7	15	12	20	12	3.2	2.8	2.7	12
13	6.5	12	54	8.2	13	11	22	11	3.2	2.7	2.9	8.0
14	6.0	11	63	7.8	14	14	20	11	3.0	2.7	2.7	6.4
15	5.4	10	67	7.2	16	20	19	10	2.9	2.6	2.6	5.5
16	4.9	9.7	59	e6.0	16	35	19	9.3	2.8	2.5	2.8	4.7
17	4.4	9.4	54	e5.5	15	34	23	8.8	3.6	2.4	3.2	4.3
18	4.0	9.0	48	e5.5	14	31	23	8.2	4.3	2.5	6.0	3.7
19	30	9.0	46	e5.4	14	29	24	8.8	5.2	2.5	5.0	3.3
20	65	8.9	41	e5.2	14	27	22	10	3.9	2.8	4.3	3.1
21	65	8.5	37	e5.0	14	26	20	9.3	3.5	3.9	6.2	2.9
22	65	8.1	34	e5.5	15	25	18	8.8	3.4	5.9	5.3	2.4
23	60	7.6	32	e5.8	14	23	16	8.2	3.3	6.4	4.5	2.3
24	e60	7.3	32	e5.9	13	20	14	8.2	3.2	6.2	4.0	2.2
25	e45	6.8	34	e6.0	12	19	12	8.5	3.1	7.6	3.7	2.0
26	e35	17	31	e7.0	11	21	11	8.6	3.0	5.5	3.5	1.9
27	e30	19	29	e12	11	18	10	7.0	2.9	4.2	3.3	1.9
28	e28	18	31	e15	11	16	15	5.9	2.8	3.4	4.0	1.7
29	e25	17	29	e17	---	15	15	5.4	2.8	2.9	3.9	2.7
30	e25	16	29	e19	---	13	14	5.2	2.7	2.7	3.9	3.9
31	e20	---	27	e18	---	25	---	4.8	---	2.6	3.6	---
TOTAL	646.9	429.3	1535	348.2	422	556.4	743	348.0	117.7	107.2	113.6	114.8
MEAN	20.9	14.3	49.5	11.2	15.1	17.9	24.8	11.2	3.92	3.46	3.66	3.83
MAX	65	25	91	24	21	35	51	19	8.3	7.6	6.2	12
MIN	3.2	6.8	25	5.0	11	9.7	10	4.8	2.7	2.4	2.6	1.7
CFSM	2.73	1.87	6.47	1.47	1.97	2.35	3.24	1.47	.51	.45	.48	.50
IN.	3.15	2.09	7.46	1.69	2.05	2.71	3.61	1.69	.57	.52	.55	.56

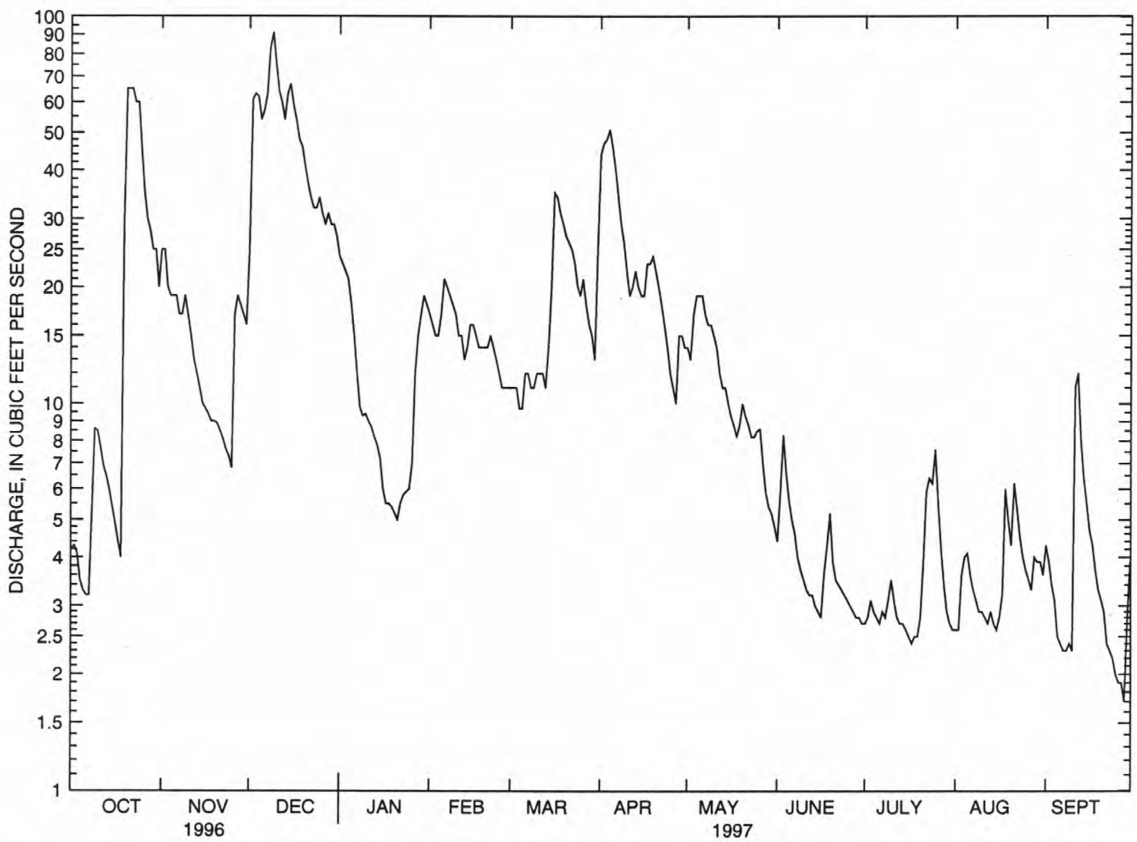
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.99	11.6	19.2	15.6	15.9	23.4	26.5	17.6	9.87	7.99	6.01	5.87
MAX	26.1	22.4	49.5	45.5	32.0	49.5	64.1	50.6	21.8	32.6	20.9	24.7
(WY)	1990	1996	1997	1996	1996	1983	1983	1989	1992	1984	1990	1987
MIN	2.31	2.07	5.29	5.85	5.92	10.5	3.84	5.77	3.54	2.65	2.13	1.77
(WY)	1985	1985	1992	1992	1992	1985	1985	1995	1987	1991	1991	1995

01379773 GREEN POND BROOK AT PICATINNY ARSENAL, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997	
ANNUAL TOTAL	8241.3		5482.1			
ANNUAL MEAN	22.5		15.0		14.0	
HIGHEST ANNUAL MEAN					21.4	1984
LOWEST ANNUAL MEAN					6.63	1985
HIGHEST DAILY MEAN	172	Jan 28	91	Dec 9	248	Apr 5 1984
LOWEST DAILY MEAN	2.0	Sep 3	1.7	Sep 28	.85	Sep 19 1995
ANNUAL SEVEN-DAY MINIMUM	2.1	Aug 31	2.1	Sep 22	1.2	Sep 15 1995
INSTANTANEOUS PEAK FLOW			100	Dec 8	333	Apr 5 1984
INSTANTANEOUS PEAK STAGE			2.55	Dec 8	3.51	Apr 5 1984
INSTANTANEOUS LOW FLOW			1.7	Sep 28	.85	Sep 18 1995
ANNUAL RUNOFF (CFSM)	2.94		1.96		1.82	
ANNUAL RUNOFF (INCHES)	40.08		26.66		24.79	
10 PERCENT EXCEEDS	54		34		31	
50 PERCENT EXCEEDS	17		9.7		8.8	
90 PERCENT EXCEEDS	3.6		2.8		2.8	

e Estimated.



01379773 GREEN POND BROOK AT PICATINNY ARSENAL, NJ, DAILY MEAN DISCHARGE

01379780 GREEN POND BROOK BELOW PICATINNY LAKE, AT PICATINNY ARSENAL, NJ

LOCATION.--Lat 40°56'56", long 74°33'29", Morris County, Hydrologic Unit 02030103, on left bank 100 ft upstream from bridge on Whitmore Avenue at Picatinny Arsenal, and 200 ft downstream from dam on Picatinny Lake.

DRAINAGE AREA.--9.16 mi^2.

PERIOD OF RECORD.--October 1984 to current year.

REVISED RECORDS.--WDR NJ-90-1: 1987 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 694.91 ft above sea level (U.S. Army, Picatinny Arsenal, benchmark).

REMARKS.--Records good except for estimated daily discharges, which are fair. Occasional regulation at Picatinny Lake. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 5, 1984 reached an elevation of 699.0 ft above sea level, 200 ft upstream from bridge on Whitmore Avenue.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 21	1745	167	3.46	Dec. 9	0945	141	3.36
Oct. 22	1400	*172	*3.48	Dec. 18	1100	122	3.28
Oct. 24	1300	87	3.12	Apr. 8	0945	136	3.34
Dec. 2	1500	107	3.21				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	20	20	26	18	13	54	14	5.6	4.5	1.5	4.6
2	5.2	12	82	25	18	14	54	14	5.4	4.5	1.6	4.4
3	4.5	13	99	27	17	14	58	19	8.1	4.5	1.7	3.7
4	3.3	13	79	26	15	13	62	23	8.1	4.5	1.7	2.9
5	2.8	13	67	23	21	12	57	21	7.1	4.3	1.7	2.6
6	2.8	11	65	21	24	15	49	22	6.4	4.3	1.7	2.6
7	2.9	8.8	68	20	24	15	42	20	5.7	4.1	1.7	2.6
8	3.0	11	85	18	23	14	55	18	5.2	4.0	1.7	2.2
9	2.5	19	112	17	21	13	46	18	4.8	3.8	1.9	2.1
10	3.5	19	90	16	19	15	41	17	4.6	2.6	1.9	1.8
11	4.1	17	75	15	18	15	17	15	4.7	1.6	2.0	11
12	4.4	15	70	15	18	14	23	14	4.9	1.6	2.1	23
13	4.5	15	63	14	17	13	23	13	4.9	1.7	2.1	11
14	4.8	14	66	14	18	18	21	12	4.7	1.7	2.1	7.6
15	4.6	12	73	13	19	26	20	11	4.0	1.8	2.1	5.7
16	4.5	11	74	10	19	35	20	10	4.0	1.9	2.2	4.9
17	4.4	11	69	6.3	18	36	19	9.3	3.7	2.0	2.5	4.2
18	3.1	10	72	e6.0	17	34	20	8.8	3.7	2.1	2.2	3.7
19	11	10	61	e5.5	17	31	22	9.4	3.7	2.0	2.3	3.1
20	100	9.6	57	e5.5	16	29	22	13	4.0	1.9	2.3	2.7
21	119	18	52	e5.5	16	27	22	11	4.1	1.9	2.2	2.5
22	119	25	46	e5.8	17	26	21	9.7	4.1	1.5	2.8	2.3
23	70	20	e45	e6.2	17	23	20	8.8	4.2	1.5	3.0	2.1
24	68	16	e40	6.6	15	21	18	8.4	4.5	1.4	3.1	2.1
25	63	14	e45	7.1	14	20	9.9	8.9	4.6	1.4	3.3	2.0
26	49	14	e40	11	13	23	6.6	9.8	4.7	1.4	3.2	1.9
27	40	15	e37	15	14	20	6.7	8.4	4.3	1.4	3.0	1.9
28	36	16	e35	20	14	18	8.6	7.4	4.4	1.4	3.9	1.7
29	33	16	33	22	---	16	13	7.0	4.5	1.5	4.0	1.6
30	32	17	32	21	---	15	14	6.7	4.5	1.5	3.7	1.6
31	30	---	30	19	---	33	---	6.5	---	1.5	3.4	---
TOTAL	840.1	435.4	1882	462.5	497	631	864.8	394.1	147.2	75.8	74.6	126.1
MEAN	27.1	14.5	60.7	14.9	17.8	20.4	28.8	12.7	4.91	2.45	2.41	4.20
MAX	119	25	112	27	24	36	62	23	8.1	4.5	4.0	23
MIN	2.5	8.8	20	5.5	13	12	6.6	6.5	3.7	1.4	1.5	1.6
CFSM	2.96	1.58	6.63	1.63	1.94	2.22	3.15	1.39	.54	.27	.26	.46
IN.	3.41	1.77	7.64	1.88	2.02	2.56	3.51	1.60	.60	.31	.30	.51

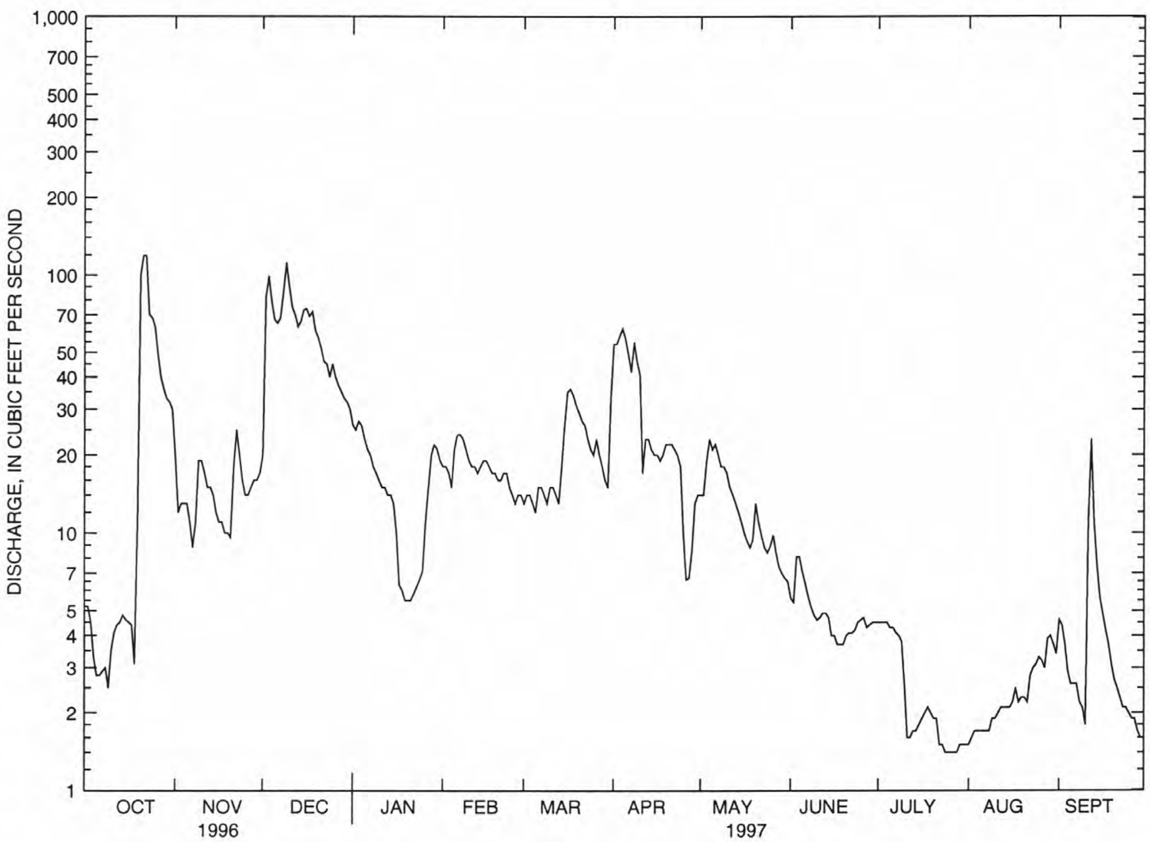
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	9.33	14.7	23.0	18.3	16.7	23.7	25.3	19.8	10.3	6.69	6.81	7.41
MAX	33.3	29.5	60.7	51.2	28.4	38.8	51.1	66.7	28.8	18.4	28.6	36.7
(WY)	1990	1996	1997	1996	1996	1994	1993	1989	1992	1990	1990	1987
MIN	.71	.28	5.28	6.98	7.08	10.6	2.48	5.32	2.23	1.48	.54	1.90
(WY)	1985	1985	1985	1985	1992	1985	1985	1995	1987	1993	1991	1995

01379780 GREEN POND BROOK BELOW PICATINNY LAKE, AT PICATINNY ARSENAL, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1985 - 1997	
ANNUAL TOTAL	9234.1		6430.6			
ANNUAL MEAN	25.2		17.6		15.2	
HIGHEST ANNUAL MEAN					22.1	1990
LOWEST ANNUAL MEAN					6.35	1985
HIGHEST DAILY MEAN	200	Jan 28	119	Oct 21	206	May 17 1990
LOWEST DAILY MEAN	1.9	Sep 7	1.4	Jul 24	.20	Nov 20 1984
ANNUAL SEVEN-DAY MINIMUM	2.3	Sep 2	1.4	Jul 22	.20	Nov 17 1984
INSTANTANEOUS PEAK FLOW			172	Oct 22	243	Sep 13 1987
INSTANTANEOUS PEAK STAGE			3.48	Oct 22	3.70	Sep 13 1987
INSTANTANEOUS LOW FLOW			1.4	Jul 10	1.0	Oct 21 1995
ANNUAL RUNOFF (CFSM)	2.75		1.92		1.66	
ANNUAL RUNOFF (INCHES)	37.50		26.12		22.50	
10 PERCENT EXCEEDS	63		45		33	
50 PERCENT EXCEEDS	16		12		9.5	
90 PERCENT EXCEEDS	4.5		2.0		1.9	

e Estimated.



—— 01379780 GREEN POND BROOK BELOW PICATINNY LAKE AT PICATINNY ARSENSAL, NJ, DAILY MEAN DISCHARGE

01379790 GREEN POND BROOK AT WHARTON, NJ

LOCATION.--Lat 40°55'04", long 74°35'02", Morris County, Hydrologic Unit 02030103, on left bank 600 ft upstream from bridge on northbound lane of State Route 15, 0.2 mi northwest of Wharton, and 1.7 mi upstream from mouth.

DRAINAGE AREA.--12.6 mi^2.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 680.26 ft above sea level (U.S. Army, Picatinny Arsenal, bench mark).

REMARKS.--Records good except for estimated daily discharges, which are fair. Some regulation from Lake Picatinny, Picatinny Arsenal sewage treatment plant, and flood gates located about 800 ft upstream from gage. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0100	*212	*3.84	Dec. 9	2000	136	3.55
Dec. 2	0830	145	3.59				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	30	48	35	35	17	75	22	10	7.0	3.2	9.8
2	7.9	19	136	33	34	18	75	21	20	7.0	3.2	6.8
3	7.3	18	132	34	33	18	82	38	28	8.8	4.8	6.1
4	5.4	18	108	34	30	19	87	41	18	7.5	4.4	5.3
5	4.6	18	89	31	48	18	76	33	15	7.0	5.1	4.8
6	4.3	16	103	28	41	26	66	35	13	6.8	4.3	4.1
7	4.3	14	103	26	36	22	59	33	12	6.5	3.7	4.1
8	10	16	120	24	33	19	62	28	11	6.3	3.7	3.8
9	20	35	123	22	31	18	57	29	11	7.5	3.7	3.7
10	13	27	119	22	27	20	57	27	10	9.1	3.7	3.7
11	9.7	23	97	20	25	23	32	24	10	4.2	3.7	43
12	7.7	20	93	19	24	20	41	22	9.6	3.8	3.7	82
13	8.0	19	86	18	22	18	46	20	11	3.7	3.9	27
14	7.9	19	102	17	26	29	36	19	11	3.7	3.9	17
15	7.9	17	100	15	31	49	33	17	9.1	3.7	3.6	13
16	15	15	95	23	28	42	32	16	8.5	3.7	4.0	11
17	8.9	15	90	14	24	46	32	15	8.0	3.7	6.4	9.5
18	7.4	14	81	11	23	44	35	14	12	3.7	10	8.5
19	81	14	79	10	22	41	37	16	13	3.9	4.6	7.6
20	192	14	73	10	23	39	34	27	9.4	3.7	4.5	6.3
21	161	17	64	9.9	22	38	33	19	8.8	3.7	9.7	5.9
22	158	27	58	11	24	36	32	16	8.3	5.6	5.8	5.5
23	110	23	41	14	23	33	30	14	7.9	3.6	5.3	5.2
24	85	20	30	12	21	30	27	14	7.9	7.4	4.9	5.0
25	82	17	39	e15	19	28	20	15	8.1	9.4	4.7	4.7
26	64	51	41	e20	18	35	14	17	8.2	4.1	4.5	4.6
27	53	31	43	e30	18	32	14	14	7.6	3.8	4.2	4.1
28	50	25	43	e35	18	27	28	12	7.4	6.0	6.9	4.0
29	44	24	43	e35	---	24	24	12	7.3	3.6	6.2	5.8
30	42	24	42	37	---	22	23	11	7.2	3.5	5.4	3.8
31	40	---	39	35	---	61	---	11	---	3.3	4.8	---
TOTAL	1318.7	640	2460	699.9	759	912	1299	652	328.3	165.3	150.5	325.7
MEAN	42.5	21.3	79.4	22.6	27.1	29.4	43.3	21.0	10.9	5.33	4.85	10.9
MAX	192	51	136	37	48	61	87	41	28	9.4	10	82
MIN	4.3	14	30	9.9	18	17	14	11	7.2	3.3	3.2	3.7
CFSM	3.38	1.69	6.30	1.79	2.15	2.33	3.44	1.67	.87	.42	.39	.86
IN.	3.89	1.89	7.26	2.07	2.24	2.69	3.84	1.92	.97	.49	.44	.96

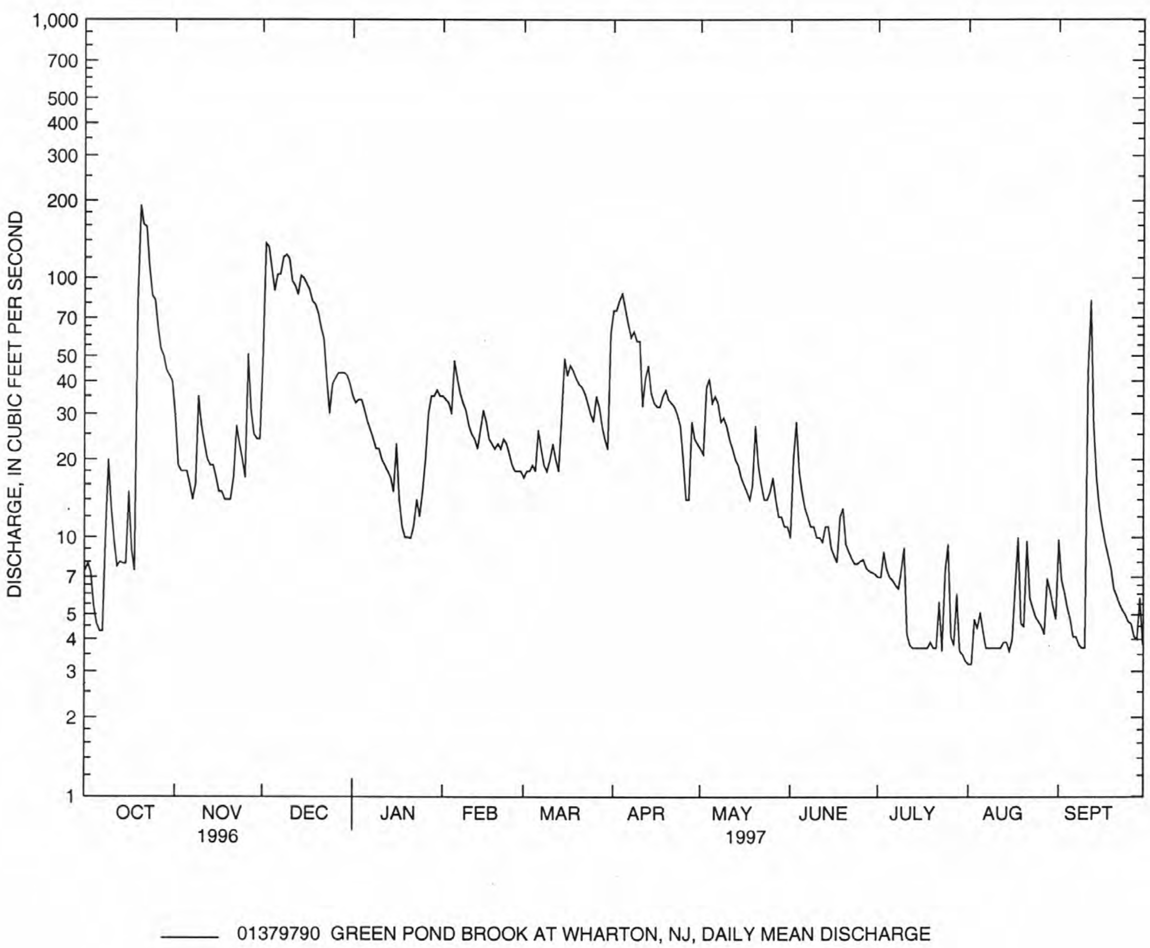
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	14.3	21.9	34.2	28.3	28.5	41.7	48.0	32.1	18.5	14.8	10.6	11.9
MAX	46.7	46.3	79.4	80.2	49.7	89.2	112	87.0	39.9	61.4	36.4	54.0
(WY)	1990	1996	1997	1996	1996	1983	1983	1989	1992	1984	1990	1987
MIN	3.89	4.23	11.7	11.3	13.2	17.8	8.96	10.7	6.65	3.12	3.04	3.88
(WY)	1995	1985	1985	1985	1992	1985	1985	1995	1987	1993	1993	1995

01379790 GREEN POND BROOK AT WHARTON, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997	
ANNUAL TOTAL	13886.4		9710.4			
ANNUAL MEAN	37.9		26.6		25.4	
HIGHEST ANNUAL MEAN					40.7	1984
LOWEST ANNUAL MEAN					12.5	1985
HIGHEST DAILY MEAN	294	Jan 28	192	Oct 20	512	Apr 6 1984
LOWEST DAILY MEAN	2.9	Sep 2	3.2	Aug 1	1.6	Sep 3 1991
ANNUAL SEVEN-DAY MINIMUM	3.2	Aug 31	3.7	Jul 12	1.8	Aug 29 1991
INSTANTANEOUS PEAK FLOW			212	Oct 20	572	Apr 5 1984
INSTANTANEOUS PEAK STAGE					5.11	Apr 5 1984
INSTANTANEOUS LOW FLOW			3.2	Jul 31	1.1	Oct 17 1994
ANNUAL RUNOFF (CFSM)	3.01		2.11		2.01	
ANNUAL RUNOFF (INCHES)	41.00		28.67		27.35	
10 PERCENT EXCEEDS	85		61		54	
50 PERCENT EXCEEDS	26		18		16	
90 PERCENT EXCEEDS	7.0		4.2		4.9	

e Estimated.



01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ

LOCATION.--Lat 40°54'10", long 74°24'36", Morris County, Hydrologic Unit 02030103, on right bank, under New Jersey Transit railroad bridge, just downstream from bridge on Morris Avenue in Boonton, 1.8 mi upstream from dam at Boonton Reservoir.

DRAINAGE AREA.--116 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1302.

REVISED RECORDS.--WRD-NJ 1974: 1938(M). WDR NJ-78-1: 1949(M), 1952(M), 1968(M), 1971(M), 1973(P), 1974(M), 1977(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 364.47 ft above sea level (levels from New Jersey Geological Survey bench mark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Splitrock Reservoir on Beaver Brook, 14.5 mi upstream from station (see Passaic River basin, reservoirs in). Town of Boonton diverts water for municipal supply from Taylortown Reservoir on Stony Brook, capacity, 75,000,000 gal and by pumping from wells in vicinity of Boonton. For diversion from Taylortown Reservoir, see Passaic River Basin diversions. Rockaway Valley trunk sewer bypasses the station (see station 01381000). Several measurements of water temperature were made during the year. Satellite telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with Jersey City, Bureau of Water.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 950 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0400	*3,070	*5.92	Jan. 25	1415	1,300	4.30
Dec. 2	1445	2,140	5.23	Mar. 31	2300	1,170	4.03
Dec. 8	0730	1,380	4.40	Sep. 12	0545	1,550	4.62
Dec. 14	2015	1,280	4.27				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	221	470	305	319	195	1020	263	125	49	36	179
2	78	197	1800	287	325	208	830	245	203	49	35	124
3	91	185	1410	289	313	211	772	401	506	60	46	84
4	74	175	984	290	300	227	705	619	283	56	77	63
5	62	168	719	279	490	228	663	409	194	48	93	51
6	58	164	916	275	526	327	622	373	159	45	96	44
7	56	162	1050	251	395	303	585	374	155	42	55	41
8	96	187	1290	226	338	253	529	308	138	43	43	39
9	409	397	976	214	311	226	487	305	121	48	39	38
10	255	363	778	216	287	241	446	309	109	120	35	38
11	180	279	642	209	260	288	399	274	100	75	33	397
12	132	238	624	171	239	257	386	245	92	60	32	1240
13	119	211	642	e146	236	227	601	224	93	48	33	481
14	104	197	978	e136	259	313	470	215	107	42	38	293
15	86	186	1080	e140	362	732	381	201	85	40	33	199
16	80	173	802	316	333	458	340	188	76	37	33	151
17	76	166	693	e285	277	372	321	173	72	36	69	123
18	78	163	646	e173	247	342	342	165	137	35	146	109
19	546	163	600	e145	248	327	423	195	264	45	105	98
20	2650	158	563	e143	256	302	359	358	149	33	74	88
21	1650	149	478	e153	246	295	320	256	115	30	220	78
22	1090	155	430	168	257	284	295	197	95	92	140	72
23	746	149	402	e245	250	264	275	171	82	58	95	84
24	536	141	389	221	225	241	255	158	73	163	77	70
25	456	134	591	930	207	228	240	169	71	258	63	61
26	381	511	467	617	198	303	217	225	66	121	53	53
27	312	576	411	365	203	300	197	172	60	72	47	41
28	291	344	380	551	201	258	427	148	55	103	94	36
29	288	274	366	569	---	241	430	132	54	59	102	82
30	264	242	358	387	---	251	308	133	52	46	74	59
31	243	---	336	333	---	667	---	137	---	41	65	---
TOTAL	11564	6828	22271	9035	8108	9369	13645	7742	3891	2054	2181	4516
MEAN	373	228	718	291	290	302	455	250	130	66.3	70.4	151
MAX	2650	576	1800	930	526	732	1020	619	506	258	220	1240
MIN	56	134	336	136	198	195	197	132	52	30	32	36

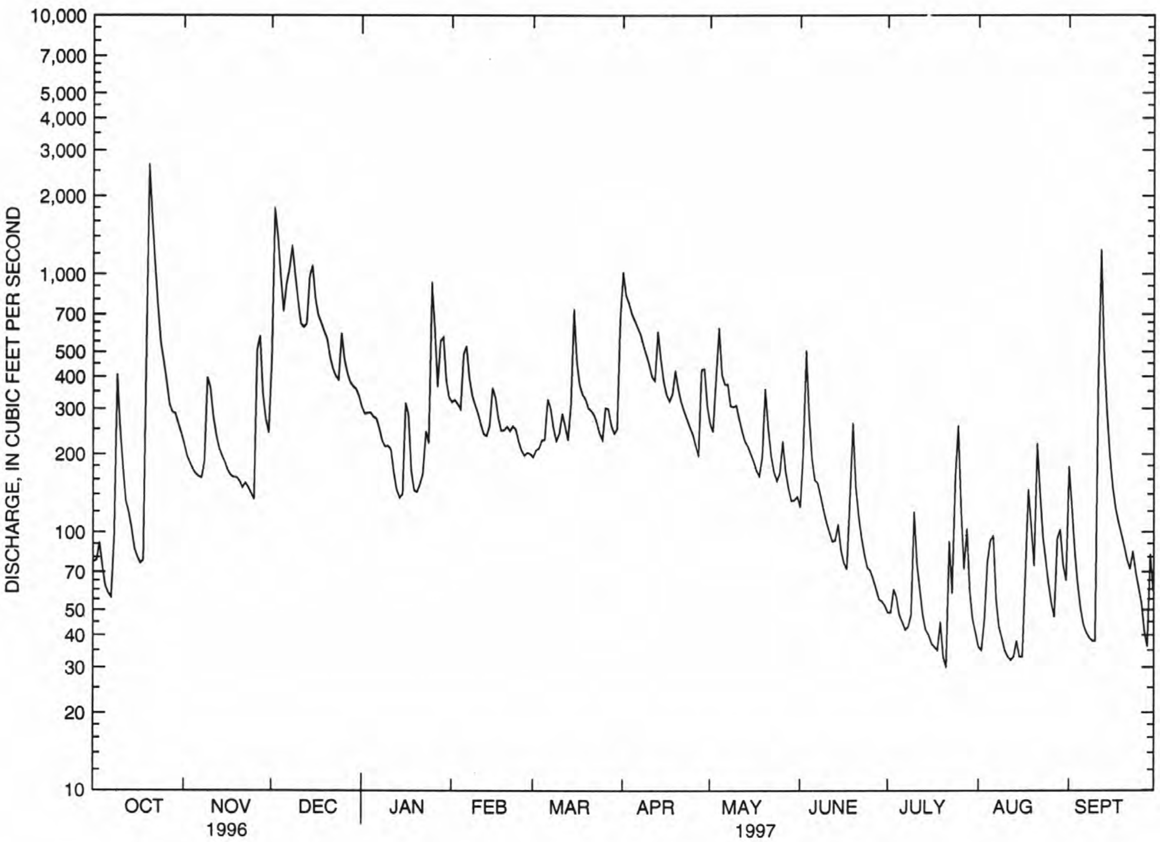
01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1997, BY WATER YEAR (WY)

MEAN	128	224	280	265	276	393	394	276	179	129	117	121
MAX	523	694	718	855	590	798	979	836	847	553	447	484
(WY)	1956	1973	1997	1979	1973	1977	1983	1989	1972	1975	1955	1971
MIN	23.7	63.7	67.2	74.8	107	152	87.0	90.5	35.3	18.1	16.6	16.8
(WY)	1965	1962	1940	1981	1940	1985	1985	1965	1965	1966	1957	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1938 - 1997	
ANNUAL TOTAL	120252		101204			
ANNUAL MEAN	329		277		231	
HIGHEST ANNUAL MEAN					396	1952
LOWEST ANNUAL MEAN					88.3	1965
HIGHEST DAILY MEAN	2650	Oct 20	2650	Oct 20	4220	Jan 25 1979
LOWEST DAILY MEAN	29	Sep 5	30	Jul 21	6.0	Sep 6 1995
ANNUAL SEVEN-DAY MINIMUM	31	Aug 31	34	Aug 10	8.5	Sep 2 1995
INSTANTANEOUS PEAK FLOW			3070	Oct 20	5590	Apr 5 1984
INSTANTANEOUS PEAK STAGE			5.92	Oct 20	7.23	Apr 5 1984
10 PERCENT EXCEEDS	690		587		499	
50 PERCENT EXCEEDS	236		215		156	
90 PERCENT EXCEEDS	69		49		44	

e Estimated.



01380500 ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON, NJ, DAILY MEAN DISCHARGE

01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-79, 1991 to September 1997 (discontinued).

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
30...	1020	263	206	7.1	11.0	738	9.2	86	<1.0	79	80	60
JAN 1997												
23...	0930	E245	540	7.6	0.0	742	13.1	92	2.9	--	--	75
MAR												
17...	0940	373	278	7.3	2.5	756	12.6	93	<1.2	17	30	56
MAY												
22...	1005	197	256	7.7	14.0	746	8.9	88	E1.3	240	50	69
JUL												
31...	0940	41	344	7.5	22.5	754	6.4	75	<1.0	220	50	100

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
30...	15	5.4	15	1.2	39	12	29	<.1	11	106	113	3
JAN 1997												
23...	19	6.8	69	1.4	45	16	120	<.1	9.7	288	272	5
MAR												
17...	14	5.1	28	.9	32	12	50	<.1	7.8	148	138	5
MAY												
22...	17	6.5	20	1.1	47	12	39	<.1	7.6	134	132	4
JUL												
31...	25	9.1	26	1.5	69	13	49	<.1	10	202	177	7

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
30...	<.003	.21	<.03	<.03	.3	.20	.51	.41	<.01	<.01	4.9	.3
JAN 1997												
23...	.010	.66	<.03	<.03	.3	.20	.96	.86	.02	.02	2.6	.6
MAR												
17...	.005	.32	.06	.04	.2	.17	.52	.49	<.01	<.01	2.5	.2
MAY												
22...	.005	.29	<.03	<.03	.2	.14	.53	.43	<.01	<.01	3.5	.3
JUL												
31...	.006	.36	.04	<.03	.1	.20	.46	.56	.04	<.01	3.4	.3

01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
22...	1005	10	<1	<10	30	<1	1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
22...	470	1	80	<.1	1	<1	<10

01381000 ROCKAWAY RIVER BELOW RESERVOIR, AT BOONTON, NJ

LOCATION.--Lat 40°53'49", long 74°23'42", Morris County, Hydrologic Unit 02030103, on right bank 2,000 ft downstream from Boonton Reservoir Dam at Boonton, and 0.4 mi upstream at bridge on Greenback Road.

DRAINAGE AREA.--119 mi^2.

PERIOD OF RECORD.--March to December 1903; January, February 1904 (gage height only); January 1906 to September 1950 (monthly discharge only, published in WSP 1302) October 1950 to current year (figures of daily discharge for October 1950 to September 1954 published in Special Report 16 of New Jersey Department of Environmental Protection). Published as "near Boonton" 1903-4, and as "at Boonton" 1906-37.

REVISED RECORDS.--WSP 1902: 1951-54. WDR NJ-79-1: 1949(M), 1952(M), 1968(M), 1970-74(M), 1977(M).

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1936. Datum of gage is 195.68 ft above sea level (levels from New Jersey Geological Survey bench mark). Mar. 15, 1903 to Feb. 2, 1904, nonrecording gage at site 1.9 mi downstream at different datum. Jan. 1, 1906 to Mar. 3, 1918, nonrecording gage on Boonton Reservoir Dam 2,000 ft upstream at datum 305.25 ft sea level (levels from New Jersey Geological Survey bench mark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Records represent flow in river only. Sewage effluent enters river about 600 ft below station (records given herein). Flow regulated by Boonton Reservoir (see Passaic River basin, reservoirs in) 2,000 ft upstream from station, and by Splitrock Reservoir (see Passaic River basin, reservoirs in) 16.5 mi above station. Water diverted from Boonton Reservoir for municipal supply of Jersey City (see Passaic River basin, diversions). Several measurements of water temperature were made during the year. Satellite telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with and record of sewage effluent furnished by Jersey City, Bureau of Water.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	380	305	247	268	105	1190	216	51	11	10	13
2	11	192	1920	229	263	115	928	173	75	11	10	11
3	11	125	1970	234	256	123	799	274	371	11	11	11
4	11	48	1270	230	243	139	719	649	278	11	11	11
5	11	12	863	225	372	138	643	413	148	11	11	11
6	11	12	931	196	535	200	585	324	96	11	10	11
7	11	12	1300	161	375	96	541	323	73	11	10	11
8	15	17	1510	155	294	14	449	262	65	11	10	11
9	12	126	1250	159	252	15	377	237	47	12	11	11
10	12	306	910	145	219	15	338	245	33	11	11	11
11	11	237	739	109	187	16	300	213	22	10	11	19
12	11	178	671	110	159	72	274	181	18	10	11	13
13	13	141	689	104	141	118	513	144	14	10	11	13
14	12	118	1010	538	160	181	413	141	11	10	11	13
15	11	104	1380	475	261	677	303	125	11	10	11	13
16	13	94	999	284	277	480	252	108	11	9.7	11	13
17	11	84	815	312	222	319	224	88	11	9.7	11	13
18	11	81	731	170	180	268	237	81	11	9.8	12	13
19	292	81	665	131	169	252	307	98	34	10	11	13
20	3460	77	614	131	162	227	291	234	64	9.8	12	13
21	2310	69	481	131	157	212	252	216	46	9.8	12	13
22	1420	65	405	121	160	202	210	130	21	12	11	13
23	892	68	365	142	165	178	188	91	11	10	11	13
24	567	57	350	158	137	153	173	77	11	12	11	13
25	412	53	556	779	116	140	159	83	10	12	11	13
26	337	271	487	836	107	192	137	132	10	11	11	13
27	282	638	388	383	118	219	118	105	11	11	11	13
28	235	336	344	454	99	176	281	77	11	10	12	13
29	224	231	326	642	---	158	419	59	11	10	12	13
30	207	175	313	388	---	146	281	49	11	10	11	12
31	526	---	291	297	---	461	---	53	---	10	11	---
TOTAL	11373	4388	24848	8676	6054	5807	11901	5601	1597	327.8	341	377
MEAN	367	146	802	280	216	187	397	181	53.2	10.6	11.0	12.6
MAX	3460	638	1970	836	535	677	1190	649	371	12	12	19
MIN	11	12	291	104	99	14	118	49	10	9.7	10	11
(†)	14.7	14.0	20.6	16.2	15.7	15.4	17.8	15.3	14.2	13.0	13.0	13.3
(††)	14.2	10.9	13.6	18.1	18.3	17.6	18.9	17.9	15.9	16.1	13.5	13.8

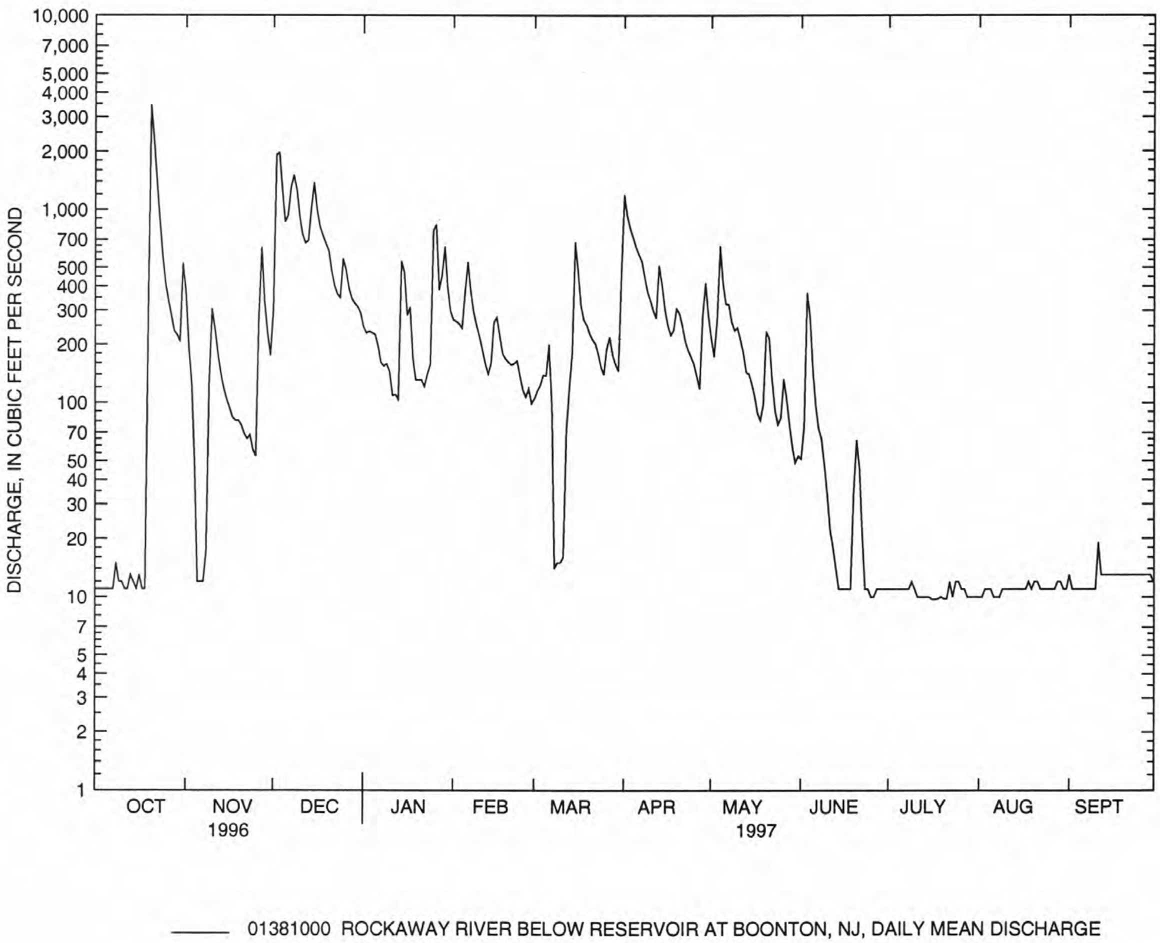
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	51.0	104	178	169	176	283	303	191	97.7	53.0	42.6	45.8
MAX	408	483	802	692	499	739	978	873	671	445	269	346
(WY)	1956	1973	1997	1979	1973	1994	1983	1989	1972	1984	1990	1960
MIN	.23	.43	.35	.39	1.49	13.9	11.4	18.6	.40	.25	.29	.28
(WY)	1964	1966	1966	1966	1966	1981	1985	1955	1957	1966	1966	1957

01381000 ROCKAWAY RIVER BELOW RESERVOIR, AT BOONTON, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1950 - 1997	
ANNUAL TOTAL	115157		81290.8			
ANNUAL MEAN	315		223		141	
(†)	16.6		16.5		---	
HIGHEST ANNUAL MEAN					296	1952
LOWEST ANNUAL MEAN					7.19	1965
HIGHEST DAILY MEAN	3460	Oct 20	3460	Oct 20	3850	Apr 6 1984
LOWEST DAILY MEAN	11	Sep 3	9.7	Jul 16	.00	Jan 19 1959
ANNUAL SEVEN-DAY MINIMUM	11	Sep 30	9.8	Jul 15	.00	Dec 18 1963
INSTANTANEOUS PEAK FLOW			4070	Oct 20	7560ab	Oct 10 1903
INSTANTANEOUS PEAK STAGE			7.96	Oct 20	---	
INSTANTANEOUS LOW FLOW			9.2	Jul 15	.00a	
10 PERCENT EXCEEDS	771		560		371	
50 PERCENT EXCEEDS	176		118		39	
90 PERCENT EXCEEDS	12		11		.80	

a Since 1903; see period of record section.
b Maximum daily.
† Sewage effluent, in cubic feet per second, from plant at Rockaway Valley Regional Sewage Authority.
†† Sewage effluent for the 1996 Water Year inadvertently left out of the 1996 Surface-Water-Data Report.



01381200 ROCKAWAY RIVER AT PINE BROOK, NJ

LOCATION.--Lat 40°51'29", long 74°20'53", Morris County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at intersection with New Road in Pine Brook, and 1.1 mi upstream from mouth.

DRAINAGE AREA.--136 mi^2.

PERIOD OF RECORD.--Water years 1963 to September 1997 (discontinued).

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
31...	1017	450	241	7.3	12.0	752	9.2	87	E1.4	79	30	67
JAN 1997												
23...	1111	155	309	7.6	2.5	742	12.8	96	2.2	230	70	71
MAR												
17...	1145	420	353	7.7	4.5	756	13.2	103	E1.1	240	<10	68
MAY												
21...	0917	210	285	7.7	14.0	754	8.9	87	E1.6	490	260	69
JUL												
31...	1205	E11	572	7.5	21.0	763	6.3	71	<1.0	1400	400	150

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
31...	17	5.9	19	1.8	44	13	34	<.1	9.1	124	130	4
JAN 1997												
23...	18	6.3	28	1.9	42	16	48	<.1	11	172	161	4
MAR												
17...	17	6.1	37	1.2	41	15	65	.1	8.7	200	178	6
MAY												
21...	17	6.1	25	1.3	43	14	46	<.1	6.0	162	145	17
JUL												
31...	37	13	49	5.6	96	27	83	.2	12	343	306	25

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
31...	.005	.82	.05	.03	.4	.27	1.2	1.1	.13	.11	4.8	.8
JAN 1997												
23...	.008	1.4	<.03	<.03	.3	.17	1.7	1.6	.11	.07	3.2	.5
MAR												
17...	.007	.64	.04	.04	.3	.20	.94	.84	.02	<.01	2.7	.4
MAY												
21...	.006	.64	<.03	<.03	.3	.12	.93	.76	.11	.04	2.8	.4
JUL												
31...	.025	4.8	.12	.12	.8	.60	5.6	5.4	1.2	1.1	3.9	.5

01381200 ROCKAWAY RIVER AT PINE BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 1997								
21...	0917	10	<1	<10	30	<1	1.3	3

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
MAY 1997							
21...	540	2	60	<.1	2	<1	<10

01381400 WHIPPANY RIVER NEAR MORRISTOWN, NJ

LOCATION.--Lat 40°48'44", long 74°30'44", Morris County, Hydrologic Unit 02030103, on left downstream side of bridge on Sussex Avenue, 1.9 mi northwest of Morristown, and 2.7 mi upstream from Lake Pocahontas Dam.

DRAINAGE AREA.--14.0 mi^2.

PERIOD OF RECORD.--Low-flow partial-record site 1964-72. August 1995 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft above sea level (from topographic map)..

REMARKS.--Records fair except for the periods of estimated daily discharges, which are poor. Water diverted at Clyde Potts Reservoir for municipal supply by the Southeast Morris County Municipal Utilities Authority. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8.2	e29	e209	e34	46	24	149	27	20	9.1	8.7	8.1
2	e8.5	e27	e967	39	41	26	101	25	49	8.4	8.7	7.5
3	e8.5	e25	e191	41	41	24	78	105	75	9.5	10	7.2
4	e7.3	e24	e99	37	36	28	61	91	28	8.0	11	6.6
5	e7.0	e24	e78	38	132	33	52	45	23	7.3	15	6.5
6	e6.8	e23	e301	35	65	53	49	47	21	7.0	12	6.7
7	e6.9	e23	e258	32	43	27	47	41	19	6.9	9.2	6.6
8	e75	e27	e338	29	38	24	41	37	18	6.4	8.8	6.7
9	e146	e66	e145	29	36	22	38	45	17	12	8.0	7.0
10	e30	e36	e109	32	33	36	36	39	17	15	7.6	7.2
11	e15	e26	e99	29	30	38	35	34	16	7.0	7.4	82
12	e11	e22	e103	35	29	28	50	32	15	6.4	7.4	83
13	e10	e20	e105	26	28	23	102	31	15	6.1	7.8	13
14	e9.5	e19	e388	23	50	77	42	30	15	5.8	7.8	11
15	e8.4	e19	e210	23	67	154	29	28	14	5.6	7.2	9.8
16	e9.7	e18	e120	95	40	56	29	27	13	5.4	7.5	9.4
17	e8.5	e17	e113	e65	31	45	30	27	13	5.1	21	9.4
18	e8.3	e18	e104	e37	30	42	46	26	16	6.2	19	8.7
19	e1330	e19	e97	e26	33	38	45	29	25	8.0	8.7	8.9
20	e2000	e17	e84	e20	33	38	31	49	14	4.9	11	8.8
21	e219	e16	e63	e20	30	35	28	28	13	4.7	42	8.7
22	e122	e16	e56	e25	32	33	26	26	12	74	11	8.5
23	e86	e16	e55	50	26	28	25	24	12	12	8.8	8.4
24	e71	e16	e76	27	24	27	24	23	11	82	8.2	7.9
25	e55	e15	e125	255	23	27	22	34	12	101	7.7	7.8
26	e46	e241	e60	64	22	48	21	37	11	24	7.5	7.7
27	e42	e124	e51	36	25	31	20	24	11	19	7.4	7.5
28	e43	e33	e46	148	23	27	106	22	10	20	21	7.8
29	e40	e27	e46	79	---	26	42	20	9.8	11	9.4	15
30	e36	e25	e45	47	---	26	27	22	9.3	10	7.9	8.6
31	e34	---	e39	42	---	154	---	21	---	9.3	7.4	---
TOTAL	4508.6	1028	4780	1518	1087	1298	1432	1096	554.1	517.1	342.1	402.0
MEAN	145	34.3	154	49.0	38.8	41.9	47.7	35.4	18.5	16.7	11.0	13.4
MAX	2000	241	967	255	132	154	149	105	75	101	42	83
MIN	6.8	15	39	20	22	22	20	20	9.3	4.7	7.2	6.5
CFSM	10.4	2.45	11.0	3.50	2.77	2.99	3.41	2.53	1.32	1.19	.79	.96
IN.	11.98	2.73	12.70	4.03	2.89	3.45	3.81	2.91	1.47	1.37	.91	1.07

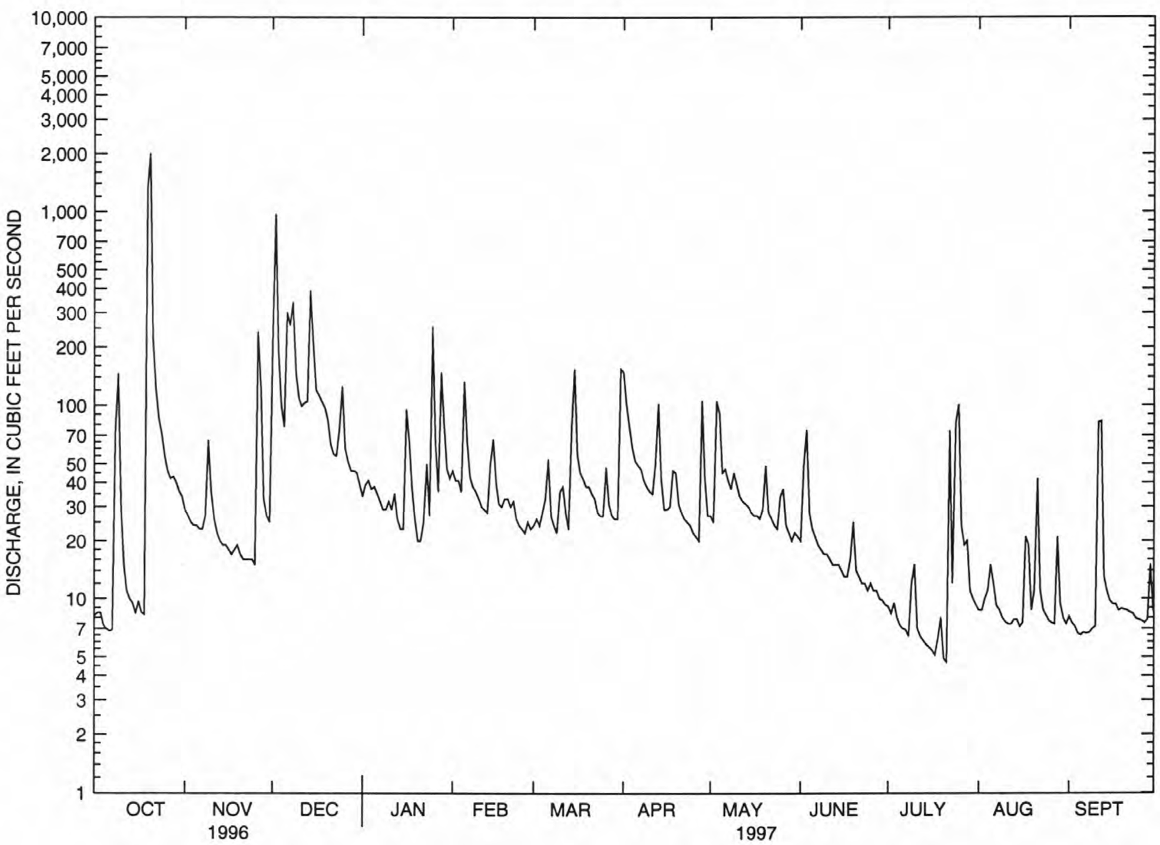
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	85.9	37.3	86.7	61.4	45.7	45.9	54.2	38.4	20.1	24.0	10.1	12.2
MAX	145	40.4	154	73.8	52.3	49.9	60.6	41.4	21.7	31.3	11.0	16.7
(WY)	1997	1996	1997	1996	1996	1996	1996	1996	1996	1996	1997	1996
MIN	26.4	34.3	19.2	49.0	38.8	41.9	47.7	35.4	18.5	16.7	9.23	6.53
(WY)	1996	1997	1996	1997	1997	1997	1997	1997	1997	1997	1996	1995

01381400 WHIPPANY RIVER NEAR MORRISTOWN, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997	
ANNUAL TOTAL	21180.1		18562.9			
ANNUAL MEAN	57.9		50.9		43.8	
HIGHEST ANNUAL MEAN					50.9	1997
LOWEST ANNUAL MEAN					36.9	1996
HIGHEST DAILY MEAN	2000	Oct 20	2000	Oct 20	2000	Oct 20 1996
LOWEST DAILY MEAN	6.8	Aug 30	4.7	Jul 21	3.4	Sep 2 1995
ANNUAL SEVEN-DAY MINIMUM	7.0	Aug 30	5.7	Jul 15	3.4	Sep 2 1995
INSTANTANEOUS PEAK FLOW			2950	Oct 20	2950	Oct 20 1996
INSTANTANEOUS PEAK STAGE			8.10a	Oct 20	8.10a	Oct 20 1996
INSTANTANEOUS LOW FLOW			4.2	Jul 21	3.2	Sep 6 1995
ANNUAL RUNOFF (CFSM)	4.13		3.63		3.13	
ANNUAL RUNOFF (INCHES)	56.28		49.32		42.56	
10 PERCENT EXCEEDS	104		98		79	
50 PERCENT EXCEEDS	33		26		24	
90 PERCENT EXCEEDS	8.9		7.7		7.4	

a From outside high-water mark.
e Estimated.



01381400 WHIPPANY RIVER NEAR MORRISTOWN, NJ, DAILY MEAN DISCHARGE

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ

LOCATION.--Lat 40°48'26", long 74°27'22", Morris County, Hydrologic Unit 02030103, on left bank at Morristown sewage-disposal plant, 0.8 mi northeast of Morristown, and 9.0 mi upstream from mouth.

DRAINAGE AREA.--29.4 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1925-27(M) 1928-29, 1930-32(M), 1933-34. WRD-NJ 1974: 1965. WDR NJ-84-1: 1971(M). WDR NJ-88-1: Longitude.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since July 1, 1936. Datum of gage is 260.01 ft above sea level (levels from New Jersey Geological Survey bench mark). Prior to July 16, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow occasionally regulated by operation of gates in Pocahontas Dam, 2.5 mi above station. Diurnal fluctuations from unknown source at low flow. Several measurements of water temperature, other than those published, were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0015	*2,290	*7.77	Jan. 25	0230	651	4.56
Dec. 2	0545	1,060	5.47	Sept. 11	1545	770	4.86

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	66	219	73	87	59	261	63	40	28	25	28
2	27	61	726	74	83	64	176	57	120	28	25	29
3	27	58	219	77	82	62	144	190	167	30	35	25
4	24	57	145	73	78	71	118	178	68	29	38	22
5	24	57	125	73	211	75	105	81	55	26	51	21
6	23	56	321	71	129	105	99	96	49	26	39	21
7	24	56	288	65	90	72	97	99	46	26	27	21
8	110	66	353	61	81	63	89	84	45	26	25	21
9	196	150	190	61	77	57	84	105	43	46	24	21
10	67	90	155	68	73	78	80	93	41	51	23	21
11	40	64	145	61	69	85	78	81	39	31	23	249
12	32	57	149	55	67	70	108	77	38	26	22	192
13	31	53	150	54	65	61	170	75	41	25	23	42
14	30	51	387	54	103	171	103	73	39	25	24	31
15	27	50	247	54	126	269	77	70	35	24	22	28
16	30	46	166	e136	90	113	74	66	35	25	25	27
17	27	47	159	e85	73	91	75	66	34	24	63	26
18	27	49	150	e62	69	86	92	65	46	29	61	25
19	853	50	143	60	71	81	100	87	72	41	32	25
20	1230	47	131	51	72	81	77	132	41	23	42	25
21	253	45	110	51	68	77	69	66	36	23	109	23
22	166	43	102	57	71	74	68	53	35	197	37	23
23	130	43	101	94	64	68	67	49	34	35	27	23
24	115	42	122	73	60	65	66	44	32	164	24	23
25	99	42	171	487	57	65	64	79	31	201	24	23
26	88	254	107	129	56	100	61	86	30	57	22	22
27	82	146	96	78	61	76	59	50	29	41	22	21
28	84	58	90	261	57	66	193	44	28	44	61	23
29	79	49	90	157	---	66	103	41	28	30	46	52
30	77	46	89	87	---	65	62	46	28	27	31	26
31	73	---	81	82	---	313	---	43	---	26	25	---
TOTAL	4122	1999	5727	2924	2290	2849	3019	2439	1405	1434	1077	1159
MEAN	133	66.6	185	94.3	81.8	91.9	101	78.7	46.8	46.3	34.7	38.6
MAX	1230	254	726	487	211	313	261	190	167	201	109	249
MIN	23	42	81	51	56	57	59	41	28	23	22	21
CFSM	4.52	2.27	6.28	3.21	2.78	3.13	3.42	2.68	1.59	1.57	1.18	1.31
IN.	5.22	2.53	7.25	3.70	2.90	3.60	3.82	3.09	1.78	1.81	1.36	1.47

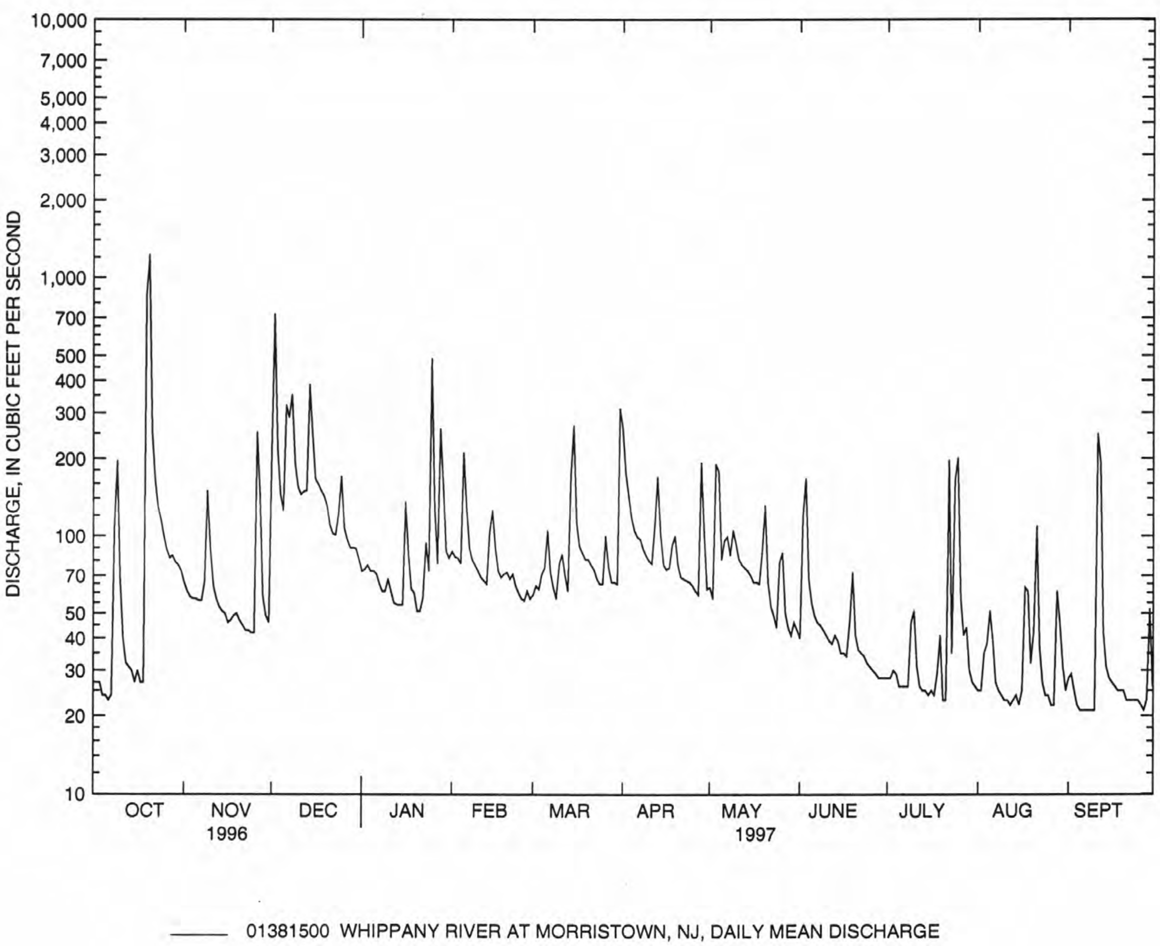
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.0	46.0	55.3	59.2	64.5	87.3	87.8	66.6	46.9	38.8	35.4	34.4
MAX	133	132	185	211	147	215	231	237	214	186	158	123
(WY)	1997	1933	1997	1979	1973	1936	1983	1989	1972	1975	1942	1971
MIN	8.72	13.4	14.2	16.9	23.5	28.1	30.2	24.4	14.6	10.3	8.02	7.25
(WY)	1931	1937	1940	1922	1940	1981	1985	1941	1965	1965	1932	1932

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	34769		30444			
ANNUAL MEAN	95.0		83.4		54.5	
HIGHEST ANNUAL MEAN					98.5	1984
LOWEST ANNUAL MEAN					23.3	1965
HIGHEST DAILY MEAN	1230	Oct 20	1230	Oct 20	1510	Aug 28 1971
LOWEST DAILY MEAN	21	Aug 31	21	Sep 5	4.2	Sep 10 1932
ANNUAL SEVEN-DAY MINIMUM	21	Aug 30	21	Sep 4	4.7	Sep 9 1932
INSTANTANEOUS PEAK FLOW			2290	Oct 20	2800	Aug 28 1971
INSTANTANEOUS PEAK STAGE			7.77	Oct 20	8.60	Aug 28 1971
INSTANTANEOUS LOW FLOW			19	Sep 8	2.8	Aug 27 1932
ANNUAL RUNOFF (CFSM)	3.23		2.84		1.85	
ANNUAL RUNOFF (INCHES)	43.99		38.52		25.20	
10 PERCENT EXCEEDS	170		158		105	
50 PERCENT EXCEEDS	66		63		36	
90 PERCENT EXCEEDS	28		25		15	

e Estimated.



01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1926, 1962 to September 1997 (discontinued).

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)
OCT 1996										
22...	1205	163	257	7.7	12.0	754	9.9	93	<1.0	2400
JAN 1997										
27...	1140	78	331	7.5	2.0	770	13.9	100	E1.3	1700
MAR										
19...	1155	82	386	8.2	5.5	759	14.0	112	E1.2	230
MAY										
21...	0930	82	312	7.6	14.5	751	9.2	92	2.1	4900
JUL										
29...	1154	29	360	7.8	23.5	755	8.4	100	<1.0	700

DATE	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
OCT 1996										
22...	330	69	18	5.8	18	2.1	41	15	40	<.1
JAN 1997										
27...	100	82	21	7.2	29	1.9	41	15	59	<.1
MAR										
19...	130	87	22	7.8	33	1.7	46	16	72	<.1
MAY										
21...	200	87	22	7.6	22	1.9	48	14	51	<.1
JUL										
29...	100	100	27	9.1	25	2.2	61	18	52	<.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 1996									
22...	15	138	143	--	<.003	1.0	<.03	<.03	.3
JAN 1997									
27...	16	192	180	2	.034	1.5	.06	.06	.3
MAR									
19...	15	207	201	1	.015	1.3	<.03	<.03	.2
MAY									
21...	14	188	166	12	.018	1.2	<.03	.05	.4
JUL									
29...	16	218	192	3	.035	1.4	.07	.06	.4

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996									
22...	.20	1.3	1.2	.06	.03	3.6	.5	6	2.7
JAN 1997									
27...	.26	1.8	1.8	.14	.11	2.1	.3	--	--
MAR									
19...	.17	1.5	1.5	.02	.02	1.8	.4	--	--
MAY									
21...	.22	1.5	1.4	.06	<.01	2.9	.6	--	--
JUL									
29...	.31	1.8	1.7	<.01	<.01	2.6	.4	--	--

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
21...	0930	10	<1	<10	40	<1	<1.0	3

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
21...	710	2	80	<.1	<1	<1	<10

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ

LOCATION.--Lat 40°50'42", long 74°20'51", Morris County, Hydrologic Unit 02030103, on left upstream abutment of former bridge on Edwards Road, 200 ft downstream from bridges of Interstate 280, 0.4 mi upstream from Rockaway River, and 1.2 mi southwest of Pine Brook. Water-quality samples collected 450 ft upstream at bridge on Ridgedale Avenue.

DRAINAGE AREA.--68.5 mi^2.

WATER-STAGE RECORDS

PERIOD OF RECORD.--Low-flow partial record station water years 1963-69, 1973, 1979-96. November 1992 to September 1996 (gage height and discharge measurements only), October 1996 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 162 ft above sea level (revised, from topographic map).

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

COOPERATION.--Gage-height record collected in cooperation with U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	e140	e372	e235	e411	122	531	301	82	43	48	59
2	55	e125	e908	e209	376	141	561	264	125	44	41	57
3	57	e105	e1120	e191	349	142	547	277	295	48	42	45
4	49	e99	e972	e182	323	174	523	438	324	45	67	37
5	44	e94	e877	e175	373	187	493	448	222	39	85	34
6	42	e92	e951	e173	446	246	465	409	131	38	89	33
7	42	e90	e1040	e160	435	245	437	387	92	38	53	32
8	78	e94	e1160	e144	395	150	408	352	83	38	43	32
9	295	e197	e1060	e130	356	117	376	323	76	55	39	33
10	e180	e234	e944	e135	318	134	343	306	72	126	36	34
11	e155	e204	e846	e135	276	185	308	267	67	57	35	175
12	e130	e171	e771	e116	229	166	279	219	63	46	34	331
13	e105	e147	e708	113	186	162	368	173	65	39	34	339
14	e90	e133	e849	183	201	210	401	149	67	37	36	238
15	e82	e122	e993	302	312	438	358	131	59	36	34	111
16	e75	e110	e897	315	342	480	306	117	57	36	33	72
17	e72	e100	e824	370	316	446	263	103	58	36	117	58
18	e63	e97	e753	325	271	404	251	97	69	39	110	51
19	e452	e99	e685	242	244	367	278	109	117	77	84	45
20	e1820	e98	e625	174	231	334	273	221	81	41	54	41
21	e1650	e93	e548	133	209	305	238	218	65	35	182	38
22	e1100	e88	e486	114	198	272	203	143	57	179	146	36
23	e800	e85	e431	195	191	226	176	105	55	149	77	36
24	e610	e81	e383	185	163	178	163	91	52	153	56	35
25	e470	e76	e410	420	141	151	151	109	52	291	46	33
26	e360	e273	e412	534	125	200	134	189	51	331	41	33
27	e295	e390	e374	506	130	234	115	137	49	306	38	31
28	e250	e439	e332	485	126	194	244	102	47	295	83	31
29	e205	e402	e306	512	---	166	381	88	44	244	100	90
30	e180	e342	e286	507	---	166	361	86	43	177	82	53
31	e155	---	e263	e467	---	301	---	88	---	97	53	---
TOTAL	10019	4820	21586	8067	7673	7243	9935	6447	2720	3215	2018	2273
MEAN	323	161	696	260	274	234	331	208	90.7	104	65.1	75.8
MAX	1820	439	1160	534	446	480	561	448	324	331	182	339
MIN	42	76	263	113	125	117	115	86	43	35	33	31

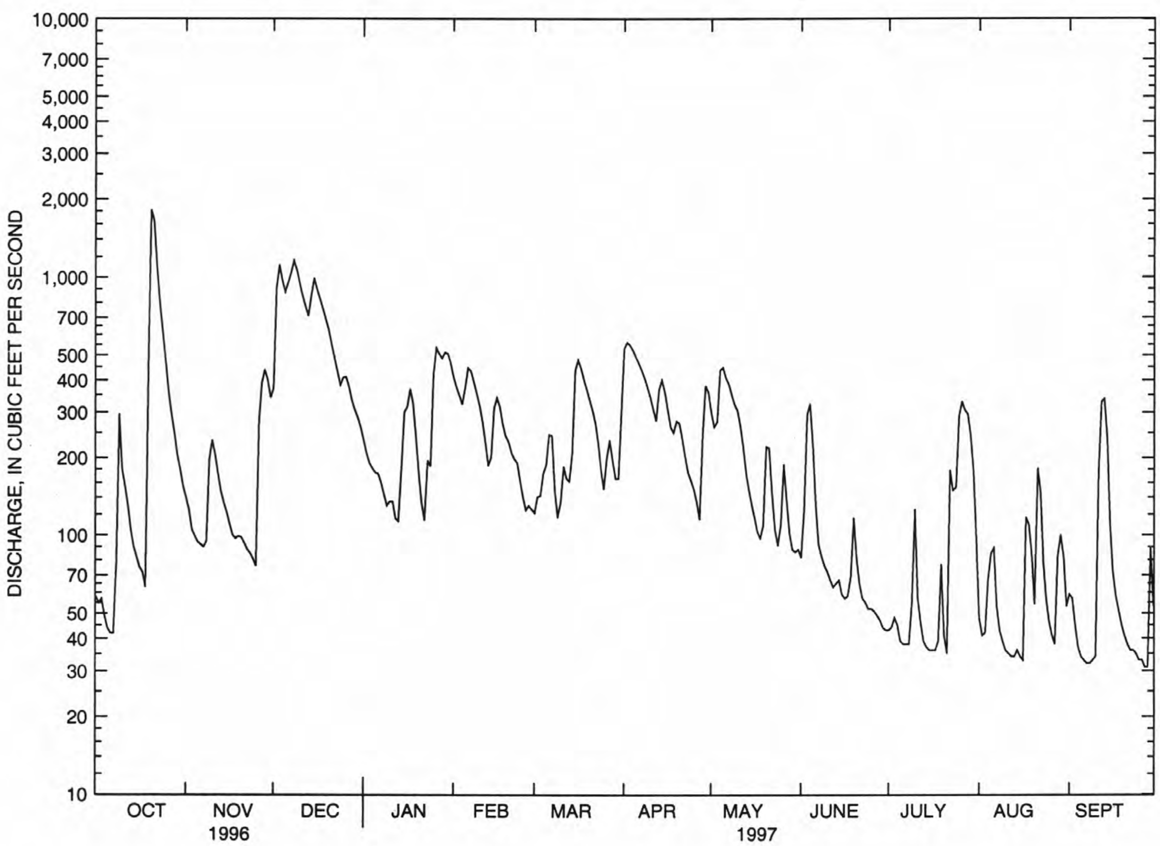
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	323	161	696	260	274	234	331	208	90.7	104	65.1	75.8
MAX	323	161	696	260	274	234	331	208	90.7	104	65.1	75.8
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	323	161	696	260	274	234	331	208	90.7	104	65.1	75.8
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

SUMMARY STATISTICS	FOR 1997 WATER YEAR	
ANNUAL TOTAL	86016	
ANNUAL MEAN	236	
HIGHEST DAILY MEAN	1820	Oct 20
LOWEST DAILY MEAN	31	Sep 27
ANNUAL SEVEN-DAY MINIMUM	34	Sep 4
INSTANTANEOUS PEAK FLOW	2080e	Oct 20
INSTANTANEOUS PEAK STAGE	9.22a	Oct 22
INSTANTANEOUS LOW FLOW	29	Sep 28
10 PERCENT EXCEEDS	482	
50 PERCENT EXCEEDS	160	
90 PERCENT EXCEEDS	41	

a Stage on Oct. 20, 1996 was higher (unknown).
e Estimated.



01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ, DAILY MEAN DISCHARGE

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

WATER-QUALITY RECORDS

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

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
22...	1035	E1100	128	6.8	12.0	757	3.5	33	2.6	1700	1500	34
JAN 1997												
27...	0942	510	386	7.4	0.0	773	11.8	80	2.1	700	1200	61
MAR												
19...	0928	370	552	7.8	4.5	763	10.6	82	E1.4	80	10	100
MAY												
20...	0945	219	350	7.6	17.0	750	6.2	65	4.7	17000	7200	98
JUL												
29...	0930	251	378	7.2	23.0	755	4.6	54	E1.3	700	1400	99

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
22...	9.0	2.9	8.6	2.4	25	8.1	15	<.1	5.6	76	68	13
JAN 1997												
27...	16	5.0	49	2.1	29	12	85	<.1	7.0	200	197	5
MAR												
19...	26	8.4	60	2.0	52	19	120	<.1	9.7	301	282	2
MAY												
20...	26	8.3	29	2.2	50	16	59	<.1	9.9	192	187	52
JUL												
29...	26	8.2	30	2.3	65	23	54	<.1	13	251	201	17

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
22...	.007	.38	<.03	<.03	.4	.33	.78	.71	.09	.04	6.4	.5
JAN 1997												
27...	.022	.85	.18	.18	.6	.45	1.5	1.3	.10	.06	3.6	.5
MAR												
19...	.013	1.3	<.03	<.03	.5	.37	1.8	1.7	.10	.07	4.2	.4
MAY												
20...	.075	1.6	.15	.17	.6	.47	2.3	2.1	.22	.06	4.6	2.0
JUL												
29...	.021	1.3	.09	.09	1.0	.20	2.3	1.5	--	.15	10	1.0

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
20...	0945	30	<1	<10	50	<1	2.7	10

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
20...	2000	14	200	<.1	3	<1	30

01381900 PASSAIC RIVER AT PINE BROOK, NJ

LOCATION.--Lat 40°51'45", long 74°19'18", Morris County, Hydrologic Unit 02030103, on left bank 20 ft downstream from bridge on U.S. Route 46, 0.5 mi east of Pine Brook, and 1.3 mi downstream from Rockaway River.

DRAINAGE AREA.--349 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1963-69, 1973, and annual maximum, water years 1966-75, 1978-79. October 1979 to current year. Feb. 19 to Aug. 24, 1939 in files of U.S. Army Corps of Engineers, New York District.

REVISED RECORDS.--WDR NJ-77-1: 1967(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 149.26 ft above sea level. December 1965 to September 1979, crest-stage gage at same site at datum 10.00 ft higher. Feb. 19 to Aug. 24, 1939, water-stage recorder at present State Route 506 bridge, 1,600 ft upstream from gage, operated by U.S. Army Corps of Engineers, New York District at datum 13.05 ft higher.

REMARKS.--Records good except those above 1,000 ft^3/s, which are fair. Flow regulated by Boonton and Splitrock Reservoirs (see Passaic River basin, reservoirs in) and many small lakes. Water diverted from Boonton Reservoir for municipal supply of Jersey City (see Passaic River basin, diversions). Several measurements of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1810, according to State Geologist's report for 1904, 23.2 ft, Oct. 10, 1903, present datum, from King Survey of highwater marks at present State Route 506 bridge, 1,600 ft upstream from gage. Floods of Mar. 13, 1936 and Sept. 24, 1938 reached stages of 20.8 ft and 19.4 ft respectively, at present State Route 506 bridge and present datum. Flood of July 23, 1945 reached a stage of 22.3 ft at present site and datum according to U.S. Army Corps of Engineers; minimum observed, 41.1 ft^3/s, Sept. 22, 1964.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 21	1400	*5,350	*21.13	Dec. 15	2130	3,030	19.14
Oct. 28	0545	2,530	18.64	Jan. 29	1930	2,090	18.17
Dec. 8	2300	3,520	19.64	Apr. 2	2245	2,450	18.56

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	257	1360	1220	845	1640	426	1680	936	265	130	384	172
2	220	1130	2110	751	1430	443	2360	842	312	130	234	170
3	211	901	3240	676	1200	455	2420	804	621	134	179	146
4	191	681	3320	638	1050	506	2300	1070	763	136	199	131
5	174	470	3080	614	1080	556	2110	1380	692	129	223	123
6	161	360	3020	603	1350	647	1920	1400	516	123	271	118
7	155	319	3160	572	1510	708	1750	1320	379	119	218	116
8	208	320	3450	520	1450	598	1560	1170	310	120	187	116
9	715	534	3460	469	1250	500	1330	1050	272	137	159	116
10	858	746	3200	464	1080	472	1100	956	242	282	137	115
11	899	802	2900	472	939	555	958	855	219	179	128	336
12	848	729	2620	424	800	559	843	735	199	141	124	662
13	730	616	2390	374	661	561	924	610	197	128	121	674
14	591	521	2520	414	601	611	1050	510	204	118	123	578
15	451	457	2950	625	780	1020	1040	450	181	115	121	382
16	340	406	2970	743	901	1490	947	409	171	113	120	245
17	278	368	2770	897	925	1590	834	368	166	111	248	187
18	240	350	2540	946	871	1500	748	338	177	109	270	162
19	630	353	2320	866	796	1320	734	340	293	171	284	147
20	3400	350	2130	699	730	1140	744	496	283	142	206	136
21	5260	337	1910	523	667	1010	697	568	237	121	421	129
22	5150	320	1710	410	621	895	621	479	195	323	443	127
23	4720	308	1520	477	587	754	548	381	170	319	307	125
24	4230	295	1340	542	541	614	500	321	155	352	215	123
25	3730	276	1300	959	496	515	473	313	151	740	170	120
26	3290	609	1360	1680	455	542	441	463	148	930	149	119
27	2850	1090	1310	1910	439	631	402	461	144	1050	138	114
28	2420	1470	1180	1920	438	603	571	386	139	1110	184	114
29	2060	1470	1080	2050	---	539	875	316	133	997	249	214
30	1760	1290	1000	2020	---	529	978	277	130	835	220	195
31	1520	---	930	1830	---	761	---	271	---	621	169	---
TOTAL	48547	19238	70010	26933	25288	23050	33458	20275	8064	10165	6601	6212
MEAN	1566	641	2258	869	903	744	1115	654	269	328	213	207
MAX	5260	1470	3460	2050	1640	1590	2420	1400	763	1110	443	674
MIN	155	276	930	374	438	426	402	271	130	109	120	114

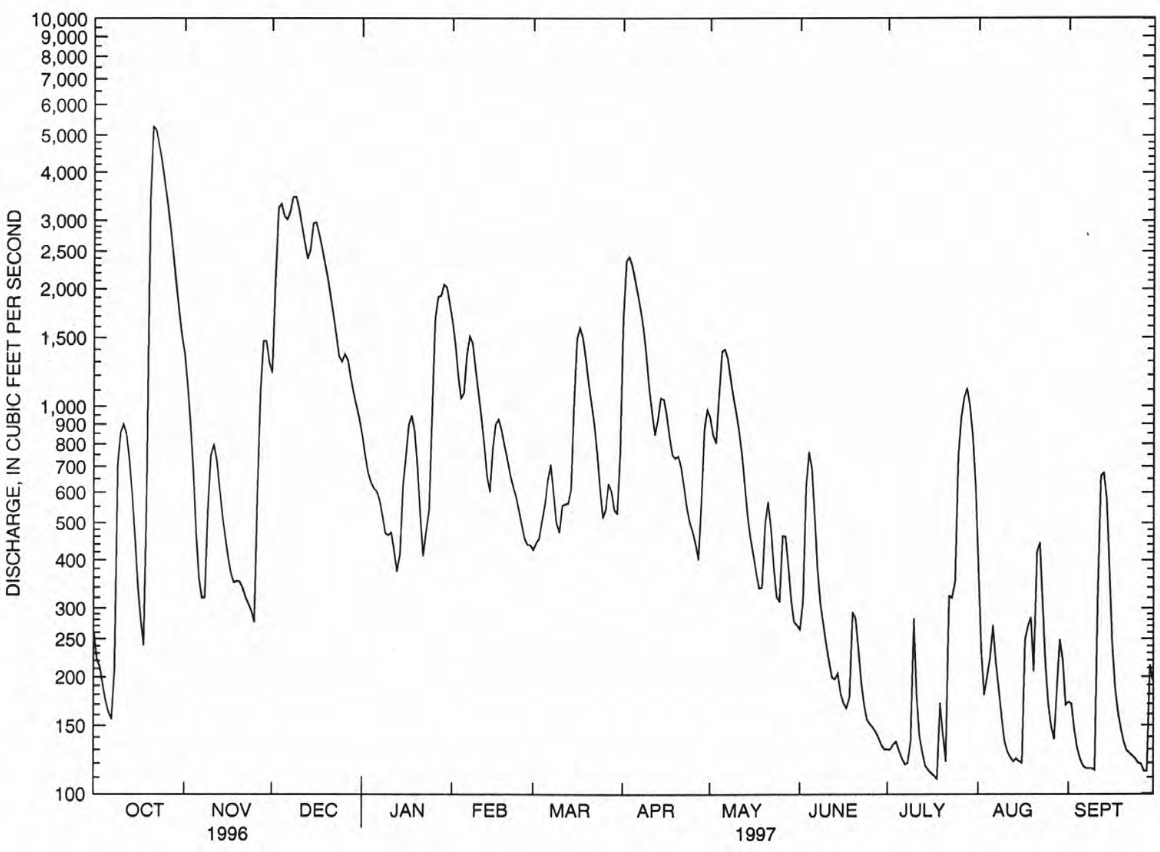
01381900 PASSAIC RIVER AT PINE BROOK, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1997, BY WATER YEAR (WY)

MEAN	423	584	822	658	781	1011	1203	793	514	376	264	258
MAX	1566	1355	2286	1516	1268	2204	2842	2537	1482	1485	1024	849
(WY)	1997	1996	1984	1996	1996	1994	1983	1989	1984	1984	1990	1989
MIN	133	161	107	105	211	272	161	289	188	126	117	91.0
(WY)	1995	1981	1981	1981	1980	1981	1985	1995	1981	1993	1981	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1980 - 1997	
ANNUAL TOTAL	371144		297841			
ANNUAL MEAN	1014		816		640	
HIGHEST ANNUAL MEAN					1125	1984
LOWEST ANNUAL MEAN					276	1981
HIGHEST DAILY MEAN	5260	Oct 21	5260	Oct 21	7910	Apr 7 1984
LOWEST DAILY MEAN	104	Sep 2	109	Jul 18	72	Sep 29 1980
ANNUAL SEVEN-DAY MINIMUM	108	Aug 31	119	Jul 12	78	Oct 12 1980
INSTANTANEOUS PEAK FLOW			5350	Oct 21	8000	Apr 7 1984
INSTANTANEOUS PEAK STAGE			21.13	Oct 21	22.90a	Apr 7 1984
INSTANTANEOUS LOW FLOW			106	Jul 18	70	Sep 29 1980
10 PERCENT EXCEEDS	2450		1920		1520	
50 PERCENT EXCEEDS	723		541		364	
90 PERCENT EXCEEDS	189		134		125	

a Affected by backwater.



01381900 PASSAIC RIVER AT PINE BROOK, NJ, DAILY MEAN DISCHARGE

01381950 PASSAIC RIVER AT TOWACO, NJ

LOCATION.--Lat 40°54'03", long 74°20'16", Morris County, Hydrologic Unit 02030103, on left bank at the pump station of the Montville Township Municipal Utilities Authority, just upstream from Willard Lane, 5.0 mi downstream from Rockaway River at Pine Brook, 0.9 mi southeast of Towaco, and 6.5 mi upstream from confluence with Pompton River.

DRAINAGE AREA.--355 mi^2.

PERIOD OF RECORD.--August 1993 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 157 ft above sea level (revised, from topographic map).

REMARKS.--Records good. Data is stage-only and is collected in cooperation with the U.S. Army Corps of Engineers. Days of missing records are not estimated and are noted with dash lines (---).

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 12.69 ft, Oct. 22; minimum recorded, 4.33 ft, July 18.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 12.69 ft, Oct. 22, 1996; minimum recorded, 4.06 ft, Sept. 16, 1995.

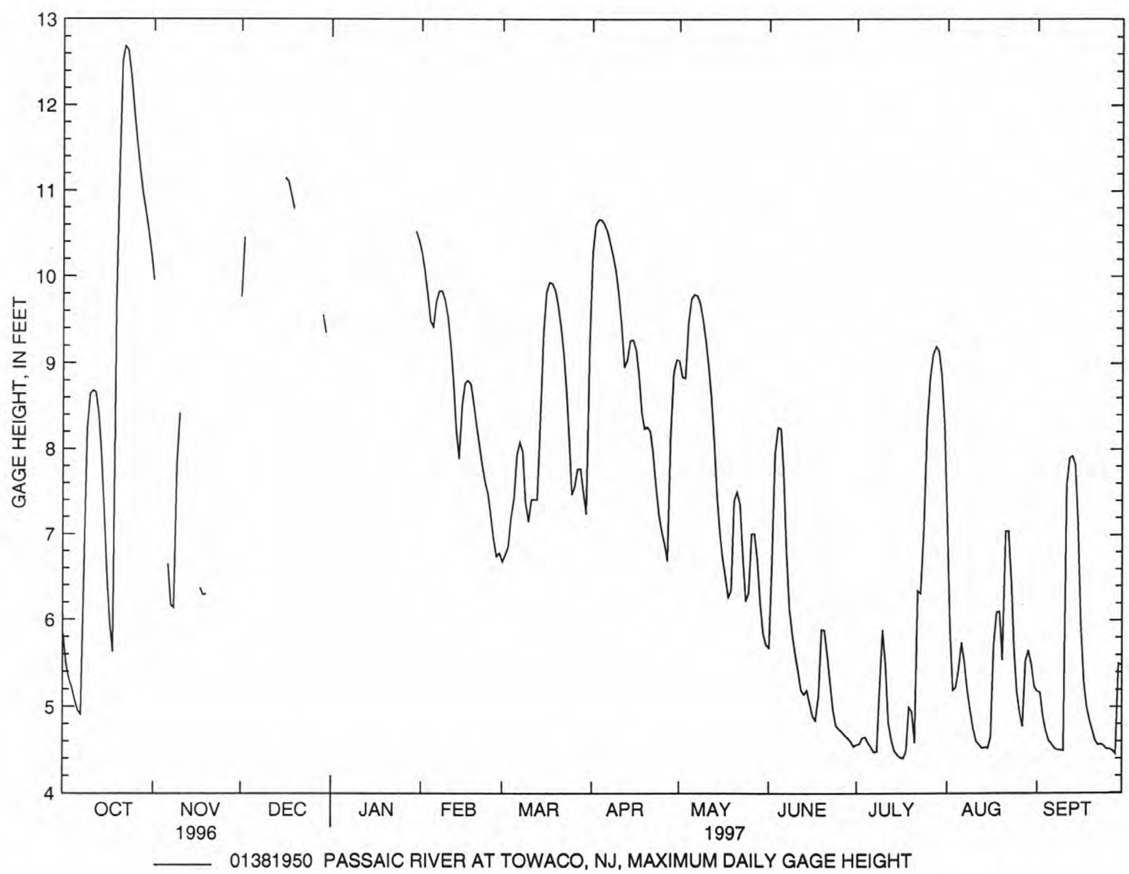
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.83	5.49	9.96	---	9.76	---	---	---	10.27	10.06	6.68	6.61
2	5.49	5.31	---	---	10.45	9.77	---	---	10.06	9.79	6.76	6.68
3	5.32	5.22	---	8.73	---	---	---	---	9.79	9.48	6.85	6.76
4	5.22	5.03	---	7.48	11.43	---	---	---	9.48	9.15	7.20	6.85
5	5.08	4.95	---	6.65	---	11.15	---	---	9.42	9.14	7.42	7.20
6	4.95	4.90	6.65	6.17	11.15	11.14	---	---	9.71	9.42	7.94	7.42
7	4.91	4.85	6.17	6.00	---	---	---	---	9.83	9.71	8.08	7.94
8	6.60	4.82	6.14	6.00	---	---	---	---	9.83	9.73	7.97	7.38
9	8.24	6.60	7.82	6.14	---	---	---	---	9.73	9.53	7.38	6.93
10	8.64	8.24	8.42	7.82	---	---	---	---	9.53	9.20	7.15	6.81
11	8.68	8.64	---	---	---	---	---	---	9.20	8.77	7.41	7.15
12	8.66	8.41	---	---	---	---	---	---	8.77	8.21	7.41	7.37
13	8.41	7.92	---	---	10.80	---	---	---	8.21	7.64	7.41	7.35
14	7.92	7.25	---	---	---	---	---	---	7.89	7.43	8.36	7.28
15	7.25	6.50	---	---	---	---	---	---	8.51	7.89	9.34	8.36
16	6.50	5.95	---	6.37	11.15	11.11	---	---	8.77	8.51	9.82	9.34
17	5.95	5.63	6.37	---	11.11	10.96	---	---	8.80	8.76	9.93	9.82
18	5.63	5.43	6.29	6.22	10.96	10.79	---	---	8.76	8.54	9.92	9.84
19	9.66	5.41	6.30	---	10.79	---	---	---	8.54	8.27	9.84	9.66
20	11.30	9.66	---	---	---	---	---	---	8.27	8.04	9.66	9.42
21	12.51	11.30	---	---	---	---	---	---	8.04	7.81	9.42	9.10
22	12.69	12.51	---	---	---	---	---	---	7.81	7.62	9.10	8.67
23	12.64	12.33	---	5.95	---	---	---	---	7.62	7.48	8.67	8.09
24	12.33	11.93	---	5.96	---	9.85	---	---	7.48	7.21	8.09	7.47
25	11.93	11.57	---	5.74	9.85	---	---	---	7.22	6.94	7.47	7.03
26	11.57	11.25	---	5.23	---	---	---	---	6.94	6.74	7.56	7.00
27	11.25	10.97	---	---	---	---	---	---	6.74	6.67	7.77	7.56
28	10.97	10.76	---	---	---	9.56	---	---	6.78	6.65	7.77	7.49
29	10.76	10.53	9.79	---	9.56	9.36	---	---	---	---	7.49	7.22
30	10.53	10.27	---	---	9.35	---	10.52	10.42	---	---	7.24	7.19
31	10.27	9.96	---	---	---	---	10.42	10.27	---	---	9.20	7.18
MONTH	12.69	4.82	---	---	---	---	---	---	10.27	6.65	9.93	6.61

01381950 PASSAIC RIVER AT TOWACO, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.27	9.20	9.03	8.84	5.68	5.61	4.56	4.53	7.22	5.91	5.18	4.82
2	10.60	10.27	8.84	8.47	6.71	5.60	4.57	4.55	5.91	5.19	5.17	4.89
3	10.66	10.60	8.83	8.30	7.96	6.71	4.64	4.57	5.19	4.93	4.89	4.72
4	10.66	10.61	9.46	8.83	8.25	7.96	4.65	4.58	5.22	4.96	4.72	4.61
5	10.61	10.51	9.74	9.46	8.24	7.71	4.58	4.51	5.43	5.09	4.61	4.56
6	10.52	10.38	9.79	9.74	7.71	6.79	4.53	4.45	5.74	5.43	4.57	4.50
7	10.38	10.23	9.78	9.70	6.79	6.14	4.47	4.44	5.51	5.19	4.52	4.46
8	10.23	10.05	9.70	9.51	6.14	5.83	4.48	4.46	5.19	4.96	4.50	4.47
9	10.05	9.78	9.51	9.27	5.83	5.60	5.22	4.45	4.96	4.75	4.50	4.47
10	9.78	9.43	9.27	8.97	5.60	5.41	5.88	5.22	4.75	4.60	4.49	4.47
11	9.43	8.96	8.97	8.58	5.41	5.19	5.49	4.81	4.60	4.54	7.58	4.49
12	8.96	8.65	8.58	8.07	5.19	5.03	4.81	4.62	4.56	4.51	7.90	7.58
13	9.03	8.71	8.07	7.46	5.14	5.02	4.62	4.49	4.52	4.49	7.92	7.82
14	9.26	9.03	7.46	7.03	5.19	5.04	4.49	4.43	4.53	4.51	7.82	7.12
15	9.27	9.16	7.03	6.73	5.04	4.88	4.44	4.40	4.52	4.48	7.12	5.97
16	9.16	8.87	6.73	6.51	4.89	4.82	4.41	4.38	4.65	4.46	5.97	5.31
17	8.87	8.44	6.51	6.27	4.84	4.79	4.40	4.36	5.71	4.65	5.31	5.01
18	8.44	8.17	6.27	6.09	5.13	4.78	4.48	4.33	6.09	5.51	5.01	4.85
19	8.24	8.16	6.34	6.10	5.89	5.13	4.99	4.48	6.10	5.54	4.85	4.73
20	8.26	8.21	7.40	6.34	5.88	5.59	4.94	4.55	5.54	5.14	4.73	4.59
21	8.21	7.95	7.50	7.35	5.59	5.27	4.58	4.46	7.04	5.21	4.61	4.53
22	7.95	7.58	7.35	6.73	5.27	4.95	6.34	4.58	7.04	6.46	4.56	4.53
23	7.58	7.24	6.73	6.22	4.96	4.78	6.31	5.66	6.46	5.66	4.57	4.54
24	7.24	7.04	6.22	5.93	4.78	4.73	7.07	5.53	5.66	5.16	4.55	4.51
25	7.04	6.89	6.32	5.85	4.74	4.69	8.31	7.07	5.16	4.91	4.51	4.48
26	6.89	6.69	7.01	6.32	4.71	4.66	8.83	8.31	4.92	4.77	4.51	4.47
27	6.69	6.45	7.01	6.70	4.67	4.62	9.10	8.83	4.77	4.69	4.49	4.40
28	8.18	6.45	6.70	6.20	4.64	4.58	9.19	9.10	5.53	4.69	4.45	4.40
29	8.89	8.18	6.20	5.85	4.60	4.52	9.14	8.86	5.65	5.49	5.50	4.44
30	9.04	8.89	5.85	5.68	4.54	4.51	8.86	8.29	5.49	5.23	5.48	4.93
31	---	---	5.71	5.67	---	---	8.29	7.22	5.23	4.85	---	---
MONTH	10.66	6.45	9.79	5.67	8.25	4.51	9.19	4.33	7.22	4.46	7.92	4.40



01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'40", long 74°16'23", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, 50 ft upstream from Pompton River.

DRAINAGE AREA.--361 mi^2.

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1969 to September 1974.
pH: June 1969 to September 1974.
WATER TEMPERATURE: October 1962 to May 1969 (once daily), June 1969 to September 1974.
DISSOLVED OXYGEN: June 1969 to September 1974.

REMARKS.--On Jan. 27 and June 11, water-column synoptic studies were conducted at this site as part of the LINJ NAWQA program. For synoptic data from other sites, see section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Some samples were collected by USGS personnel for the LINJ NAWQA study.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
OCT 1996											
16...	*0930*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
16...	1010	ENVIRONMENTAL	380	370	7.5	13.5	12.0	756	7.0	67.0	--
29...	1105	ENVIRONMENTAL	2100	197	7.0	--	12.0	757	2.9	27	2.8
NOV											
12...	1020	ENVIRONMENTAL	860	310	7.2	3.5	8.5	766	7.8	69.7	--
DEC											
11...	*1010*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
11...	1030	ENVIRONMENTAL	3000	180	7.3	3.0	3.5	756	9.0	71.3	--
JAN 1997											
07...	1020	ENVIRONMENTAL	660	380	7.6	4.0	4.5	754	10.6	86.2	--
15...	1225	ENVIRONMENTAL	720	454	7.3	--	1.0	765	13.8	97	<1.2
27...	1400	ENVIRONMENTAL	2360	360	6.9	-1.0	0.0	--	--	--	--
FEB											
27...	1120	ENVIRONMENTAL	490	480	7.8	2.5	5.0	748	16.1	127	--
MAR											
18...	1045	ENVIRONMENTAL	1820	443	7.4	--	4.5	765	11.1	86	E1.2
APR											
02...	1120	ENVIRONMENTAL	2400	310	7.3	16.0	6.5	759	9.8	80	--
23...	1100	ENVIRONMENTAL	630	410	7.5	24.0	11.5	752	10.4	97	--
MAY											
14...	1015	ENVIRONMENTAL	580	422	7.7	--	15.5	749	7.3	75	E1.7
21...	1010	ENVIRONMENTAL	660	390	7.6	14.0	17.0	755	6.1	64	--
JUN											
11...	1140	ENVIRONMENTAL	240	520	7.5	28.5	21.5	755	6.5	75	--
JUL											
23...	1120	ENVIRONMENTAL	360	340	7.6	26.0	22.5	762	5.5	64	--
30...	1118	ENVIRONMENTAL	990	268	7.2	--	22.5	763	5.1	59	E1.6
AUG											
27...	1030	ENVIRONMENTAL	150	570	7.6	28.0	22.0	759	7.2	83	--
SEP											
23...	1050	ENVIRONMENTAL	130	690	7.5	17.0	17.5	756	7.3	77	--

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 1996												
16...	*--*	*--*	*--*	*<.02*	*<.01*	*<.2*	*<.1*	*--*	*1.3*	*--*	*<.1*	*<.1*
16...	--	--	90	23	8.0	32	3.7	66	58	54	28	55
29...	110	10	51	13	4.6	14	2.9	--	38	--	13	25
NOV												
12...	--	--	81	21	7.0	25	2.6	61	54	50	19	44
DEC												
11...	*--*	*--*	*--*	*.03*	*<.01*	*<.2*	*<.1*	*--*	*1.4*	*--*	*<.1*	*<.1*
11...	--	--	48	12	4.3	15	1.6	33	30	27	13	26
JAN 1997												
07...	--	--	96	24	8.7	32	2.4	67	55	55	22	59
15...	220	30	92	23	8.3	42	2.7	--	55	--	24	78
27...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
27...	--	--	100	26	9.0	46	2.7	68	59	56	25	82
MAR												
18...	70	30	71	18	6.3	50	1.7	--	38	--	15	92
APR												
02...	--	--	58	15	5.0	33	1.6	22	34	34	14	59
23...	--	--	92	23	8.2	38	2.4	68	57	56	22	70
MAY												
14...	8	20	100	26	9.2	37	2.7	--	63	--	21	66
21...	--	--	91	23	8.1	34	2.9	65	56	53	21	62
JUN												
11...	--	--	130	32	11	45	3.6	93	78	76	30	82
JUL												
23...	--	--	82	21	7.0	32	3.4	57	47	47	23	48
30...	700	570	68	18	5.8	21	2.6	--	40	--	27	35
AUG												
27...	--	--	150	37	13	50	4.2	110	89	86	33	81
SEP												
23...	--	--	170	42	15	63	6.3	120	99	98	48	110

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT 1996											
16...	*<.1*	*.05*	*<1*	*--*	*--*	*.01*	*<.05*	*.04*	*<.2*	*<.20*	*--*
16...	.1	13	236	207	--	.02	2.2	.09	.7	.50	2.9
29...	<.1	9.8	120	106	17	--	.19	--	.6	.42	.79
NOV											
12...	.1	12	169	168	--	.04	1.4	.08	.5	.40	1.9
DEC											
11...	*<.1*	*.01*	*<1*	*--*	*--*	*<.01*	*<.05*	*<.015*	*<.2*	*<.20*	*--*
11...	<.1	8.5	112	100	--	.02	.57	.03	.3	.20	.87
JAN 1997											
07...	.1	13	210	203	--	.02	1.8	.11	.4	.30	2.2
15...	<.1	14	246	234	6	--	2.1	--	.4	.30	2.5
27...	--	--	--	--	--	--	--	--	--	--	--
FEB											
27...	.1	9.7	260	246	--	.01	2.5	.04	.5	.30	3.0
MAR											
18...	<.1	8.4	242	219	14	--	1.1	--	.5	.31	1.6
APR											
02...	.1	6.6	175	149	--	.02	.76	.05	.7	.30	1.5
23...	<.1	8.0	222	213	--	.02	1.5	.15	.6	.30	2.2
MAY											
14...	<.1	11	242	219	22	--	2.0	--	.5	.40	2.5
21...	<.1	8.5	231	203	--	.04	2.2	.15	.7	.50	2.9
JUN											
11...	<.1	14	309	278	--	.05	3.1	.13	.7	.40	3.8
JUL											
23...	<.1	7.1	212	181	--	.04	2.4	.07	.8	.30	3.2
30...	<.1	11	173	148	41	--	1.0	--	1.0	.60	2.0
AUG											
27...	.1	14	329	302	--	.03	3.6	<.02	.6	.30	4.2
SEP											
23...	.1	15	402	380	--	.02	4.8	.09	.6	.50	5.4

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996											
16...	*--*	*<.01*	*<.01*	*<.01*	*<4.0*	*4*	*<1*	*--*	*--*	*--*	*--*
16...	2.7	.47	.37	.38	99	170	74	8.1	.9	19	20
29...	.61	.25	.16	--	--	--	--	10	.6	--	--
NOV											
12...	1.8	.29	.20	.19	71	170	30	6.8	.5	9	21
DEC											
11...	*--*	*<.01*	*<.01*	*<.01*	*9.8*	*<3*	*<1*	*--*	*--*	*--*	*--*
11...	.77	.07	.04	.04	42	98	5	5.4	.4	6	45
JAN 1997											
07...	2.1	.31	.26	.23	68	99	56	3.6	.4	2	3.9
15...	2.4	.30	.25	--	--	--	--	3.2	.6	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
FEB											
27...	2.8	.32	.25	.25	88	79	75	3.8	.4	4	5.8
MAR											
18...	1.4	.13	.06	--	--	--	--	4.7	.3	--	--
APR											
02...	1.1	.14	.08	.07	37	95	27	4.8	.5	11	68
23...	1.9	.28	.17	.20	66	140	97	4.2	.6	18	31
MAY											
14...	2.4	.41	.25	--	--	--	--	4.5	1	--	--
21...	2.7	.41	.23	.23	78	41	94	4.2	.7	29	52
JUN											
11...	3.5	.50	.28	.29	110	29	140	6.4	1.1	26	17
JUL											
23...	2.7	.48	.37	.32	96	32	49	4.8	2.2	36.2	36
30...	1.6	.52	.30	--	--	--	--	7.8	1.5	--	--
AUG											
27...	3.9	.61	.46	.48	160	15	95	4.4	1.2	510	206
SEP											
23...	5.3	.86	.70	.71	170	17	73	4.5	.9	14	4.8

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
14...	1015	20	<1	<10	80	<1	3.0	3

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
14...	1300	4	170	<.1	3	<1	10

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE NEW JERSEY DEPARTMENT OF HEALTH, PUBLIC HEALTH, AND ENVIRONMENTAL LABORATORIES

DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 1996				
29...	1105	.006	<.03	<.03
JAN 1997				
15...	1225	.023	.07	.04
MAR				
18...	1045	.013	<.03	<.03
MAY				
14...	1015	.030	.20	.12
JUL				
30...	1118	.020	.11	.11

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels in the "Explanation of Records" section). Only pesticides measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	ACETO-CHLOR, WATER FLTRD TREC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
JUN 1997							
11...	1140	<.002	<.002	.017	E.0024	<.002	E.0750

DATE	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)
JUN								
11...	<.003	.005	.004	E.0017	.014	<.004	<.005	.010

DATE	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN								
11...	<.004	<.003	<.004	.028	<.004	.020	<.010	<.002

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Samples were analyzed for volatile organic compounds (VOCs) on schedule 2020 (listed with minimum reporting levels in the "Explanation of Records" section). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)
NOV 1996									
12...	1020	<.10	E.010	<.10	<.10	<.20	<.10	<.10	<.10
DEC									
11...	1030	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
JAN 1997									
27...	1400	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10

DATE	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)
NOV 1996											
12...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	E.030	<.10	<.10	<10
DEC											
11...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
JAN 1997											
27...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10

DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	ACRO-LEIN TOTAL (UG/L) (34210)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)
NOV 1996										
12...	<.10	<4.0	<10	<10	<.10	.38	<.10	<.10	.20	<.20
DEC										
11...	<.10	<4.0	<10	<10	<.10	E.020	E.020	<.10	<.20	<.20
JAN 1997										
27...	<.10	<4.0	<10	<10	<.10	E.020	<.10	<.10	<.20	<.20

DATE	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
NOV 1996										
12...	<.40	E.010	<.40	<.20	<.20	<.10	<.10	<.10	.38	<.10
DEC										
11...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	<.10	.60	<.10
JAN 1997										
27...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	E.040	.48	<.10

DATE	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLOR-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	BROMO-FORM TOTAL (UG/L) (32104)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
NOV 1996										
12...	<.10	<.40	<.10	<.20	<.10	<10	<.40	E.010	<.20	.58
DEC										
11...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	E.080
JAN 1997										
27...	<.10	<.40	<.10	<.20	E.010	<10	<.40	E.030	<.20	E.080

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ

LOCATION.--Lat 41°01'05", long 74°24'07", Morris County, Hydrologic Unit 02030103, on left bank 15 ft downstream from culvert at crossover between northbound and southbound lanes on State Route 23, 1,000 ft downstream from Macopin Intake Dam, 0.6 mi downstream from Macopin River, and 2.8 mi northwest of Butler.

DRAINAGE AREA.--63.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1898 to March 1990, September 1992 to current year. Monthly discharge only for some periods, published in WSP 1302. Records for January 1892 to December 1897, published in WSP 541, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 549.17 ft above sea level. Prior to May 22, 1970, at site just upstream from Macopin Intake Dam, at datum 36.35 ft higher. May 22, 1970 to March 5, 1990, at site just upstream from Macopin Intake Dam, at datum 20.83 ft higher.

REMARKS.--Records good. Flow regulated by Canistear, Oak Ridge, Clinton, Charlotteburg Reservoirs, and Echo Lake (see Passaic River basin, reservoirs in). Water diverted at Charlotteburg Reservoir for municipal supply of city of Newark (see Passaic River basin, diversions). During peak flows, frequent variations in flow due to automatic gate operations upstream. Several measurements of water temperature were made during the year. Satellite telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with and record of gate openings provided by the Department of Public Affairs, Division of Water Supply, city of Newark. Prior to May 22, 1970, discharge figures provided by city of Newark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	82	62	21	52	16	247	81	5.4	1.8	1.3	4.3
2	6.6	18	1060	65	54	15	432	98	10	1.9	1.3	4.3
3	11	17	991	150	55	15	370	135	21	2.3	2.8	5.3
4	6.2	65	611	150	53	15	416	280	13	1.9	2.1	4.3
5	3.5	18	387	149	119	15	485	185	8.9	2.0	2.1	2.2
6	3.1	74	451	77	148	24	469	167	7.1	1.8	1.6	1.6
7	2.9	77	497	20	105	77	380	168	6.3	1.7	1.4	1.4
8	6.8	93	597	19	78	48	282	115	5.6	1.7	1.3	1.5
9	24	58	456	22	61	44	235	107	5.2	2.0	1.3	1.5
10	25	40	327	16	47	49	164	118	4.5	4.9	1.2	1.4
11	26	49	262	14	37	100	124	101	4.0	2.3	1.2	40
12	24	139	270	11	29	117	131	75	3.4	1.8	1.2	88
13	21	109	320	11	25	42	222	62	3.2	1.7	1.3	39
14	18	32	506	8.5	36	20	185	55	3.6	1.6	1.5	31
15	12	162	585	8.4	66	140	124	46	3.1	1.4	1.3	27
16	6.7	139	454	12	59	141	100	41	2.6	1.4	1.3	20
17	5.9	136	383	20	41	96	85	32	2.5	1.3	3.2	7.1
18	5.5	271	335	19	30	83	122	27	7.6	1.3	13	5.7
19	109	122	306	14	34	73	168	27	18	1.6	6.9	4.4
20	718	120	290	9.7	106	71	109	83	9.2	1.8	2.8	3.8
21	1100	119	207	7.4	165	68	88	75	5.5	1.3	11	6.0
22	595	120	161	8.2	169	72	75	47	5.8	3.1	14	2.7
23	359	116	142	11	165	60	65	29	7.8	1.8	12	2.1
24	259	114	155	10	75	36	57	24	3.6	4.3	5.5	2.6
25	176	58	266	39	19	22	48	11	3.0	8.8	3.8	2.1
26	130	47	234	145	18	69	41	13	2.8	2.8	3.0	2.4
27	102	35	178	83	17	61	35	8.5	3.2	1.8	2.4	2.4
28	135	21	162	119	17	19	136	6.6	2.4	1.8	4.2	2.1
29	84	19	164	119	---	18	175	6.0	1.9	2.1	4.9	6.7
30	81	19	165	74	---	18	106	5.4	1.8	1.8	3.6	3.9
31	71	---	85	53	---	55	---	5.7	---	1.3	2.7	---
TOTAL	4135.4	2489	11069	1485.2	1880	1699	5676	2234.2	182.0	69.1	117.2	326.8
MEAN	133	83.0	357	47.9	67.1	54.8	189	72.1	6.07	2.23	3.78	10.9
MAX	1100	271	1060	150	169	141	485	280	21	8.8	14	88
MIN	2.9	17	62	7.4	17	15	35	5.4	1.8	1.3	1.2	1.4

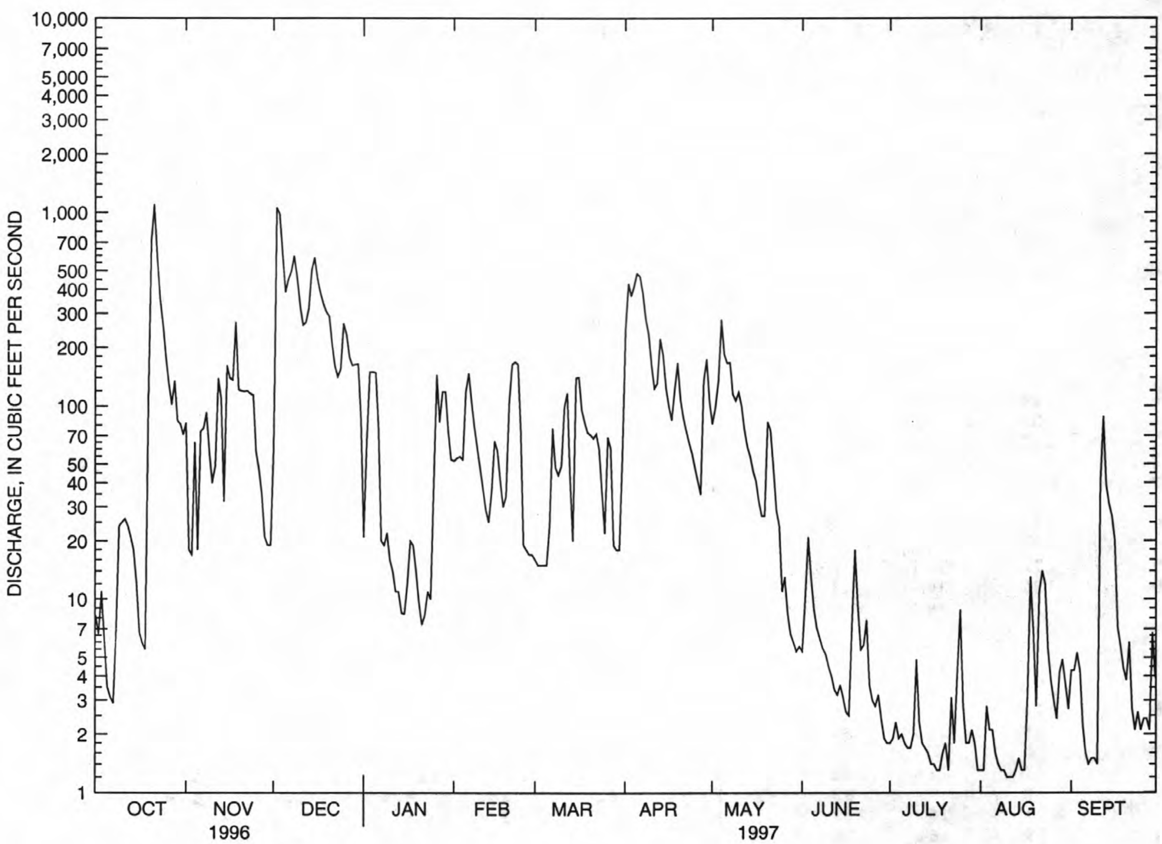
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.9	33.6	42.0	42.6	50.6	99.4	133	65.9	31.0	19.2	14.8	18.9
MAX	288	309	357	308	270	572	506	263	360	238	228	211
(WY)	1956	1928	1997	1996	1939	1936	1983	1989	1972	1938	1955	1960
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1929	1929	1929	1931	1930	1965	1950	1954	1944	1923	1923	1929

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1923 - 1997	
ANNUAL TOTAL	50897.1		31362.9			
ANNUAL MEAN	139		85.9		47.1	
HIGHEST ANNUAL MEAN					109	1952
LOWEST ANNUAL MEAN					.12	1954
HIGHEST DAILY MEAN	1370	Jan 28	1100	Oct 21	3170	Apr 6 1984
LOWEST DAILY MEAN	1.2	Sep 4	1.2	Aug 10	.00	Oct 1 1922
ANNUAL SEVEN-DAY MINIMUM	1.3	Aug 31	1.3	Aug 7	.00	Oct 18 1922
INSTANTANEOUS PEAK FLOW			2480	Oct 20	6100	Oct 10 1903
INSTANTANEOUS PEAK STAGE			6.87	Oct 20	17.40a	Oct 10 1903
INSTANTANEOUS LOW FLOW			1.2	Many days	.00	Many days
10 PERCENT EXCEEDS	384		234		142	
50 PERCENT EXCEEDS	70		25		5.1	
90 PERCENT EXCEEDS	3.9		1.8		.00	

a Highest since 1898, site and datum then in use.



——— 01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ, DAILY MEAN DISCHARGE

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1924, 1962-69, 1973-79, 1991 to current year.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
23...	1040	227	114	7.3	13.0	746	10.0	97	E1.7	70	50	31
JAN 1997												
15...	0930	8.2	213	7.2	0.0	754	--	--	<1.0	170	<10	53
MAR												
17...	1010	97	142	--	3.0	756	13.3	100	<1.1	<2	<10	33
MAY												
22...	1058	45	133	7.5	13.5	745	9.9	97	2.7	20	10	33
JUL												
21...	1145	1.4	208	7.7	20.5	749	8.5	96	2.2	49	40	58

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
23...	7.5	2.9	8.3	.6	21	7.4	15	<.1	5.3	68	60	6
JAN 1997												
15...	13	5.0	17	.7	30	13	34	<.1	11	142	114	<1
MAR												
17...	8.1	3.2	12	.5	20	9.0	22	<.1	6.5	78	74	4
MAY												
22...	8.1	3.2	11	.5	21	8.1	19	<.1	--	58	62	2
JUL												
21...	15	5.1	15	.7	38	11	32	<.1	6.8	123	109	<1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
23...	.005	<.05	<.03	<.03	.4	.30	--	--	.04	.02	4.7	.7
JAN 1997												
15...	.005	.59	<.03	<.03	.2	.16	.79	.75	.03	.03	2.7	.2
MAR												
17...	.005	.18	.04	.04	.2	.18	.38	.36	<.01	<.01	3.1	.1
MAY												
22...	<.003	<.05	<.03	<.03	.1	.07	--	--	<.01	<.01	3.1	.3
JUL												
21...	.004	.13	<.03	<.03	.1	.11	.24	.24	.04	.02	2.8	.2

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
22...	1058	<10	<1	<10	<10	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
22...	150	<1	50	<.1	<1	<1	<10

01382800 PEQUANNOCK RIVER AT RIVERDALE, NJ

LOCATION.--Lat 40°59'55", long 74°17'54", Passaic County, Hydrologic Unit 02030103, on right bank 5 ft upstream from bridge on Paterson-Hamburg Turnpike in Riverdale, 0.6 mi upstream from Wanaque River, and 2.8 mi upstream from confluence with the Ramapo River.

DRAINAGE AREA.--83.9 mi^2.

PERIOD OF RECORD.--Crest-stage gage, water years 1981-82. October 1993 to September 1997 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 187.90 ft above sea level.

REMARKS.--Records good. Flow regulated by Echo Lake, Canistear, Oak Ridge, Clinton, and Charlotteburg Reservoirs (see Passaic River basin, reservoirs in). Water diverted at Charlotteburg Reservoir for municipal supply for city of Newark (see Passaic River basin, diversions). Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 5, 1984, reached a stage of 13.6 ft, from floodmarks (11.5 ft at downstream side of bridge).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

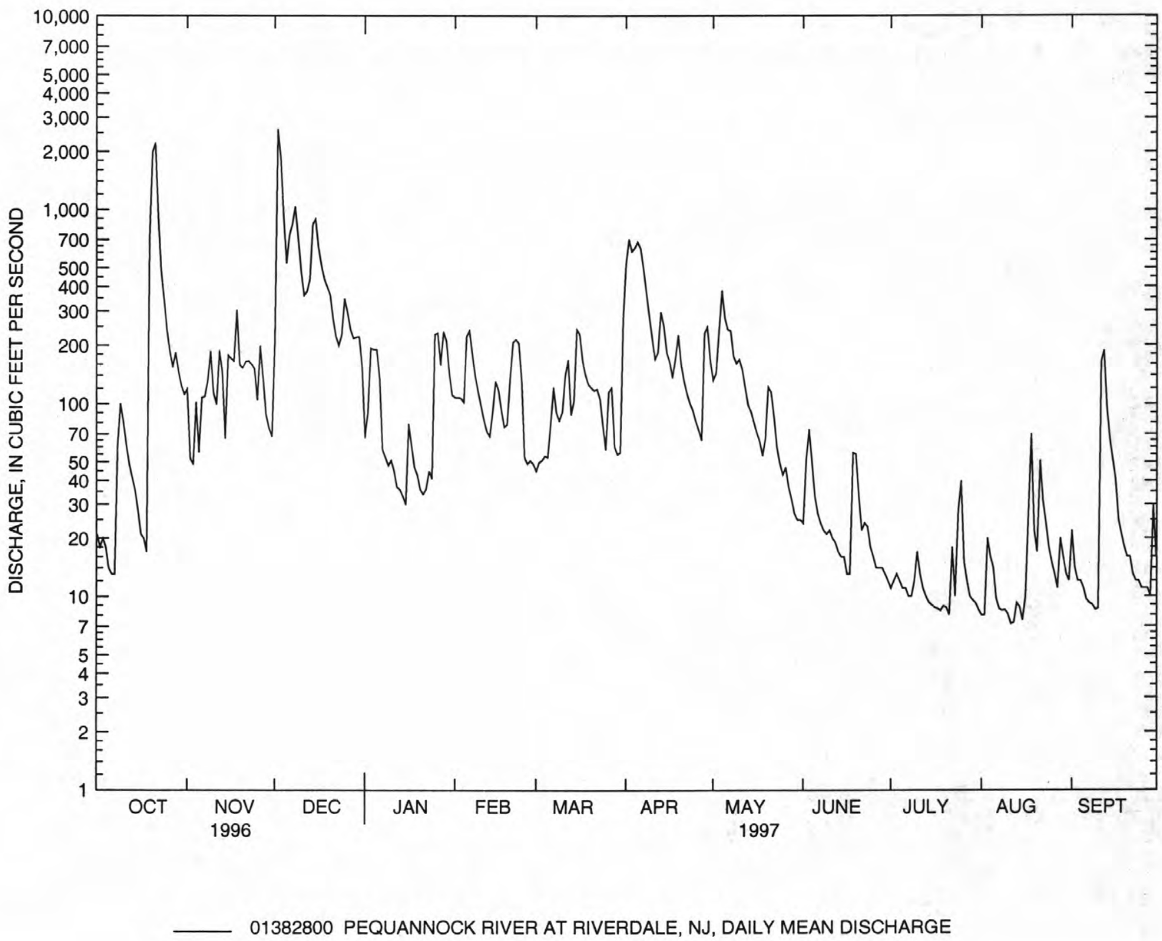
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	119	219	67	108	45	523	132	24	11	8.0	22
2	18	52	2610	91	108	50	702	143	51	12	8.0	14
3	20	49	1850	193	107	51	608	239	74	13	20	12
4	18	102	910	190	102	54	631	383	50	12	16	12
5	14	56	529	190	222	53	680	276	33	11	14	11
6	13	108	738	135	237	79	628	240	27	11	9.7	9.6
7	13	109	835	58	179	122	492	236	24	10	8.6	9.2
8	61	131	1040	53	139	90	372	175	22	10	8.4	9.0
9	100	186	702	48	116	82	282	161	21	12	8.5	8.5
10	81	114	478	51	97	91	216	169	22	17	8.1	8.6
11	62	99	362	45	82	140	170	150	20	13	7.2	164
12	49	188	377	37	72	169	183	120	19	11	7.3	187
13	42	145	437	36	68	88	296	98	17	10	9.2	95
14	36	66	840	33	91	103	253	91	16	9.3	8.8	66
15	28	178	895	30	131	241	183	80	16	9.0	7.5	52
16	21	171	641	79	118	228	164	71	13	8.7	9.9	41
17	20	166	518	61	93	167	136	64	13	8.6	27	25
18	17	304	438	47	76	141	171	54	56	8.4	70	21
19	723	159	399	43	78	126	225	66	55	8.9	22	18
20	1990	153	364	36	136	121	159	122	33	8.7	17	16
21	2210	165	274	34	207	117	131	115	22	8.0	51	16
22	910	166	222	36	214	119	113	84	24	18	31	13
23	482	160	199	45	205	106	101	59	23	10	24	12
24	336	152	225	41	131	77	92	49	18	28	18	12
25	239	105	348	227	53	58	81	43	16	40	15	11
26	186	198	296	231	49	115	73	47	14	15	13	11
27	154	135	240	159	51	121	65	37	14	12	11	11
28	184	88	217	234	49	60	230	32	14	10	20	10
29	147	75	220	211	---	55	248	27	13	9.5	16	30
30	124	68	221	144	---	56	167	25	12	9.2	13	16
31	112	---	154	111	---	271	---	25	---	8.5	12	---
TOTAL	8431	3967	17798	2996	3319	3396	8375	3613	776	382.8	519.2	942.9
MEAN	272	132	574	96.6	119	110	279	117	25.9	12.3	16.7	31.4
MAX	2210	304	2610	234	237	271	702	383	74	40	70	187
MIN	13	49	154	30	49	45	65	25	12	8.0	7.2	8.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	89.7	103	185	149	153	238	253	105	26.3	46.1	23.9	23.2
MAX	272	210	574	307	271	453	393	182	41.8	128	44.0	31.4
(WY)	1997	1996	1997	1996	1996	1994	1994	1996	1996	1996	1994	1997
MIN	13.8	32.5	37.5	73.1	82.0	110	55.2	37.5	13.6	12.3	16.0	10.6
(WY)	1995	1994	1996	1994	1995	1997	1995	1995	1995	1997	1995	1995

01382800 PEQUANNOCK RIVER AT RIVERDALE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1994 - 1997	
ANNUAL TOTAL	75849.3		54515.9			
ANNUAL MEAN	207		149		116	
HIGHEST ANNUAL MEAN					150	1996
LOWEST ANNUAL MEAN					50.2	1995
HIGHEST DAILY MEAN	2610	Dec 2	2610	Dec 2	2610	Dec 2 1996
LOWEST DAILY MEAN	9.0	Sep 3	7.2	Aug 11	5.0	Sep 8 1995
ANNUAL SEVEN-DAY MINIMUM	9.5	Aug 30	8.1	Aug 9	5.6	Sep 3 1995
INSTANTANEOUS PEAK FLOW			5140	Oct 20	5570	Jan 27 1996
INSTANTANEOUS PEAK STAGE			8.88	Oct 20	9.36	Jan 27 1996
INSTANTANEOUS LOW FLOW			5.9	Aug 12	3.6	Sep 8 1995
10 PERCENT EXCEEDS	531		299		271	
50 PERCENT EXCEEDS	120		68		47	
90 PERCENT EXCEEDS	16		11		11	



01383500 WANAQUE RIVER AT AWOSTING, NJ

LOCATION.--Lat 41°09'31", long 74°20'00", Passaic County, Hydrologic Unit 02030103, on right bank 700 ft downstream from dam at outlet of Greenwood Lake at Awosting.

DRAINAGE AREA.--27.1 mi^2.

PERIOD OF RECORD.--May 1919 to current year. Prior to October 1940, published as "at Greenwood Lake".

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922(M), 1928(M), 1936. WDR NJ-79-1: 1933(M), 1936(M), 1945(M), 1948(P), 1951(P), 1952(P), 1953(M), 1955(P), 1956(M), 1957(M), 1958(M), 1960(P), 1961(M), 1968(P), 1969(P). WDR NJ-80-1: 1960(P).

GAGE.--Water-stage recorder. Concrete control since Oct. 31, 1938. Datum of gage is 601.32 ft above sea level (levels from New Jersey Geological Survey bench mark). Prior to Apr. 1, 1926, nonrecording gage and Apr. 1, 1926, to Oct. 31, 1938, water-stage recorder at site 100 ft upstream at same datum.

REMARKS.--Records good. Flow completely regulated by Greenwood Lake (see Passaic River basin, reservoirs in). Water diverted into basin above gage from Upper Greenwood Lake (Hudson River basin) by North Jersey District Water Supply Commission since 1968. Several measurements of water temperature were made during the year.

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	2030	*402	*3.57	Dec. 14	2245	275	3.28
Dec. 3	1615	231	3.16	Apr. 1	1445	324	3.40
Dec. 8	0715	303	3.35	Sept. 12	1200	307	3.36

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	75	6.1	66	65	41	306	61	17	5.8	5.5	13
2	36	75	98	59	62	46	284	67	21	5.8	5.5	12
3	37	75	218	56	60	47	266	73	28	5.8	5.5	13
4	28	74	223	55	57	50	277	114	28	5.4	5.5	9.4
5	25	73	189	54	76	48	268	105	23	5.7	5.5	6.5
6	24	73	219	52	87	60	236	100	20	5.5	5.4	5.8
7	24	73	237	48	83	59	201	95	19	5.6	5.5	5.6
8	32	73	294	47	77	54	161	77	17	5.7	5.5	5.2
9	70	73	264	37	69	49	128	72	15	5.9	5.4	5.0
10	80	74	208	37	63	54	97	72	12	6.0	5.1	5.0
11	77	75	177	36	57	57	78	63	8.3	6.0	4.8	47
12	65	73	178	33	52	54	72	52	6.8	5.8	4.8	283
13	59	114	189	31	49	49	82	50	6.3	5.8	4.9	240
14	56	154	238	29	53	54	76	42	5.9	5.8	4.8	168
15	97	152	264	27	59	77	62	38	5.8	5.7	4.8	120
16	135	150	232	36	57	74	54	36	5.8	5.0	4.9	90
17	115	149	202	41	54	66	52	30	5.8	4.8	5.0	67
18	92	147	176	37	49	66	72	27	5.8	5.3	5.1	55
19	93	148	162	33	48	61	73	28	6.0	5.7	5.0	42
20	333	147	139	30	50	59	65	39	6.1	5.8	5.0	36
21	390	147	119	29	48	56	60	34	6.1	5.8	5.2	28
22	322	99	104	27	51	58	57	31	6.7	5.8	5.3	19
23	247	11	91	30	50	52	54	24	6.3	5.8	5.7	16
24	194	11	89	29	47	45	52	20	6.1	5.7	6.6	14
25	155	8.8	110	66	45	40	47	23	6.0	5.6	6.9	12
26	128	5.3	100	77	41	53	44	31	6.6	5.5	6.5	13
27	108	6.1	93	70	41	52	38	26	7.1	5.5	6.2	12
28	100	6.1	83	82	44	49	63	21	6.3	5.5	7.3	11
29	89	5.9	79	85	---	49	77	18	6.1	5.5	10	21
30	81	5.8	81	76	---	49	66	16	5.8	5.5	12	21
31	76	---	77	68	---	128	---	16	---	5.5	11	---
TOTAL	3408	2353.0	4939.1	1483	1594	1756	3468	1501	325.7	174.6	186.2	1395.5
MEAN	110	78.4	159	47.8	56.9	56.6	116	48.4	10.9	5.63	6.01	46.5
MAX	390	154	294	85	87	128	306	114	28	6.0	12	283
MIN	24	5.3	6.1	27	41	40	38	16	5.8	4.8	4.8	5.0

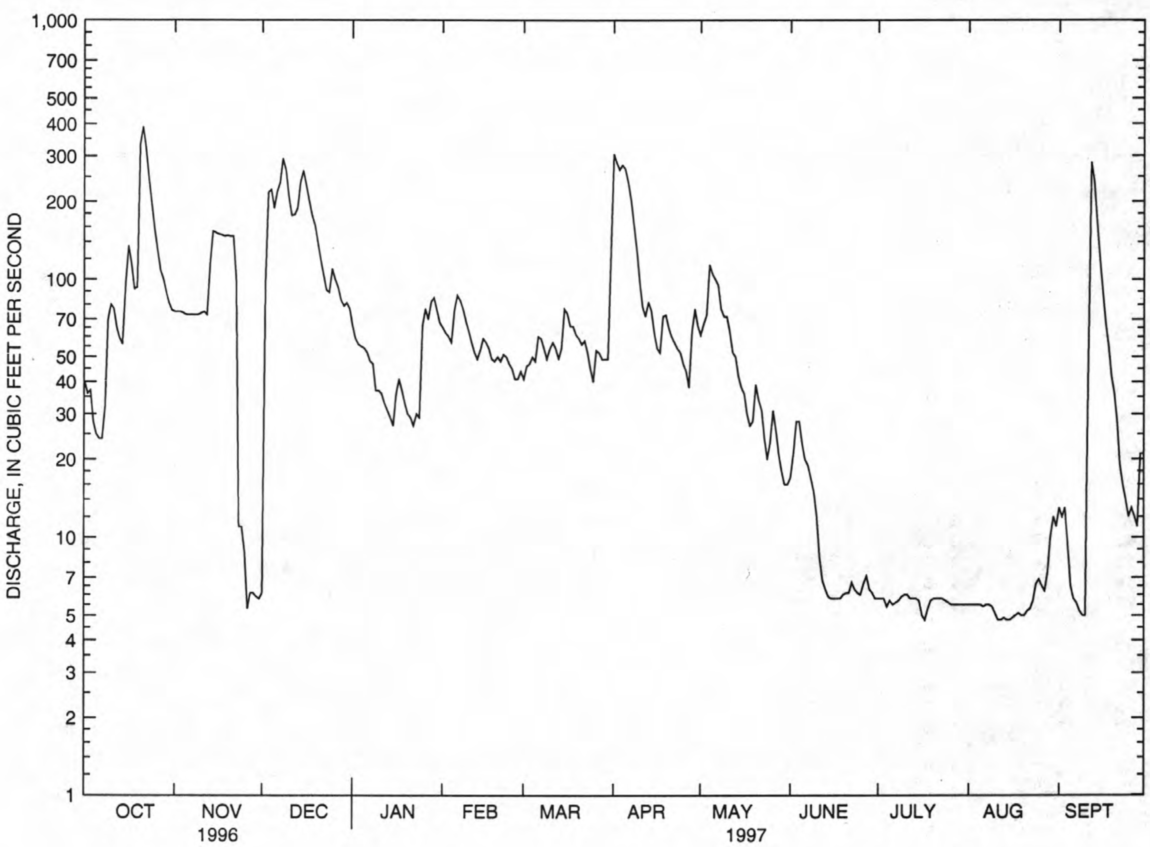
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	29.1	56.4	66.0	63.2	63.8	103	96.2	60.7	36.3	26.4	26.1	28.6
MAX	210	210	197	221	168	271	333	233	178	132	208	231
(WY)	1956	1984	1974	1979	1981	1980	1984	1989	1972	1938	1955	1927
MIN	.20	.18	1.88	3.00	3.04	43.5	24.7	13.4	4.37	2.76	.006	.057
(WY)	1932	1932	1985	1922	1922	1938	1985	1941	1957	1981	1929	1929

01383500 WANAQUE RIVER AT AWOSTING, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1919 - 1997	
ANNUAL TOTAL	33045.1		22584.1			
ANNUAL MEAN	90.3		61.9		54.5	
HIGHEST ANNUAL MEAN					105	1984
LOWEST ANNUAL MEAN					19.9	1965
HIGHEST DAILY MEAN	1150	Jan 28	390	Oct 21	2350	Apr 6 1984
LOWEST DAILY MEAN	4.3	Sep 3	4.8	Jul 17	.00	Oct 15 1928
ANNUAL SEVEN-DAY MINIMUM	4.5	Aug 29	4.9	Aug 11	.00	Jul 27 1929
INSTANTANEOUS PEAK FLOW			402	Oct 20	2800a	Apr 5 1984
INSTANTANEOUS PEAK STAGE			3.57	Oct 20	6.65	Apr 5 1984
INSTANTANEOUS LOW FLOW			4.3	Nov 25	.00	Many days
10 PERCENT EXCEEDS	190		151		126	
50 PERCENT EXCEEDS	70		48		33	
90 PERCENT EXCEEDS	11		5.5		4.8	

a From rating curve extended above 750 ft^3/s based on theoretical weir formula.



——— 01383500 WANAQUE RIVER AT AWOSTING, NJ, DAILY MEAN DISCHARGE

01384500 RINGWOOD CREEK NEAR WANAQUE, NJ

LOCATION.--Lat 41°07'36", long 74°15'52", Passaic County, Hydrologic Unit 02030103, on right bank 500 ft upstream from Wanaque Reservoir, 0.7 mi downstream from Ringwood Mill Pond dam, and 6.5 mi north of Wanaque.

DRAINAGE AREA.--19.1 mi^2.

PERIOD OF RECORD.--October 1934 to September 1978, October 1985 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR NJ-82-1: 1935-77(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 292.67 ft above sea level (levels by New Jersey Geological Survey). Prior to Sept. 30, 1978, at datum 10.0 ft higher.

REMARKS.--Records good except for estimated daily discharges, and those above 40 ft^3/s, which are fair. Records given herein include flow over spillway and through ports in dam when open or through waste gate in dam. No flow through ports or waste gates this year. Flow slightly regulated by Ringwood Mill Pond, Sterling, and Sterling Forest Lakes, and several smaller lakes above station. Several measurements of water temperature were made during the year.

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0415	495	12.14	Dec. 7	2230	266	11.63
Dec. 2	0700	*558	*12.26	Dec. 14	1145	243	11.57
Dec. 6	1245	236	11.55	Mar. 31	2215	270	11.64

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	32	89	35	36	25	227	38	9.9	2.7	1.4	4.0
2	14	29	451	34	36	28	167	40	13	2.5	1.1	3.6
3	14	26	247	37	35	28	154	69	16	3.0	1.2	3.0
4	11	24	166	35	32	28	143	102	14	3.0	1.1	2.4
5	10	22	129	34	71	28	128	70	11	2.6	1.2	2.1
6	9.9	21	190	33	57	40	111	65	9.6	2.3	1.3	1.8
7	9.6	21	183	29	46	35	96	58	8.9	3.1	1.2	1.6
8	20	27	229	26	41	32	80	51	8.0	3.2	1.1	1.4
9	64	67	162	24	38	29	67	51	7.2	3.6	1.1	1.3
10	44	53	125	25	34	35	59	48	6.9	6.8	1.2	1.4
11	34	44	108	23	32	39	53	42	6.7	5.7	1.1	24
12	27	39	118	20	31	32	54	37	6.0	4.3	.92	51
13	25	35	117	20	29	29	69	34	6.0	3.4	.93	20
14	23	32	191	19	35	42	52	32	5.7	3.0	e1.0	13
15	20	29	169	18	42	72	46	29	5.5	2.6	e.90	10
16	18	27	133	35	36	53	41	26	4.8	2.2	e1.0	7.9
17	17	25	116	e27	31	46	40	24	4.2	1.9	e2.0	6.5
18	16	25	101	e23	30	44	47	23	6.4	1.8	e15	5.5
19	119	26	97	e20	32	41	54	22	16	1.6	e8.0	4.6
20	382	24	85	e18	33	40	45	27	8.6	1.5	e4.5	4.1
21	208	22	69	e17	31	38	40	21	8.1	1.3	e15	3.3
22	144	20	61	17	33	36	38	19	7.0	2.0	e9.0	2.9
23	110	19	57	20	31	33	35	17	5.7	1.9	e5.0	2.7
24	93	18	63	18	28	30	34	15	4.6	2.7	e4.5	2.4
25	75	17	77	88	26	29	32	16	4.3	6.0	e4.5	2.3
26	63	94	58	40	25	41	30	20	3.8	5.4	e4.0	2.1
27	54	68	53	31	26	37	28	15	3.4	3.9	3.1	1.9
28	50	50	49	48	26	32	61	14	3.5	3.2	4.7	1.9
29	46	45	49	40	---	31	50	12	3.1	2.7	6.8	5.9
30	40	41	49	33	---	30	41	11	2.8	2.1	5.3	5.8
31	35	---	43	32	---	157	---	11	---	1.7	4.3	---
TOTAL	1810.5	1022	3834	919	983	1240	2122	1059	220.7	93.7	113.45	200.4
MEAN	58.4	34.1	124	29.6	35.1	40.0	70.7	34.2	7.36	3.02	3.66	6.68
MAX	382	94	451	88	71	157	227	102	16	6.8	15	51
MIN	9.6	17	43	17	25	25	28	11	2.8	1.3	.90	1.3
CFSM	3.06	1.78	6.48	1.55	1.84	2.09	3.70	1.79	.39	.16	.19	.35
IN.	3.53	1.99	7.47	1.79	1.91	2.42	4.13	2.06	.43	.18	.22	.39

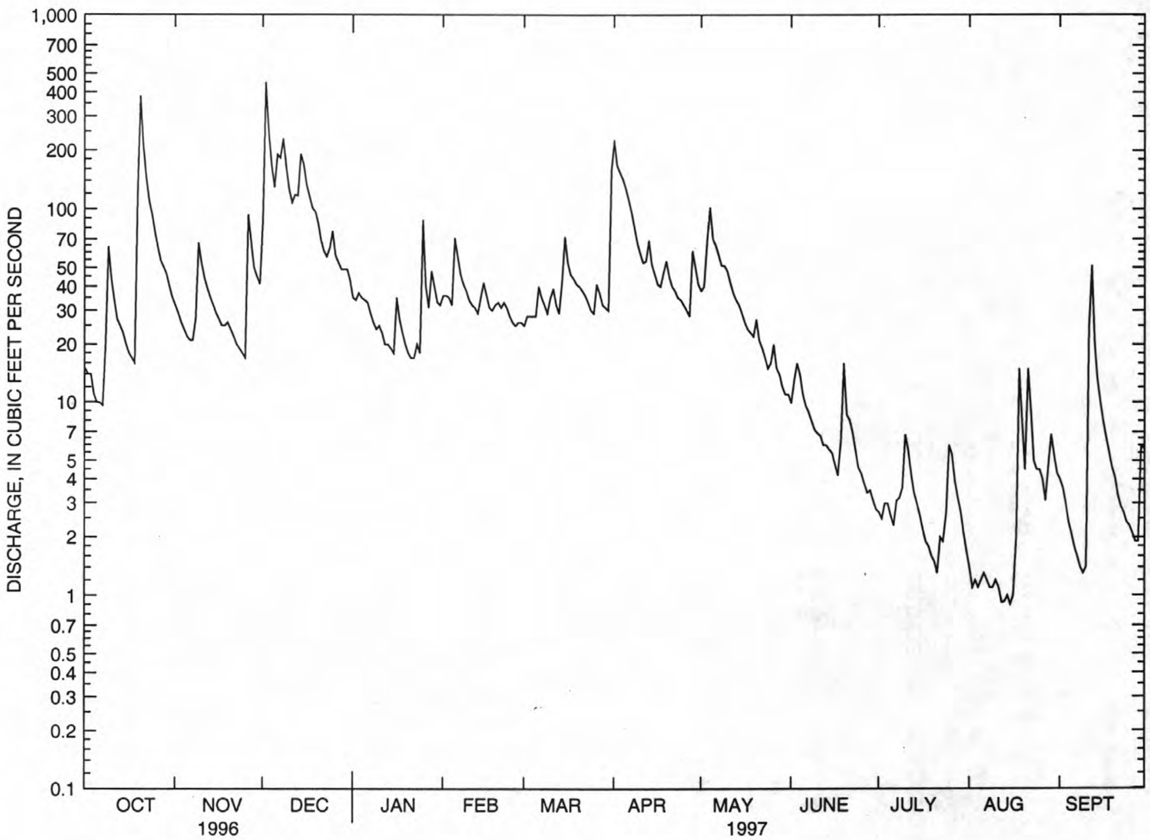
01384500 RINGWOOD CREEK NEAR WANAQUE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1997, BY WATER YEAR (WY)

MEAN	16.5	32.9	43.8	41.7	41.2	66.1	59.3	39.3	22.3	14.5	13.0	11.7
MAX	131	88.8	124	149	109	157	123	131	121	86.1	107	59.0
(WY)	1956	1973	1997	1979	1970	1936	1940	1989	1972	1945	1955	1960
MIN	1.07	2.27	4.06	12.5	14.0	28.5	18.3	10.9	3.78	1.31	.70	.28
(WY)	1945	1950	1940	1940	1940	1938	1966	1941	1957	1966	1966	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1935 - 1997	
ANNUAL TOTAL	20092.91		13617.75			
ANNUAL MEAN	54.9		37.3		33.4	
HIGHEST ANNUAL MEAN					54.4	1952
LOWEST ANNUAL MEAN					13.2	1965
HIGHEST DAILY MEAN	536	Jan 28	451	Dec 2	756	Aug 19 1955
LOWEST DAILY MEAN	.91	Sep 6	.90	Aug 15	.00	Sep 11 1963
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 31	1.0	Aug 10	.16	Sep 5 1944
INSTANTANEOUS PEAK FLOW			558	Dec 2	1570	Mar 30 1951
INSTANTANEOUS PEAK STAGE			12.26	Dec 2	13.74	Mar 30 1951
INSTANTANEOUS LOW FLOW			.80	Aug 12		
ANNUAL RUNOFF (CFSM)	2.87		1.95		1.75	
ANNUAL RUNOFF (INCHES)	39.13		26.52		23.79	
10 PERCENT EXCEEDS	120		86		77	
50 PERCENT EXCEEDS	36		26		21	
90 PERCENT EXCEEDS	8.9		2.3		2.2	

e Estimated.



01384500 RINGWOOD CREEK NEAR WANAQUE, NJ, DAILY MEAN DISCHARGE

01387000 WANAQUE RIVER AT WANAQUE, NJ

LOCATION.--Lat 41°02'39", long 74°17'36", Passaic County, Hydrologic Unit 02030103, on left bank 750 ft downstream from Raymond Dam in Wanaque, and 50 ft upstream from bridge on State Highway 511.

DRAINAGE AREA.--90.4 mi^2, considered as 94 mi^2 Oct. 1, 1928 to Sept. 30, 1934.

PERIOD OF RECORD.--December 1903 to December 1905 (gage heights only), September 1912 to April 1915, May 1919 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 210.00 ft above sea level (levels from New Jersey Geological Survey bench mark). Dec. 16, 1903, to Dec. 31, 1905, nonrecording gage on highway bridge at site 50 ft downstream at different datum. Sept. 15, 1912, to Apr. 1, 1922, nonrecording gage at site 200 ft downstream from present concrete control at different datum. Apr. 1, 1922 to Mar. 14, 1931, water-stage recorder at site 400 ft downstream from present concrete control at present datum.

REMARKS.--Records good. Flow regulated by Greenwood Lake 11 mi above station, since October 1987 by Monksville Reservoir just upstream from Wanaque Reservoir, and since 1928 by Wanaque Reservoir (see Passaic River basin, reservoirs in). North Jersey District Water Supply Commission diverts water for municipal supply from Wanaque Reservoir. Water is diverted to Wanaque Reservoir from Posts Brook at Wanaque and from Ramapo River at Pompton Lakes (see Passaic River basin, diversions). Water diverted into basin above gage from Upper Greenwood Lake (Hudson River basin) by North Jersey District Water Supply Commission since 1968. Several measurements of water temperature, other than those published, were made during the year. National Weather Service rain-gage and USGS satellite gage-height telemeters at station.

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

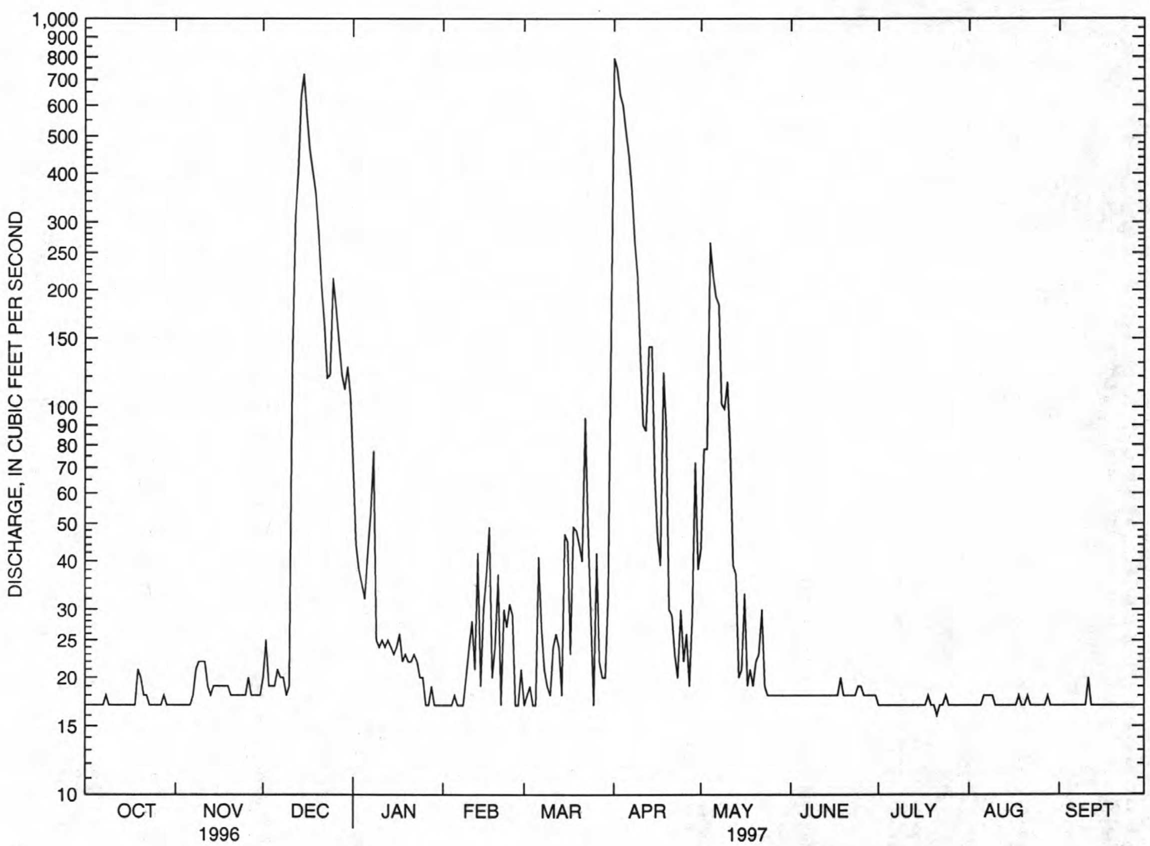
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	20	70	17	17	794	43	18	17	17	17
2	17	17	25	44	17	18	747	78	18	17	17	17
3	17	17	19	38	17	19	640	78	18	17	17	17
4	17	17	19	35	17	17	600	266	18	17	17	17
5	17	17	19	32	18	17	514	218	18	17	17	17
6	17	17	21	42	17	41	444	192	18	17	18	17
7	17	18	20	53	17	27	363	184	18	17	18	17
8	18	21	20	77	17	21	268	102	18	17	18	17
9	17	22	18	25	20	19	217	99	18	17	18	17
10	17	22	19	24	24	18	136	116	18	17	17	17
11	17	22	140	25	28	24	90	80	18	17	17	20
12	17	19	308	24	21	26	87	39	18	17	17	17
13	17	18	403	25	42	24	143	37	18	17	17	17
14	17	19	631	24	19	18	143	20	18	17	17	17
15	17	19	723	23	30	47	67	21	18	17	17	17
16	17	19	564	24	37	45	46	33	18	17	17	17
17	17	19	459	26	49	23	39	19	18	17	17	17
18	17	19	403	22	20	49	123	21	20	18	18	17
19	21	19	357	23	24	48	87	19	18	17	17	17
20	20	18	281	22	37	44	30	22	18	17	17	17
21	18	18	203	22	17	40	29	23	18	16	18	17
22	18	18	162	23	30	94	23	30	18	17	17	17
23	17	18	119	22	27	49	20	19	18	17	17	17
24	17	18	121	20	31	29	30	18	19	18	17	17
25	17	18	215	20	29	17	22	18	19	17	17	17
26	17	20	180	17	17	42	26	18	18	17	17	17
27	17	18	146	17	17	22	19	18	18	17	17	17
28	18	18	121	19	21	20	29	18	18	17	18	17
29	17	18	111	17	---	20	72	18	18	17	17	17
30	17	18	127	17	---	33	38	18	18	17	17	17
31	17	---	106	17	---	184	---	18	---	17	17	---
TOTAL	538	558	6080	889	677	1112	5886	1903	544	528	534	513
MEAN	17.4	18.6	196	28.7	24.2	35.9	196	61.4	18.1	17.0	17.2	17.1
MAX	21	22	723	77	49	184	794	266	20	18	18	20
MIN	17	17	18	17	17	17	19	18	18	16	17	17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	36.4	47.4	64.7	69.9	77.4	161	184	99.7	58.7	39.8	28.5	34.9
MAX	258	435	434	453	471	758	806	545	416	247	258	477
(WY)	1956	1928	1921	1915	1915	1920	1984	1989	1972	1938	1927	1927
MIN	1.82	1.70	1.48	.76	2.05	1.91	1.54	1.72	2.17	1.73	1.53	1.51
(WY)	1966	1966	1950	1950	1966	1966	1966	1966	1966	1965	1965	1965

01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1912 - 1997	
ANNUAL TOTAL	27268.7		19762			
ANNUAL MEAN	74.5		54.1		73.7	
HIGHEST ANNUAL MEAN					231	1920
LOWEST ANNUAL MEAN					1.93	1966
HIGHEST DAILY MEAN	723	Dec 15	794	Apr 1	5470	Apr 6 1984
LOWEST DAILY MEAN	7.2	Jan 13	16	Jul 21	.06	Oct 11 1984
ANNUAL SEVEN-DAY MINIMUM	7.4	Jan 1	17	Oct 1	.50	Dec 14 1949
INSTANTANEOUS PEAK FLOW			908	Apr 1	10500	Apr 5 1984
INSTANTANEOUS PEAK STAGE			4.84	Apr 1	10.82	Apr 5 1984
INSTANTANEOUS LOW FLOW			11	Feb 27		
10 PERCENT EXCEEDS	210		120		206	
50 PERCENT EXCEEDS	18		18		19	
90 PERCENT EXCEEDS	17		17		16	



01387000 WANAQUE RIVER AT WANAQUE, NJ, DAILY MEAN DISCHARGE

01387420 RAMAPO RIVER AT SUFFERN, NY

LOCATION.--Lat 41°07'06", long 74°09'38", Rockland County, Hydrologic Unit 02030103, on left bank, 145 ft downstream from highway bridge on New York State Thruway at Suffern, and 1.1 mi upstream from Mahwah River.

DRAINAGE AREA.--93.0 mi^2.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 264.44 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow affected by diversion from United Water New York well field upstream from station and by occasional regulation by Lake Sebago.

AVERAGE DISCHARGE.--18 years, 174 ft^3/s, unadjusted.

COOPERATION.--Figures of pumpage from well field provided by United Water New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft^3/s, Apr. 5, 1984, gage height, 15.38 ft, from rating curve extended above 5,400 ft^3/s; minimum discharge, 1.7 ft^3/s, Sept. 7, 1995, gage height, 1.04 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 6,600 ft^3/s, Mar. 12, 1936, by computation of flow over dam at site 0.65 mi upstream, drainage area, 90.6 mi^2.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	1045	*3,030	*9.19	Dec. 14	2030	1,130	5.68
Dec. 2	1645	2,470	8.31	Apr. 1	0530	1,150	5.72
Dec. 8	0430	1,180	5.78				

Minimum discharge, 9.5 ft^3/s, July 8, Aug. 6, 8, gage height, 1.40 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	159	408	179	180	118	1090	195	42	13	12	22
2	84	140	2190	161	189	127	867	187	55	13	11	27
3	82	125	1630	164	175	140	834	285	80	13	12	47
4	71	113	936	183	165	141	836	507	76	13	11	51
5	58	104	705	175	318	139	746	375	55	12	11	40
6	52	99	885	163	346	202	576	315	43	11	11	23
7	48	96	926	143	262	188	461	298	36	14	11	17
8	78	128	1130	124	225	163	370	246	32	11	11	17
9	519	313	841	112	201	153	319	238	31	14	12	36
10	437	313	612	114	176	169	270	236	29	33	11	42
11	323	243	500	111	155	193	245	213	25	23	11	87
12	238	207	576	96	142	168	234	185	22	13	11	170
13	202	175	670	92	132	144	321	158	21	12	12	119
14	172	156	973	85	149	182	271	144	25	13	12	88
15	137	140	1010	81	198	335	222	130	21	11	12	43
16	115	127	735	143	189	286	201	115	17	11	16	30
17	102	118	601	173	156	249	185	106	15	11	64	25
18	91	117	512	e120	140	238	238	105	34	12	123	22
19	423	119	465	e95	152	221	372	104	81	11	101	19
20	2750	116	433	83	161	209	326	132	61	12	47	15
21	1630	108	346	81	152	206	276	109	38	12	58	13
22	875	100	300	80	174	195	241	88	28	17	84	13
23	588	92	278	95	172	177	220	74	22	11	54	14
24	466	88	284	99	148	146	205	65	18	16	38	14
25	374	84	399	408	129	134	181	68	15	26	29	13
26	311	421	317	316	118	189	161	107	14	19	24	14
27	268	627	276	219	121	204	146	86	17	13	21	15
28	248	367	251	281	126	172	274	67	18	12	35	14
29	240	289	244	286	---	155	288	55	13	16	54	21
30	212	255	256	220	---	151	231	54	12	12	34	26
31	189	---	225	183	---	527	---	49	---	13	25	---
TOTAL	11485	5539	19914	4865	4951	6021	11207	5096	996	443	978	1097
MEAN	370	185	642	157	177	194	374	164	33.2	14.3	31.5	36.6
MAX	2750	627	2190	408	346	527	1090	507	81	33	123	170
MIN	48	84	225	80	118	118	146	49	12	11	11	13
‡	11	11	11	11	11	10	11	12	12	11	10	10

01387420 RAMAPO RIVER AT SUFFERN, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

MEAN	109	188	229	195	209	315	357	217	103	62.0	50.7	58.1
MAX	389	496	693	654	475	816	862	777	269	308	305	219
(WY)	1990	1996	1984	1996	1981	1983	1984	1989	1982	1996	1990	1987
MIN	11.0	17.1	29.6	6.84	49.7	128	77.1	79.4	19.2	8.03	7.40	8.17
(WY)	1985	1985	1981	1981	1980	1981	1985	1995	1995	1993	1993	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1979 - 1997	
ANNUAL TOTAL	112738		72592			
ANNUAL MEAN	308		199		174	
ANNUAL MEAN (‡)	12		11			
HIGHEST ANNUAL MEAN					295	1984
LOWEST ANNUAL MEAN					78.2	1985
HIGHEST DAILY MEAN	3950	Jan 20	2750	Oct 20	7110	Apr 5 1984
LOWEST DAILY MEAN	11	Sep 1	11	Jul 6	2.3	Sep 7 1995
ANNUAL SEVEN-DAY MINIMUM	12	Aug 31	11	Aug 2	3.1	Sep 7 1995
10 PERCENT EXCEEDS	645		427		372	
50 PERCENT EXCEEDS	200		128		90	
90 PERCENT EXCEEDS	48		13		13	

e Estimated.
‡ Diversion, in cubic feet per second, by pumpage from well field upstream of station.

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft downstream from State Highway 17, 0.6 mi downstream from Mahwah River, and 1.0 mi west of Mahwah. Water-quality samples collected at bridge, 350 ft upstream from gage, at high flows.

DRAINAGE AREA.--120 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1902 to December 1906, September 1922 to current year. October 1902 to February 1905 monthly discharge only, published in WSP 1302. Figures of daily discharge Feb. 10, 1903, to Dec. 31, 1904, published in WSP 97, 125, are unreliable and should not be used. Gage-height records for 1903-14 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 781: 1904(M). WSP 1031: 1938, 1940. WSP 1552: 1923(M), 1924, 1925-26(M), 1927-28, 1933, 1937. WRD-NJ 1971: 1968(M). WDR NJ-82-1: Drainage area. WDR-NJ-87-1: 1986.

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft above sea level. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Records fair except for estimated daily discharges, which are fair. Flow affected by diversion from United Water New York well field upstream from station (see station 01387420). Occasional regulation from lakes and ponds upstream from the station. Several measurements of water temperature, other than those published, were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	1115	*3,300	*8.59	Dec. 8	0515	1,450	6.57
Dec. 2	0730	2,810	8.15	Apr. 1	0245	1,420	6.52

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	193	510	234	225	148	1330	232	61	23	18	43
2	96	175	2470	222	230	160	999	218	81	23	18	35
3	96	159	1830	225	216	172	927	366	107	26	17	51
4	76	145	1060	235	207	176	907	599	96	24	18	54
5	62	138	785	227	441	173	796	442	72	21	19	47
6	55	130	1100	218	431	242	627	379	59	20	18	31
7	52	130	1130	193	315	219	517	353	51	40	17	25
8	123	173	1370	168	267	194	427	288	47	25	17	24
9	591	394	995	153	237	182	369	284	45	28	17	40
10	484	360	703	160	214	207	313	275	43	52	16	45
11	348	271	586	152	195	227	283	242	38	34	16	162
12	248	226	655	130	181	201	285	215	35	23	15	175
13	205	199	746	122	169	175	404	190	41	21	20	126
14	182	182	1190	116	203	253	321	177	48	21	23	92
15	153	168	1180	110	253	435	259	162	34	19	17	50
16	131	154	837	247	235	345	233	143	29	19	29	35
17	119	145	678	238	199	290	222	133	27	18	108	30
18	106	143	587	e145	179	274	279	130	104	20	230	27
19	559	145	543	e120	191	250	424	145	252	19	119	24
20	3000	140	509	112	201	239	373	182	98	18	60	22
21	1840	134	416	108	190	233	311	139	59	19	99	20
22	1010	124	363	108	212	224	268	114	63	44	103	20
23	673	116	336	133	207	206	243	97	40	20	64	20
24	536	110	358	133	182	177	226	91	32	51	47	20
25	429	105	487	622	161	164	208	107	29	76	38	20
26	354	582	384	386	150	230	190	143	28	31	32	21
27	303	726	332	255	154	231	173	109	35	22	29	22
28	288	413	304	398	157	199	364	87	31	22	69	20
29	276	319	303	360	---	185	345	73	24	25	69	54
30	239	278	314	258	---	180	262	72	23	19	44	37
31	217	---	274	222	---	730	---	68	---	19	34	---
TOTAL	12967	6677	23335	6510	6202	7321	12885	6255	1732	842	1440	1392
MEAN	418	223	753	210	222	236	430	202	57.7	27.2	46.5	46.4
MAX	3000	726	2470	622	441	730	1330	599	252	76	230	175
MIN	52	105	274	108	150	148	173	68	23	18	15	20
CFSM	3.49	1.85	6.27	1.75	1.85	1.97	3.58	1.68	.48	.23	.39	.39
IN.	4.02	2.07	7.23	2.02	1.92	2.27	3.99	1.94	.54	.26	.45	.43

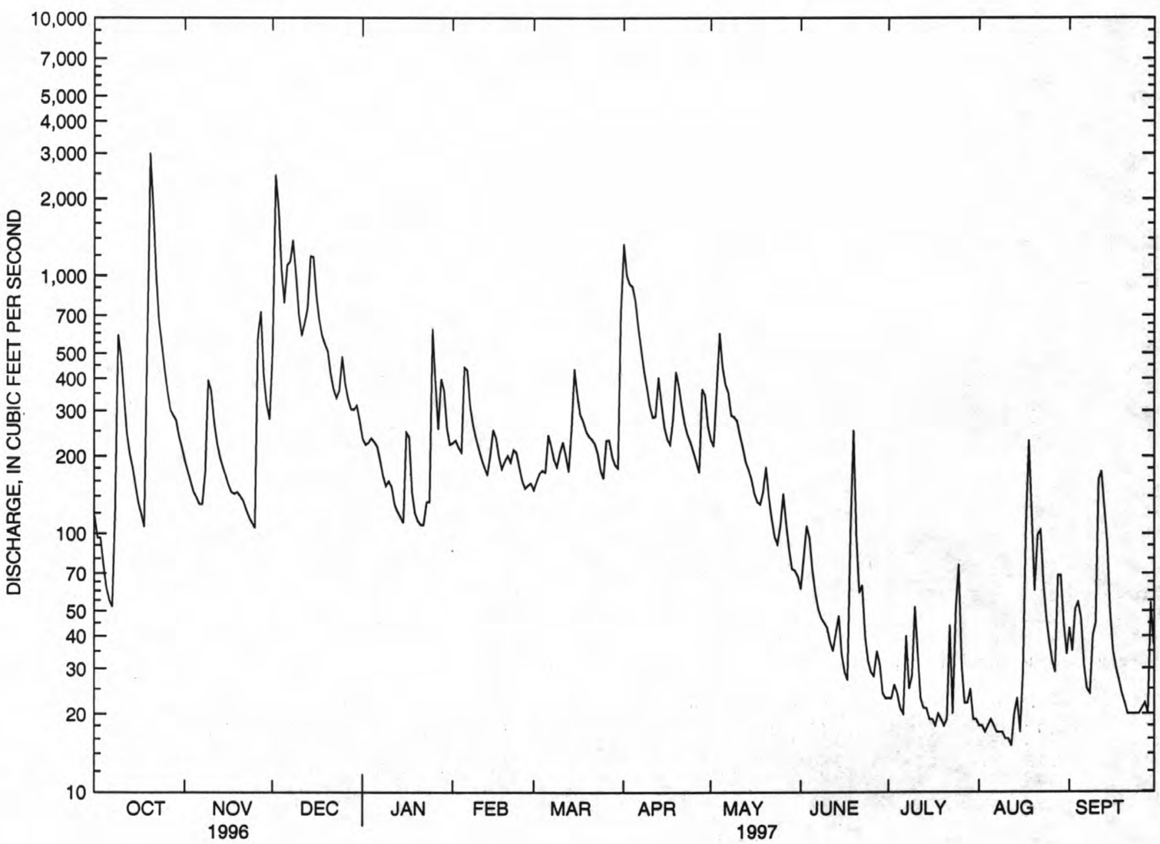
01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1997, BY WATER YEAR (WY)

MEAN	146	227	278	267	279	442	405	257	151	99.8	100	107
MAX	954	736	873	877	701	1151	1055	994	735	602	755	478
(WY)	1904	1978	1984	1979	1970	1936	1984	1989	1972	1945	1955	1927
MIN	13.8	24.4	43.4	16.5	70.8	144	88.4	79.5	30.7	15.8	11.3	11.1
(WY)	1942	1965	1981	1981	1980	1985	1985	1905	1995	1993	1993	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1903 - 1997	
ANNUAL TOTAL	132813		87558			
ANNUAL MEAN	363		240		230	
HIGHEST ANNUAL MEAN					461	1903
LOWEST ANNUAL MEAN					99.5	1985
HIGHEST DAILY MEAN	3470	Jan 20	3000	Oct 20	8920	Oct 9 1903
LOWEST DAILY MEAN	22	Sep 3	15	Aug 12	1.2	Aug 12 1993
ANNUAL SEVEN-DAY MINIMUM	23	Aug 31	17	Aug 6	3.7	Sep 7 1995
INSTANTANEOUS PEAK FLOW			3300	Oct 20	15500a	Apr 5 1984
INSTANTANEOUS PEAK STAGE			8.59	Oct 20	13.35	Apr 5 1984
INSTANTANEOUS LOW FLOW			15	Aug 12	.20	Aug 11 1993
ANNUAL RUNOFF (CFSM)	3.02		2.00		1.91	
ANNUAL RUNOFF (INCHES)	41.17		27.14		25.99	
10 PERCENT EXCEEDS	755		525		510	
50 PERCENT EXCEEDS	256		164		138	
90 PERCENT EXCEEDS	56		22		28	

a From rating curve extended above 6,500 ft^3/s.
e Estimated.



01387500 RAMAPO RIVER NEAR MAHWAH, NJ, DAILY MEAN DISCHARGE

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: February 1964 to June 1965.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, EC BROTH (MPN) (31615)
NOV 1996										
06...	0957	131	368	7.8	8.5	764	11.4	97	E1.0	490
JAN 1997										
21...	0935	106	477	7.8	0.0	763	13.8	94	E1.2	70
MAR										
19...	1015	252	362	7.5	4.0	759	13.3	102	E1.4	17
MAY										
20...	1030	183	349	7.8	15.5	748	9.0	92	2.7	5400
JUL										
29...	0915	27	642	7.8	23.0	753	6.2	73	E1.7	460

DATE	ENTERO- COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
NOV 1996										
06...	60	88	24	6.9	34	1.6	63	15	63	<.1
JAN 1997										
21...	20	100	29	7.9	47	1.3	67	17	89	.1
MAR										
19...	10	69	19	5.2	38	.9	41	13	68	.1
MAY										
20...	800	94	26	6.9	32	1.3	56	13	58	.1
JUL										
29...	600	150	42	11	63	3.0	92	22	110	.1

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV 1996									
06...	9.0	198	197	--	.006	1.3	.05	<.03	.2
JAN 1997									
21...	8.4	256	247	<1	.011	1.5	<.03	<.03	.2
MAR									
19...	5.4	193	177	3	.005	.64	.04	.04	.2
MAY									
20...	6.1	188	183	11	.025	1.2	.07	.05	.5
JUL									
29...	7.2	359	328	7	.043	2.9	.17	.17	.7

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 1996									
06...	.17	1.5	1.5	.10	.09	2.6	.2	2	.67
JAN 1997									
21...	.24	1.7	1.7	.05	.05	1.9	.3	--	--
MAR									
19...	.14	.83	.78	.06	.06	2.1	.3	--	--
MAY									
20...	.27	1.7	1.5	.13	.09	3.0	.5	--	--
JUL									
29...	.29	3.6	3.2	--	.30	3.1	.6	--	--

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
20...	1030	20	<1	<10	30	<1	1.2	3

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
20...	390	2	90	<.1	1	<1	10

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ

LOCATION.--Lat 40°59'33", long 74°16'44", Passaic County, Hydrologic Unit 02030103, on right end of dam at pumping station in Pompton Lakes, 700 ft upstream from bridge on Paterson-Hamburg Turnpike, and 2.0 mi upstream from mouth. Water samples collected upstream from dam at water-supply intake, on right bank. Water-quality monitor is 450 ft downstream from dam.

DRAINAGE AREA.--160 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1552: 1922(M), 1924-25, 1929-31(M), 1934-35(M). WRD-NJ 1970: 1968-69. WRD-NJ 1988: 1984(M).

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 190.96 ft above sea level. Prior to October 1, 1981, at datum 10.00 ft higher.

REMARKS.--Records good. Diversion by North Jersey District Water Supply Commission to Wanaque Reservoir since December 1953 (see Passaic River basin, diversions) and to Oradell Reservoir by United Water New Jersey since February 1985 (see Hackensack River basin, diversions) for municipal supply. Slight regulation by Pompton Lake, capacity, 300,000,000 gal. Several measurements of water temperature, other than those published, were made during the year. National Weather Service telephone telemeter at station. Satellite telemeter at auxiliary station 700 ft below station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	1545	*3,650	*12.14	Dec. 14	1815	1,620	---
Dec. 2	1630	3,410	12.05	Apr. 1	0815	1,960	11.46
Dec. 8	0645	2,080	---				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	254	697	346	332	228	1900	358	89	31	24	71
2	141	234	3020	305	345	233	1540	321	102	27	22	64
3	130	213	2820	293	322	250	1310	466	150	31	24	59
4	115	187	1750	320	311	263	1240	860	137	31	24	67
5	104	174	1440	314	557	260	1140	707	112	30	26	69
6	127	166	1630	306	687	328	953	584	92	27	23	58
7	94	164	1730	250	499	330	778	534	82	26	21	48
8	107	182	2030	213	414	286	631	445	74	31	20	41
9	594	436	1660	189	367	266	534	407	66	34	18	43
10	681	512	1360	189	340	286	465	404	61	37	17	57
11	514	386	1150	232	318	337	414	356	55	38	16	237
12	369	305	1130	208	291	307	400	301	50	38	17	242
13	293	263	1230	190	263	269	575	271	47	32	18	187
14	260	237	1620	184	282	312	504	255	54	25	19	137
15	221	218	1750	170	381	699	404	232	51	23	20	110
16	189	203	1430	294	367	565	357	211	42	22	21	72
17	167	190	1250	378	313	453	335	193	38	22	86	59
18	150	183	1110	238	280	412	358	170	49	20	278	54
19	369	191	1010	189	279	378	502	189	311	20	197	48
20	3080	192	926	180	293	356	513	241	212	18	107	44
21	2630	185	716	173	289	348	441	204	115	16	150	37
22	1450	171	602	169	294	337	382	163	78	23	156	34
23	967	154	518	196	305	314	346	134	79	27	115	34
24	741	145	495	200	277	279	325	117	55	31	85	34
25	584	136	721	822	255	256	305	124	46	147	67	33
26	462	616	610	678	236	304	281	192	41	75	57	33
27	388	978	500	413	229	344	258	155	38	44	49	31
28	372	613	441	569	235	300	464	125	38	34	79	33
29	354	438	415	594	---	278	547	108	37	30	101	63
30	306	371	445	416	---	273	415	96	33	30	80	63
31	284	---	400	350	---	814	---	99	---	26	60	---
TOTAL	16422	8697	36606	9568	9361	10665	18617	9022	2434	1046	1997	2162
MEAN	530	290	1181	309	334	344	621	291	81.1	33.7	64.4	72.1
MAX	3080	978	3020	822	687	814	1900	860	311	147	278	242
MIN	94	136	400	169	229	228	258	96	33	16	16	31

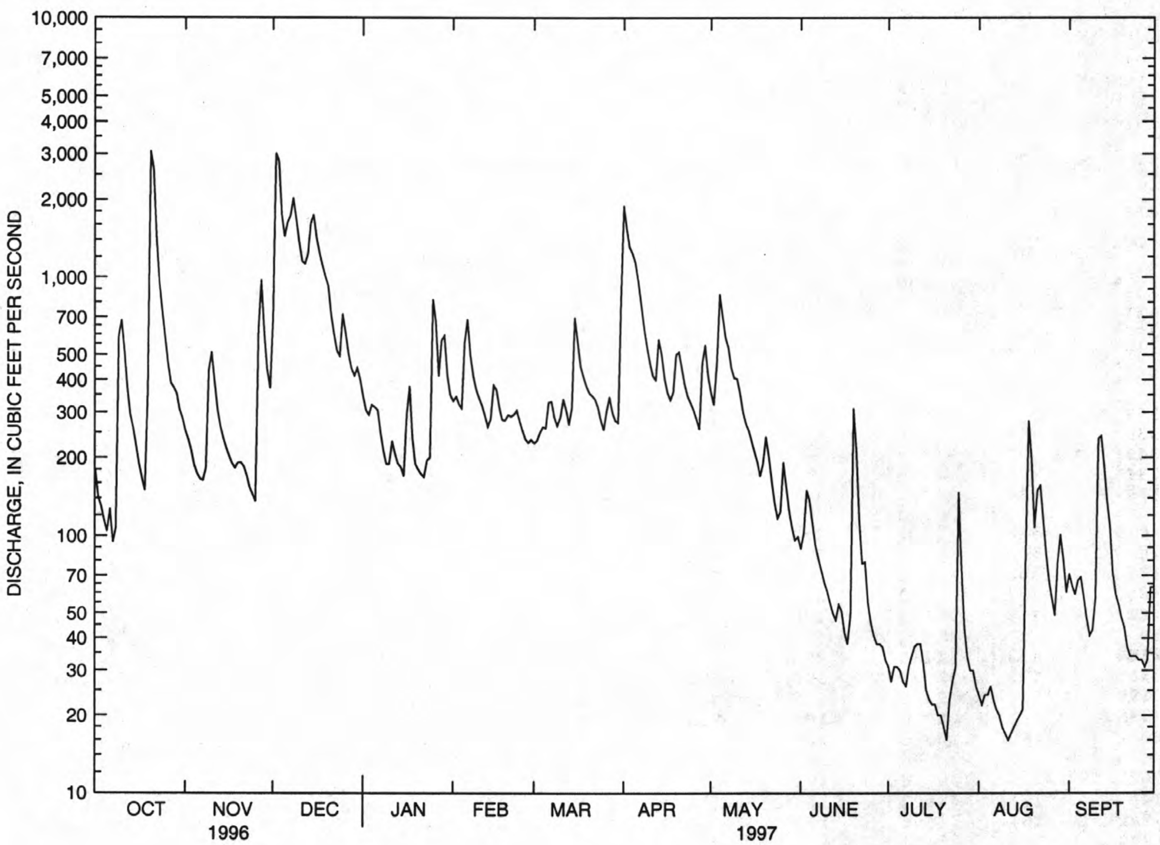
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	152	270	326	323	350	548	517	346	204	137	134	141
MAX	1154	954	1181	1035	838	1670	1465	1195	973	895	889	725
(WY)	1956	1933	1997	1979	1970	1936	1983	1989	1972	1945	1955	1927
MIN	13.6	22.2	12.8	27.5	83.0	67.8	24.9	72.0	39.9	5.89	6.17	10.8
(WY)	1981	1981	1981	1981	1969	1985	1985	1965	1965	1985	1985	1964

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	184844		126597			
ANNUAL MEAN	505		347		287	
HIGHEST ANNUAL MEAN					512	1984
LOWEST ANNUAL MEAN					73.1	1985
HIGHEST DAILY MEAN	4950	Jan 20	3080	Oct 20	10400	Mar 12 1936
LOWEST DAILY MEAN	34	Sep 2	16	Jul 21	.00	Oct 1 1922
ANNUAL SEVEN-DAY MINIMUM	35	Aug 31	18	Aug 8	.00	Dec 1 1980
INSTANTANEOUS PEAK FLOW			3650	Oct 20	15400	Apr 5 1984
INSTANTANEOUS PEAK STAGE			12.14	Oct 20	15.21a	Apr 5 1984
INSTANTANEOUS LOW FLOW			16	Many days	.00	Many days
10 PERCENT EXCEEDS	1120		718		643	
50 PERCENT EXCEEDS	340		236		163	
90 PERCENT EXCEEDS	86		31		36	

a From gage well, outside high-water marks at 15.33 ft.



—— 01388000 RAMAPO RIVER AT POMPTON LAKES, NJ, DAILY MEAN DISCHARGE

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923, 1962-67, 1982, 1987 to current year.
NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1923, 1962-67, 1982, 1987-96.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April, 1989 to current year.
WATER TEMPERATURE: April, 1989 to current year.
DISSOLVED OXYGEN: April, 1989 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1989, pumping system, data recorded hourly.

REMARKS.--Water-quality monitor is 450 ft downstream from dam. Interruptions in the daily record were due to the water level dropping below the intakes, July 6-8, 14-21, 31, Aug. 1, and pump malfunction May 21-23.

EXTREMES FOR PERIOD OF DAILY RECORD.--
FROM WATER-QUALITY MONITOR DOWNSTREAM FROM DAM.
SPECIFIC CONDUCTANCE: maximum, 678 µS/cm, Jan. 19, 1996; minimum, 105 µS/cm, Oct. 21, 1989.
WATER TEMPERATURE: maximum recorded, 31.0 °C, July 8-11, 1993, Aug. 3, 1995; minimum, 0.0 °C, on several days during winters.
DISSOLVED OXYGEN: maximum, 14.8 mg/L, Jan. 20, 21, 1996; minimum, 4.7 mg/L, Aug. 9, 1991.

EXTREMES FOR CURRENT YEAR.--
FROM WATER-QUALITY MONITOR DOWNSTREAM FROM DAM.
SPECIFIC CONDUCTANCE: maximum, 526 µS/cm, Jan. 21, 22; minimum, 114 µS/cm, Dec. 3.
WATER TEMPERATURE: maximum recorded, 29.0 °C, Aug. 17, but may have been higher during period of low stream stage July 14-21; minimum, 1.0 °C, on several days during January.
DISSOLVED OXYGEN: maximum, 13.4 mg/L, Jan. 14, 27, 30; minimum recorded, 5.6 mg/L, July 29, Aug. 7, but may have been lower during period of low stream stage July 14-21.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	353	343	347	289	283	286	228	214	220	296	292	294
2	357	352	356	298	289	293	231	128	181	306	296	301
3	360	357	359	305	298	302	128	114	118	318	306	313
4	359	356	358	313	305	309	142	121	132	334	318	327
5	360	356	358	324	313	318	159	142	150	353	332	341
6	359	357	358	332	324	327	172	159	166	358	353	356
7	359	357	358	338	330	332	192	172	182	356	353	355
8	362	357	360	351	338	344	236	190	211	356	355	356
9	384	357	372	355	350	352	237	232	234	355	354	354
10	375	291	329	353	319	341	238	235	237	367	354	359
11	291	253	266	319	290	304	238	236	236	363	360	361
12	256	247	253	293	281	287	249	237	241	378	362	370
13	264	252	256	285	276	280	251	248	249	395	378	388
14	265	258	260	276	273	275	248	217	235	420	393	410
15	269	262	265	279	274	277	217	199	204	436	419	430
16	275	268	271	285	279	282	206	203	205	459	436	447
17	283	274	276	291	285	287	212	206	208	488	457	467
18	289	280	285	297	289	292	222	212	217	517	488	508
19	299	284	288	306	295	299	236	222	229	521	515	518
20	301	131	199	312	305	307	243	236	241	521	518	519
21	142	124	130	321	312	316	251	243	246	526	521	524
22	167	142	154	329	320	324	260	251	254	526	520	524
23	186	167	177	331	328	329	269	260	265	520	506	514
24	206	186	194	338	331	333	276	268	272	506	487	497
25	215	204	210	343	338	340	289	275	279	490	431	459
26	226	215	222	344	326	339	289	285	287	431	394	409
27	238	226	232	326	236	273	286	282	284	394	378	386
28	253	238	246	236	208	219	282	281	281	388	372	377
29	266	253	259	211	207	209	285	282	283	480	385	438
30	274	265	269	214	208	212	289	285	288	495	479	486
31	284	274	278	---	---	---	292	288	290	495	467	485
MONTH	384	124	276	355	207	300	292	114	230	526	292	415

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	467	434	447	393	385	390	309	277	294	302	294	298
2	434	422	426	387	383	385	317	309	314	299	292	294
3	435	425	432	385	380	382	315	289	303	293	287	291
4	433	428	430	381	378	380	289	260	273	289	264	278
5	428	420	425	400	380	390	261	242	249	264	244	251
6	466	428	455	440	400	422	242	236	239	245	239	243
7	447	413	431	475	435	455	250	239	244	249	244	246
8	413	375	395	490	470	481	261	250	254	252	248	249
9	375	358	364	490	484	486	270	259	264	263	252	256
10	361	350	357	484	460	474	276	268	271	271	263	266
11	351	347	349	460	442	450	288	276	280	277	268	272
12	357	351	354	460	442	450	299	288	293	283	274	277
13	366	356	360	460	457	459	316	299	306	289	281	283
14	366	363	364	460	453	457	318	313	316	297	288	293
15	411	366	383	484	450	462	318	313	315	310	297	304
16	481	411	447	487	466	478	320	315	317	314	307	311
17	506	469	491	466	457	462	325	319	320	322	314	319
18	505	493	498	457	432	444	326	325	325	330	322	326
19	501	495	498	432	395	408	326	325	326	339	327	332
20	495	473	481	397	381	386	327	319	322	338	332	336
21	474	455	466	382	375	380	319	311	315	---	---	---
22	455	437	443	375	371	373	313	310	312	---	---	---
23	437	428	433	373	364	368	312	309	310	---	---	---
24	428	414	421	366	364	365	316	310	313	349	347	348
25	414	405	408	366	364	365	316	313	315	348	345	347
26	405	398	401	371	366	367	322	315	317	355	347	352
27	399	394	396	369	367	368	324	319	321	365	355	360
28	396	392	393	369	365	367	332	324	326	374	365	370
29	---	---	---	367	362	364	332	314	324	382	372	376
30	---	---	---	368	362	366	314	300	308	385	381	383
31	---	---	---	362	308	350	---	---	---	387	384	385
MONTH	506	347	420	490	308	411	332	236	300	387	239	309

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	389	385	386	424	422	423	---	---	---	424	404	412
2	391	388	389	426	424	425	472	452	459	444	402	417
3	398	389	394	430	426	428	471	444	456	435	429	430
4	407	398	403	434	429	432	447	440	444	433	430	431
5	412	405	407	437	434	435	448	440	444	434	431	432
6	423	412	416	---	---	---	447	444	447	439	434	436
7	423	418	420	---	---	---	448	444	446	441	438	440
8	423	420	421	---	---	---	456	446	452	438	429	433
9	426	422	424	445	438	442	459	452	456	435	429	433
10	431	422	428	448	443	445	458	453	456	438	434	436
11	434	429	431	449	443	447	459	453	457	449	432	440
12	437	432	434	445	438	443	459	452	455	464	449	458
13	443	437	441	442	436	440	458	453	456	453	435	442
14	451	442	447	---	---	---	458	454	456	440	418	429
15	455	451	453	---	---	---	457	454	455	423	409	417
16	457	453	454	---	---	---	458	451	457	414	404	410
17	459	455	457	---	---	---	451	446	448	408	404	405
18	463	459	461	---	---	---	457	438	447	408	399	403
19	476	461	469	---	---	---	475	457	468	407	399	402
20	480	457	472	---	---	---	479	472	476	415	404	409
21	465	427	444	---	---	---	477	465	472	411	409	410
22	438	430	434	465	459	460	470	453	464	412	410	411
23	431	411	421	461	459	460	456	441	450	411	410	410
24	418	412	414	462	459	461	444	427	437	410	407	409
25	417	413	414	466	455	459	432	416	426	410	409	409
26	415	412	414	466	460	462	437	416	424	409	407	408
27	419	413	417	480	466	474	436	423	429	408	407	408
28	421	419	420	480	465	474	430	413	422	408	406	407
29	422	420	421	465	461	463	413	410	411	406	405	405
30	422	420	421	468	464	466	416	411	413	407	405	407
31	---	---	---	---	---	---	428	412	417	---	---	---
MONTH	480	385	428	---	---	---	479	410	447	464	399	420

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

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

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.8	9.7	9.7	10.9	10.6	10.8	12.8	12.1	12.6	12.9	12.5	12.8
2	9.8	9.5	9.7	11.1	10.9	11.0	12.1	11.6	11.8	12.7	12.6	12.7
3	9.8	9.5	9.6	11.6	11.1	11.4	12.1	11.8	12.0	12.6	12.5	12.5
4	10.2	9.7	10.0	11.8	11.5	11.7	12.1	12.0	12.0	12.6	12.3	12.5
5	10.4	10.0	10.2	11.6	11.3	11.5	12.2	12.0	12.1	12.3	12.0	12.1
6	10.4	10.2	10.3	11.4	11.2	11.3	12.1	11.9	12.0	12.1	11.9	12.0
7	10.4	10.0	10.2	11.2	10.9	11.1	12.2	12.1	12.1	12.3	12.0	12.2
8	10.0	9.9	9.9	11.0	10.3	10.6	12.2	12.1	12.2	12.7	12.3	12.6
9	10.3	10.0	10.2	10.4	10.2	10.3	12.5	12.2	12.3	12.9	12.6	12.8
10	10.3	10.2	10.3	10.5	10.4	10.5	12.6	12.5	12.5	12.6	12.5	12.6
11	10.6	10.3	10.5	11.1	10.5	10.8	12.5	12.3	12.4	12.8	12.6	12.7
12	10.7	10.5	10.6	11.8	11.1	11.5	12.4	12.3	12.3	13.1	12.8	13.0
13	10.6	10.4	10.5	12.1	11.8	12.0	12.3	12.2	12.2	13.3	13.1	13.2
14	10.4	10.2	10.3	12.2	12.0	12.1	12.4	12.2	12.3	13.4	13.1	13.2
15	10.6	10.3	10.5	12.6	12.2	12.5	12.5	12.4	12.5	13.3	12.9	13.2
16	10.7	10.4	10.5	12.9	12.6	12.7	12.5	12.2	12.3	13.0	12.8	12.8
17	10.5	10.0	10.3	12.8	12.4	12.6	12.2	11.9	12.0	13.2	13.0	13.1
18	10.4	10.1	10.3	12.4	12.1	12.3	11.9	11.6	11.7	13.1	13.0	13.0
19	10.5	10.2	10.3	12.2	12.0	12.1	11.6	11.4	11.5	13.2	13.0	13.1
20	10.6	10.5	10.6	12.1	12.0	12.0	12.3	11.5	11.9	13.1	12.9	13.0
21	10.7	10.6	10.7	12.2	12.0	12.1	12.8	12.3	12.6	13.3	13.0	13.1
22	10.7	10.6	10.6	12.3	12.1	12.2	12.9	12.7	12.9	13.2	12.9	13.1
23	10.6	10.4	10.5	12.5	12.2	12.4	12.9	12.6	12.8	13.1	12.9	13.0
24	10.5	10.3	10.4	12.5	12.3	12.4	12.6	12.3	12.5	13.3	13.1	13.2
25	10.5	10.3	10.4	12.4	12.0	12.2	12.5	12.3	12.4	13.2	13.0	13.1
26	10.6	10.4	10.5	12.1	11.9	12.0	12.8	12.5	12.7	13.3	13.1	13.2
27	10.6	10.4	10.5	12.6	12.0	12.2	12.7	12.6	12.6	13.4	13.2	13.3
28	10.4	10.3	10.3	12.8	12.6	12.8	12.6	12.4	12.6	13.3	13.0	13.2
29	10.6	10.4	10.5	13.0	12.8	12.9	12.4	12.1	12.3	13.3	13.2	13.3
30	10.5	10.4	10.4	13.0	12.8	12.9	12.2	12.1	12.1	13.4	13.1	13.3
31	10.7	10.4	10.6	---	---	---	12.5	12.1	12.2	13.1	12.8	13.0
MONTH	10.7	9.5	10.3	13.0	10.2	11.8	12.9	11.4	12.3	13.4	11.9	12.9

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.8	12.7	12.8	11.7	11.5	11.6	12.1	11.2	11.8	9.9	9.7	9.8
2	12.8	12.6	12.7	11.5	11.4	11.5	12.2	12.0	12.1	10.1	9.7	9.9
3	12.7	12.5	12.6	11.7	11.5	11.6	12.0	11.6	11.8	9.8	9.7	9.8
4	12.8	12.5	12.7	11.9	11.7	11.8	11.7	11.2	11.4	10.0	9.7	9.9
5	12.6	12.5	12.5	12.0	11.7	11.9	11.3	11.1	11.2	10.2	9.8	10.0
6	12.6	12.5	12.5	11.8	11.6	11.7	11.1	10.8	11.0	10.1	9.8	9.9
7	12.6	12.5	12.5	12.1	11.7	12.0	10.8	10.3	10.6	10.2	9.9	10.1
8	12.7	12.5	12.6	12.1	11.9	12.0	10.7	10.4	10.5	10.3	10.0	10.2
9	12.8	12.6	12.7	12.4	12.0	12.2	11.0	10.4	10.8	10.1	10.0	10.1
10	12.7	12.6	12.6	12.1	11.8	12.0	11.4	11.0	11.2	10.2	9.9	10.0
11	12.8	12.6	12.7	12.0	11.9	11.9	11.4	11.1	11.2	10.2	9.8	10.0
12	12.8	12.6	12.7	12.4	12.0	12.2	11.2	11.1	11.1	9.9	9.5	9.7
13	13.1	12.8	12.9	12.6	12.2	12.4	11.2	10.8	11.0	9.5	9.4	9.5
14	12.9	12.7	12.8	12.5	12.2	12.3	11.2	10.8	11.0	9.7	9.4	9.6
15	12.8	12.7	12.7	12.4	12.2	12.3	11.1	10.6	10.9	9.5	9.2	9.4
16	13.0	12.6	12.8	12.6	12.3	12.5	11.0	10.5	10.8	9.5	9.1	9.3
17	13.0	12.6	12.8	12.8	12.4	12.6	10.6	10.4	10.5	9.5	9.3	9.4
18	12.9	12.4	12.6	12.6	12.4	12.5	10.8	10.4	10.6	9.8	9.4	9.6
19	12.5	12.2	12.4	12.5	12.2	12.4	11.1	10.8	11.0	9.6	9.1	9.4
20	12.5	12.2	12.3	12.2	12.1	12.1	11.2	11.0	11.1	9.3	9.0	9.1
21	12.3	11.7	12.1	12.2	11.7	12.0	11.2	10.9	11.1	---	---	---
22	11.8	11.5	11.6	11.7	11.5	11.6	11.0	10.7	10.9	---	---	---
23	11.9	11.6	11.8	12.0	11.6	11.8	10.8	10.7	10.7	---	---	---
24	11.9	11.6	11.8	12.1	11.8	11.9	10.8	10.6	10.6	9.5	9.0	9.2
25	12.3	11.8	12.1	12.1	11.6	11.9	10.8	10.5	10.6	9.0	8.7	8.8
26	12.3	11.9	12.1	11.9	11.5	11.7	10.7	10.3	10.5	9.1	8.6	8.9
27	12.0	11.5	11.8	12.0	11.4	11.8	10.6	10.2	10.4	9.0	8.6	8.8
28	11.7	11.5	11.6	11.7	11.2	11.5	10.4	10.2	10.3	9.0	8.4	8.7
29	---	---	---	11.3	11.0	11.1	10.4	10.0	10.2	9.0	8.5	8.8
30	---	---	---	11.3	10.6	11.0	10.3	9.9	10.1	8.7	8.4	8.5
31	---	---	---	11.2	10.6	10.8	---	---	---	8.7	8.2	8.4
MONTH	13.1	11.5	12.4	12.8	10.6	11.9	12.2	9.9	10.9	10.3	8.2	9.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.2	7.8	8.0	7.3	6.2	6.7	---	---	---	8.5	7.8	8.1
2	8.3	7.8	8.1	6.9	6.2	6.5	8.4	6.4	7.3	8.5	7.7	8.0
3	8.7	8.3	8.5	7.1	6.3	6.6	8.6	6.5	7.3	8.6	7.7	8.1
4	8.7	8.3	8.5	7.4	6.3	6.8	8.1	6.1	6.9	8.6	7.9	8.2
5	8.7	8.2	8.4	7.5	6.5	7.0	8.2	6.1	7.0	8.9	8.1	8.4
6	8.7	8.3	8.5	---	---	---	8.1	6.0	7.0	9.0	8.1	8.5
7	8.6	8.1	8.4	---	---	---	8.5	5.6	7.0	8.9	8.1	8.5
8	8.5	8.1	8.3	---	---	---	8.1	5.8	7.0	8.9	7.9	8.3
9	8.5	7.9	8.2	7.7	6.6	7.1	8.4	6.1	7.3	8.9	7.7	8.3
10	8.2	7.1	7.8	7.9	6.8	7.3	8.6	6.2	7.3	8.8	8.0	8.4
11	7.7	6.9	7.3	7.6	6.1	7.0	8.6	6.3	7.3	8.9	8.3	8.6
12	8.2	6.9	7.6	7.3	5.9	6.6	8.7	6.4	7.2	---	---	---
13	8.1	7.4	7.8	7.2	5.7	6.4	7.1	5.9	6.5	---	---	---
14	8.1	7.3	7.7	---	---	---	8.2	6.3	7.2	---	---	---
15	8.2	7.5	7.8	---	---	---	8.2	6.2	7.0	---	---	---
16	8.4	7.5	8.0	---	---	---	8.3	6.3	7.2	8.2	7.3	7.8
17	8.4	7.5	7.9	---	---	---	7.8	6.9	7.3	8.3	7.3	7.8
18	8.2	7.5	7.8	---	---	---	7.8	7.0	7.5	8.1	7.3	7.7
19	8.4	7.8	8.2	---	---	---	8.0	7.6	7.8	8.0	7.2	7.6
20	8.2	7.7	8.0	---	---	---	7.9	7.6	7.7	8.0	7.3	7.6
21	8.2	7.3	7.8	---	---	---	8.0	7.6	7.8	8.3	7.3	7.8
22	7.9	6.8	7.4	7.6	6.1	6.8	8.2	7.9	8.0	8.5	7.6	8.0
23	7.6	6.5	7.1	7.3	5.9	6.6	8.2	7.9	8.1	8.3	7.9	8.1
24	7.3	6.4	6.8	7.3	5.8	6.6	8.5	7.7	8.1	9.0	8.0	8.4
25	7.1	6.3	6.6	7.7	7.1	7.5	8.5	7.4	7.9	9.0	8.2	8.5
26	6.7	6.0	6.3	7.7	7.0	7.3	8.6	7.4	7.9	9.0	8.3	8.6
27	7.0	6.0	6.5	7.6	6.6	7.0	8.5	7.6	8.0	9.1	8.2	8.6
28	7.2	6.3	6.7	7.2	5.8	6.7	8.6	7.6	8.1	9.1	8.2	8.5
29	7.1	6.0	6.6	7.5	5.6	6.5	8.6	8.0	8.3	8.8	8.3	8.5
30	7.3	6.3	6.8	7.7	5.8	6.7	8.6	7.7	8.1	8.7	8.3	8.5
31	---	---	---	---	---	---	8.8	7.7	8.2	---	---	---
MONTH	8.7	6.0	7.6	---	---	---	8.8	5.6	7.5	9.1	7.2	8.2

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ

LOCATION.--Lat 40°58'09", long 74°16'56", Passaic County, Hydrologic Unit 02030103, on left bank in Passaic Valley Water Commission pumping station, 800 ft below confluence of Pequannock and Ramapo Rivers, 100 ft upstream from bridge on Jackson Avenue (Pompton Plains Cross Road), and 0.7 mi east of Pompton Plains.

DRAINAGE AREA.--355 mi^2.

PERIOD OF RECORD.--March 1903 to December 1904, May 1940 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1202: 1945(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 160.00 ft above sea level. March 1903 to December 1904, nonrecording gage on main spillway of dam 2,000 ft upstream at different datum. May 1940 to September 1964 two water-stage recorders, each above a concrete dam about 2,000 ft upstream at datum 14.46 ft higher.

REMARKS.--Records good. Water diverted from reservoirs on Pequannock and Wanaque Rivers, from Pompton River to Point View Reservoir (no diversion this year), and from Ramapo River to Wanaque Reservoir and Oradell Reservoir (from February 1985) for municipal supply (see Hackensack River basin, diversions into and from and Passaic River basin, diversions). Prior to the 1969 water year, published discharge included flow over the weir and pumpage to Point View Reservoir from Jackson Avenue Pumping Station. Since water year 1969, the published discharges have included only flow over the weir. Flow regulated by Canistear, Oak Ridge, Clinton, Charlotteburg and Echo Lake Reservoirs on Pequannock River and by Greenwood Lake, Monksville, and Wanaque Reserviors on Wanaque River (see Passaic River basin, reservoirs in). Several measurements of water temperature were made during the year. Satellite telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with Passaic Valley Water Commission.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 21	0045	*6,770	*14.86	Dec. 14	2315	4,230	12.62
Dec. 2	1930	6,690	14.79	Apr. 1	2200	4,230	12.62
Dec. 8	0615	3,720	12.21				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	464	1010	575	546	299	3730	623	167	72	57	120
2	193	342	5310	501	562	306	3570	644	208	72	56	101
3	184	315	5320	654	528	325	3030	977	293	76	66	90
4	167	356	3040	664	502	340	2900	1910	251	74	71	96
5	154	299	2200	643	1080	340	2740	1620	197	71	70	95
6	179	343	2650	582	1300	525	2470	1380	166	68	60	85
7	142	347	2920	420	919	574	2120	1310	150	65	56	74
8	204	395	3560	420	717	461	1730	940	139	82	54	68
9	816	808	2770	321	607	435	1450	839	130	77	53	68
10	811	778	2090	316	538	458	1150	874	127	105	50	80
11	611	573	1820	310	492	591	890	740	120	97	49	533
12	444	598	2050	276	426	635	861	569	110	78	49	561
13	360	482	2320	256	415	454	1380	476	106	68	52	344
14	318	343	3400	247	442	533	1250	431	114	63	54	245
15	278	451	3980	234	649	1350	851	377	109	61	52	195
16	238	438	3050	462	629	1170	716	352	94	59	53	146
17	214	415	2530	515	535	857	616	315	88	58	152	113
18	192	572	2260	311	424	771	800	297	158	60	410	99
19	966	420	2080	254	399	705	1080	314	471	60	245	90
20	5420	405	1930	269	516	649	886	442	277	55	143	83
21	5590	410	1550	255	594	638	732	386	176	55	231	76
22	2970	402	1280	246	625	676	612	311	148	95	211	71
23	1970	375	1100	284	637	588	543	260	154	81	160	69
24	1550	354	1080	277	495	450	503	228	112	115	122	68
25	1220	305	1700	1480	361	368	446	232	98	248	99	66
26	927	1100	1480	1250	308	531	404	300	91	124	88	66
27	742	1490	1220	747	309	602	363	258	86	86	82	64
28	741	941	1030	1120	312	431	926	220	88	72	129	65
29	671	658	971	1120	---	391	1170	189	82	66	142	127
30	554	547	1060	731	---	399	771	175	75	64	116	103
31	487	---	834	583	---	1520	---	178	---	59	91	---
TOTAL	29545	15726	69595	16323	15867	18372	40690	18167	4585	2486	3323	4061
MEAN	953	524	2245	527	567	593	1356	586	153	80.2	107	135
MAX	5590	1490	5320	1480	1300	1520	3730	1910	471	248	410	561
MIN	142	299	834	234	308	299	363	175	75	55	49	64

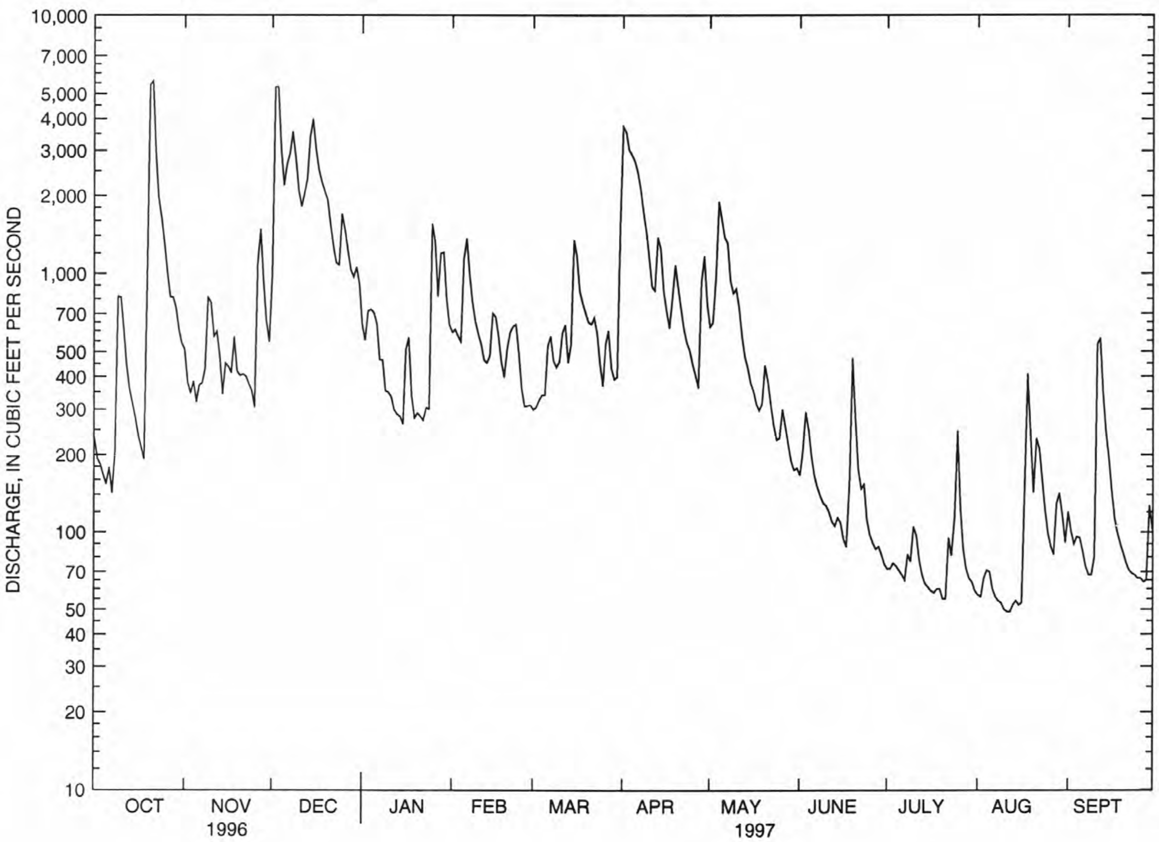
01388500 POMPTON RIVER AT POMPTON PLAINS, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1997, BY WATER YEAR (WY)

MEAN	296	424	540	517	564	928	969	614	372	240	215	220
MAX	2370	1417	2245	1777	1654	2477	2995	2778	2177	1530	1520	1057
(WY)	1904	1956	1997	1996	1973	1983	1983	1989	1972	1945	1955	1971
MIN	40.2	52.3	34.8	39.2	149	118	62.7	110	62.9	34.2	34.2	46.7
(WY)	1981	1981	1981	1981	1969	1981	1985	1965	1965	1965	1966	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1903 - 1997	
ANNUAL TOTAL	374462		238740			
ANNUAL MEAN	1023		654		490	
HIGHEST ANNUAL MEAN					906	1952
LOWEST ANNUAL MEAN					117	1965
HIGHEST DAILY MEAN	8970	Jan 28	5590	Oct 21	28300	Oct 10 1903
LOWEST DAILY MEAN	71	Sep 3	49	Aug 11	.00	Aug 18 1904
ANNUAL SEVEN-DAY MINIMUM	73	Aug 31	51	Aug 9	1.7	Aug 14 1904
INSTANTANEOUS PEAK FLOW			6770	Oct 21	28300a	Oct 10 1903
INSTANTANEOUS PEAK STAGE			14.86	Oct 21	14.30bc	Oct 10 1903
INSTANTANEOUS LOW FLOW			47	Aug 12	.00	Aug 18 1904
10 PERCENT EXCEEDS	2280		1530		1140	
50 PERCENT EXCEEDS	622		386		245	
90 PERCENT EXCEEDS	144		70		74	

a By computation of peak flow over dam, maximum observed.
b Site and datum then in use.
c Maximum stage at present site and datum was 24.47 ft, Apr. 6, 1984.



01388500 POMPTON RIVER AT POMPTON PLAINS, NJ, DAILY MEAN DISCHARGE

01388600 POMPTON RIVER AT PACKANACK LAKE, NJ

LOCATION.--Lat 40°56'36", long 74°16'47", Morris County, Hydrologic Unit 02030103, at bridge on State Highway 504 in Packanack Lake, and 2.2 mi downstream from confluence of Pequannock and Wanaque Rivers.

DRAINAGE AREA.--361 mi^2.

PERIOD OF RECORD.--Water years 1979 to September 1997 (discontinued).

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrate, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)
OCT 1996										
29...	1130	697	232	7.6	12.5	761	9.5	89	E1.4	80
JAN 1997										
29...	1245	1150	356	7.7	1.5	773	15.2	107	<1.0	80
MAR										
19...	1130	734	343	7.7	4.5	764	13.6	105	E1.9	21
MAY										
21...	1115	397	275	8.1	16.0	756	10.7	109	2.5	80
JUL										
16...	1120	61	367	7.9	26.5	755	7.0	88	2.8	330

DATE	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
OCT 1996										
29...	40	61	17	4.6	18	1.2	41	13	35	<.1
JAN 1997										
29...	30	55	15	4.2	41	1.6	34	13	74	<.1
MAR										
19...	20	60	16	4.8	36	1.3	37	13	67	<.1
MAY										
21...	20	72	20	5.5	23	1.0	45	13	46	<.1
JUL										
16...	60	90	24	7.2	30	1.8	59	17	62	<.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 1996									
29...	8.8	100	124	--	.009	.44	<.03	<.03	.2
JAN 1997									
29...	7.5	190	180	--	.006	.63	.07	.04	.3
MAR									
19...	6.4	187	169	1	.007	.55	<.03	<.03	.2
MAY									
21...	5.1	154	142	12	.019	.52	<.03	<.03	.4
JUL									
16...	4.0	208	185	7	.018	.77	<.03	<.03	.6

01388600 POMPTON RIVER AT PACKANACK LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996									
29...	.19	.64	.63	.04	.02	3.7	.4	2	3.0
JAN 1997									
29...	.21	.93	.84	.02	<.01	2.4	.4	4	13
MAR									
19...	.18	.75	.73	.01	<.01	2.2	.3	--	--
MAY									
21...	.13	.88	.65	.03	.02	2.9	.6	--	--
JUL									
16...	.38	1.4	1.1	.04	<.01	3.1	.5	--	--

01388910 POMPTON RIVER AT MOUNTAIN VIEW, NJ

LOCATION.--Lat 40°54'52", long 74°16'15", Morris County, Hydrologic Unit 02030103, on right upstream wingwall of bridge on U.S. Route 202 in Mountain View, 0.2 mi downstream from Packanack Brook, and 1.5 mi upstream from confluence with Passaic River.

DRAINAGE AREA.--371 mi^2.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 156.50 ft above sea level.

REMARKS.--Records good. Data is stage-only and is collected in cooperation with U.S. Army Corps of Engineers. Days of missing record are not estimated and are noted with dash lines (---).

EXTREMES FOR CURRENT WATER YEAR.--Maximum gage height recorded, 10.40 ft, Oct. 21; minimum recorded, 1.55 ft, June 24.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 11.81 ft, Jan. 28, 1996; minimum recorded, 1.25 ft, Oct. 19, 1995.

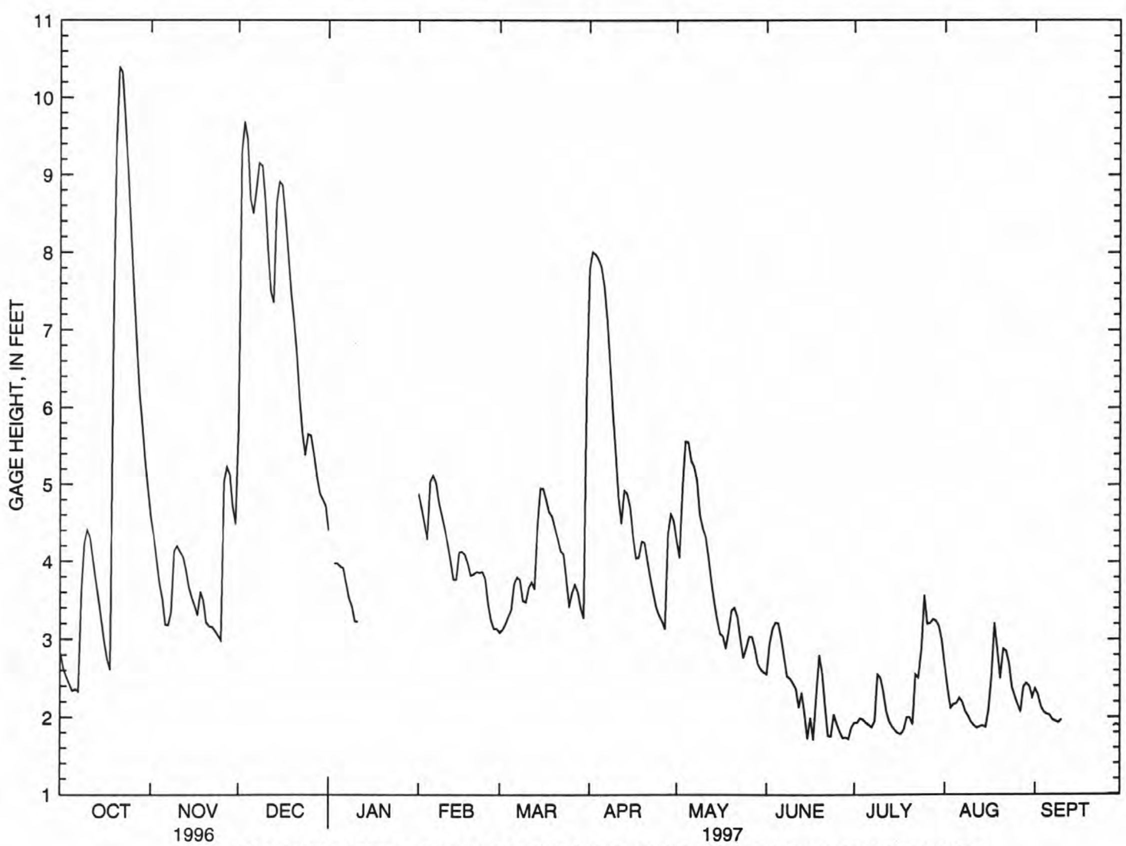
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.82	2.62	4.57	4.32	5.74	4.36	4.41	---	4.88	4.70	3.09	3.06
2	2.62	2.52	4.32	3.99	9.28	5.74	---	3.86	4.70	4.50	3.13	3.08
3	2.52	2.42	4.00	3.71	9.69	9.28	3.98	3.90	4.50	4.29	3.20	3.11
4	2.43	2.34	3.71	3.51	9.46	8.68	3.98	3.94	4.29	4.11	3.30	3.20
5	2.34	2.27	3.52	3.12	8.68	7.93	3.94	3.90	5.04	4.12	3.38	3.30
6	2.36	2.30	3.19	2.99	8.50	7.85	3.92	3.72	5.12	5.03	3.72	3.38
7	2.33	2.22	3.18	2.92	8.80	8.43	3.72	3.50	5.03	4.78	3.80	3.71
8	3.60	2.19	3.35	2.95	9.15	8.80	3.53	3.41	4.78	4.61	3.77	3.48
9	4.23	3.60	4.13	3.19	9.12	8.66	3.43	3.22	4.61	4.43	3.50	3.33
10	4.41	4.23	4.20	4.12	8.66	7.99	3.24	3.19	4.43	4.23	3.48	3.32
11	4.31	4.02	4.12	3.94	7.99	7.49	3.23	3.16	4.23	4.01	3.67	3.48
12	4.02	3.75	4.06	3.84	7.49	7.32	---	---	4.01	3.76	3.74	3.64
13	3.75	3.50	3.89	3.62	7.36	7.32	---	---	3.77	3.56	3.65	3.42
14	3.50	3.23	3.67	3.32	8.64	7.33	---	---	3.77	3.48	4.46	3.35
15	3.23	2.96	3.54	3.22	8.91	8.64	---	---	4.12	3.77	4.95	4.46
16	2.96	2.74	3.43	3.31	8.87	8.46	4.01	---	4.13	4.09	4.95	4.81
17	2.74	2.61	3.31	3.23	8.46	7.99	4.00	3.97	4.09	3.98	4.81	4.65
18	2.61	2.49	3.61	3.20	7.99	7.49	---	---	3.98	3.82	4.65	4.59
19	6.97	2.47	3.50	3.22	7.49	7.13	---	---	3.82	3.72	4.59	4.44
20	9.39	6.97	3.22	3.15	7.13	6.70	---	---	3.84	3.73	4.44	4.30
21	10.40	9.39	3.17	3.14	6.70	6.13	---	---	3.87	3.84	4.30	4.14
22	10.33	9.77	3.16	3.09	6.13	5.68	---	---	3.86	3.79	4.14	4.02
23	9.77	9.04	3.11	3.04	5.68	5.30	---	---	3.87	3.78	4.10	3.76
24	9.04	8.28	3.05	2.99	5.39	5.11	---	3.68	3.78	3.46	3.76	3.42
25	8.28	7.53	2.99	2.81	5.66	5.37	5.28	3.57	3.46	3.25	3.42	3.20
26	7.53	6.83	5.04	2.80	5.64	5.38	5.28	5.02	3.25	3.14	3.60	3.17
27	6.83	6.18	5.23	5.03	5.38	5.10	---	---	3.14	3.09	3.71	3.60
28	6.18	5.77	5.13	4.71	5.10	4.89	5.62	4.87	3.14	3.09	3.61	3.40
29	5.77	5.30	4.71	4.49	4.89	4.78	5.62	---	---	---	3.40	3.26
30	5.30	4.93	4.49	4.36	4.81	4.73	---	---	---	---	3.28	3.22
31	4.93	4.57	---	---	4.73	4.41	---	4.88	---	---	6.32	3.24
MONTH	10.40	2.19	5.23	2.80	9.69	4.36	---	---	5.12	3.09	6.32	3.06

01388910 POMPTON RIVER AT MOUNTAIN VIEW, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.80	6.32	4.28	4.05	2.56	2.51	1.93	1.87	2.67	2.36	2.37	2.10
2	8.01	7.80	4.06	3.87	2.95	2.50	1.93	1.91	2.36	2.10	2.29	2.14
3	7.98	7.91	4.97	3.74	3.14	2.95	1.99	1.93	2.12	2.02	2.14	2.06
4	7.92	7.82	5.57	4.97	3.22	3.14	1.97	1.92	2.17	2.09	2.07	2.04
5	7.82	7.56	5.56	5.32	3.21	3.02	1.93	1.89	2.18	2.16	2.04	2.01
6	7.56	7.14	5.32	5.17	3.02	2.78	1.90	1.86	2.25	2.17	2.03	1.97
7	7.14	6.57	5.24	5.06	2.78	2.53	1.87	1.85	2.20	2.08	1.97	1.94
8	6.57	5.93	5.06	4.61	2.53	2.45	1.95	1.85	2.08	2.01	1.95	1.92
9	5.94	5.42	4.61	4.43	2.50	2.44	2.55	1.87	2.02	1.94	1.93	1.91
10	5.42	4.84	4.44	4.33	2.44	2.37	2.51	2.33	1.94	1.88	1.97	1.92
11	4.84	4.39	4.33	4.03	2.37	1.87	2.33	2.08	1.89	1.84	---	---
12	4.50	4.22	4.04	3.73	2.13	1.74	2.08	1.95	1.86	1.83	---	---
13	4.93	4.50	3.73	3.47	2.32	1.68	1.95	1.88	1.88	1.83	---	---
14	4.89	4.71	3.47	3.25	2.05	1.66	1.88	1.81	1.89	1.85	---	---
15	4.71	4.33	3.25	3.07	1.72	1.66	1.83	1.78	1.87	1.85	---	---
16	4.33	4.05	3.08	3.00	2.00	1.57	1.79	1.76	2.10	1.82	---	---
17	4.05	3.83	3.05	2.88	1.71	1.63	1.78	1.74	2.52	2.10	---	---
18	4.06	3.81	2.89	2.80	2.30	1.67	1.84	1.74	3.21	2.50	---	---
19	4.27	4.03	3.11	2.79	2.80	2.30	2.00	1.84	2.88	2.50	---	---
20	4.25	4.01	3.38	3.11	2.57	2.15	2.00	1.88	2.50	2.22	---	---
21	4.01	3.79	3.41	3.29	2.15	1.69	1.91	1.82	2.88	2.34	---	---
22	3.79	3.60	3.29	3.00	1.76	1.66	2.55	1.91	2.85	2.69	---	---
23	3.60	3.41	3.01	2.77	1.75	1.56	2.51	2.32	2.69	2.38	---	---
24	3.41	3.31	2.77	2.69	2.04	1.55	2.88	2.28	2.38	2.22	---	---
25	3.31	3.21	2.89	2.69	1.92	1.65	3.57	2.88	2.27	2.16	---	---
26	3.24	3.14	3.04	2.89	1.82	1.64	3.20	3.16	2.16	2.07	---	---
27	3.14	3.02	3.04	2.89	1.73	1.68	3.21	3.17	2.07	2.03	---	---
28	4.36	3.02	2.89	2.69	1.74	1.66	3.26	3.21	2.39	2.02	1.89	1.56
29	4.62	4.35	2.69	2.59	1.72	1.61	3.24	3.17	2.44	2.39	1.91	1.70
30	4.54	4.28	2.62	2.55	1.87	1.56	3.17	2.99	2.40	2.26	1.89	1.69
31	---	---	2.58	2.56	---	---	2.99	2.67	2.26	2.11	---	---
MONTH	8.01	3.02	5.57	2.55	3.22	1.55	3.57	1.74	3.21	1.82	---	---



01388910 POMPTON RIVER AT MOUNTAIN VIEW, NJ, MAXIMUM DAILY GAGE HEIGHT

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'47", long 74°16'10", Passaic County, Hydrologic Unit 02030103, on left bank, in Two Bridges and 400 ft downstream from the Pompton River.

DRAINAGE AREA.--734 mi^2.

PERIOD OF RECORD.--Water years 1987 to current year.
NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1987-96.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1989 to current year.
WATER TEMPERATURE: August 1989 to current year.
DISSOLVED OXYGEN: August 1989 to current year. Unpublished fragmentary water-quality records for the period March to July 1989 are available at the U.S. Geological Survey office in West Trenton, N.J.

INSTRUMENTATION.--Water-quality monitors since March 1989, pumping system, data recorded hourly. Three water-quality monitors are necessary at this site because of poor mixing below the confluence; each measures the characteristics of water pumped from a single intake. Looking downstream, the left, middle, and right intakes are 70, 160, and 220 ft, respectively, from the left bank. The distances are from the edge of the monitor house.

REMARKS.--Interruptions in the daily record were due to instrument or pumping system malfunction and pumping system maintenance, July 8-23.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: maximum, 1,650 µS/cm from right intake, Dec. 18, 1995; minimum, 123 µS/cm from left intake, Sept. 4, 1992.
WATER TEMPERATURE: maximum, 30.5 °C from right, middle, and left intakes, July 9, 1993, from right and middle intakes, July 10, 1993, from right intake, July 11, 12, 1993; minimum, 0.0 °C from right, middle, and left intakes, on many days during winters.
DISSOLVED OXYGEN: maximum recorded, 18.7 mg/L from left intake, June 30, 1993; minimum, 1.3 mg/L from right intake, May 29, 1991.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: maximum, 1,070 µS/cm from right intake, Feb. 15; minimum recorded, 127 µS/cm from middle intake, Dec. 3, but may have been lower at left intake during period of pumping system malfunction, Dec. 2-6.
WATER TEMPERATURE: maximum recorded, 27.5 °C from left intake, June 23, from middle intake, June 27, but may have been higher at all intakes during period of pumping system maintenance, July 8-23; minimum, 0.0°C from left, middle, and right intakes on several days during January.
DISSOLVED OXYGEN: maximum recorded, 17.3 mg/L from right intake, July 7, but may have been higher at right intake during period of pumping system maintenance, July 8-23; minimum, 2.9 mg/L from right intake, Oct. 29.

SPECIFIC CONDUCTANCE, (US/CM AT 25 DEG. C), AT LEFT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	345	328	336	282	266	272	235	198	227	267	235	257
2	356	340	348	291	252	271	---	---	---	288	262	278
3	363	351	358	303	289	297	---	---	---	289	253	271
4	370	358	364	307	299	303	---	---	---	258	252	255
5	373	360	366	304	269	285	---	---	---	268	256	261
6	365	355	360	311	294	305	---	---	---	274	267	271
7	370	358	365	310	267	288	177	169	173	309	272	297
8	371	313	359	309	266	287	198	168	183	310	297	304
9	340	248	290	309	253	273	205	198	204	307	285	295
10	354	315	340	314	295	308	212	205	208	429	307	372
11	315	280	297	312	293	302	213	209	212	418	377	401
12	280	272	275	293	249	278	215	203	209	377	354	361
13	276	272	275	274	225	252	208	205	206	355	347	352
14	284	274	279	273	229	253	205	186	195	367	351	360
15	291	282	286	279	267	275	187	174	178	384	365	373
16	300	288	294	267	218	234	180	175	179	521	379	426
17	309	295	303	242	237	239	186	180	183	490	417	439
18	317	303	310	245	209	240	189	184	186	433	412	420
19	319	161	270	248	190	218	197	189	193	441	433	436
20	---	---	---	256	248	253	203	196	199	442	430	435
21	---	---	---	256	252	254	211	202	206	432	423	428
22	---	---	---	253	246	249	220	211	216	453	425	431
23	---	---	---	253	249	251	231	220	225	506	439	475
24	---	---	---	256	252	254	253	231	236	488	438	460
25	206	192	199	260	253	257	253	216	227	514	345	404
26	214	203	208	284	221	249	225	217	222	380	334	362
27	225	209	219	293	256	280	225	215	220	334	319	326
28	243	224	233	256	233	242	229	224	227	536	321	444
29	247	232	238	234	226	230	231	226	229	377	341	356
30	270	245	258	234	227	231	234	226	230	388	364	380
31	273	252	265	---	---	---	239	226	233	398	384	392
MONTH	373	161	296	314	190	264	253	168	208	536	235	365

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

SPECIFIC CONDUCTANCE, (US/CM AT 25 DEG. C), AT LEFT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	418	397	401	371	366	368	---	---	---	275	270	273
2	418	375	393	373	367	371	---	---	---	275	246	266
3	375	361	365	391	359	365	---	---	---	263	222	246
4	365	358	361	546	391	488	232	216	224	238	220	232
5	431	361	396	538	408	461	216	205	210	226	217	220
6	380	357	369	425	405	413	205	203	204	223	213	217
7	374	356	363	407	379	393	206	199	203	224	210	215
8	356	339	349	399	375	388	---	---	---	234	214	225
9	341	326	335	412	399	406	---	---	---	239	234	236
10	326	319	322	609	397	467	---	---	---	240	235	238
11	329	314	321	557	405	471	252	238	246	246	233	239
12	328	315	320	405	346	368	264	252	259	256	242	250
13	335	327	331	380	346	365	261	242	250	271	256	265
14	650	320	429	558	378	434	255	247	251	276	265	270
15	608	395	486	498	395	436	271	247	262	289	276	282
16	395	364	370	395	383	389	274	269	272	296	289	293
17	403	375	391	387	375	381	287	273	282	297	292	294
18	423	391	406	387	373	384	287	264	282	308	294	302
19	423	419	421	373	349	360	265	256	259	315	298	308
20	423	387	413	349	344	346	286	265	278	301	287	296
21	387	341	356	344	329	335	291	285	288	301	285	291
22	344	331	336	338	322	334	290	286	288	297	284	291
23	335	321	327	323	295	310	294	286	290	313	295	304
24	323	316	321	333	319	326	295	288	292	327	312	319
25	370	322	354	347	333	341	298	291	295	324	317	320
26	373	356	365	356	337	347	302	297	300	330	314	322
27	377	371	375	337	312	319	306	302	304	343	328	336
28	375	367	371	350	319	338	306	253	283	348	336	342
29	---	---	---	355	350	353	277	258	272	358	341	348
30	---	---	---	354	349	352	275	259	270	359	346	353
31	---	---	---	349	263	311	---	---	---	367	353	358
MONTH	650	314	370	609	263	378	306	199	265	367	210	282

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	370	356	362	413	398	407	420	374	395	---	---	---
2	364	352	359	407	396	402	437	418	425	---	---	---
3	353	316	327	405	392	400	447	424	433	---	---	---
4	352	330	343	405	385	396	427	412	419	411	385	397
5	368	348	361	402	389	395	418	399	408	422	403	412
6	382	366	374	404	387	395	418	386	401	423	406	413
7	385	373	378	406	389	399	424	384	405	423	404	413
8	393	378	384	---	---	---	428	395	413	424	410	417
9	393	383	388	---	---	---	457	401	424	426	408	418
10	402	385	395	---	---	---	453	413	431	431	418	426
11	537	389	434	---	---	---	458	415	430	430	256	361
12	559	410	525	---	---	---	437	418	428	306	256	296
13	585	546	572	---	---	---	432	411	424	346	305	328
14	595	564	583	---	---	---	443	402	422	356	346	351
15	616	571	596	---	---	---	440	410	425	367	354	357
16	602	569	589	---	---	---	468	405	421	365	349	357
17	621	573	600	---	---	---	419	344	371	440	347	356
18	628	586	611	---	---	---	354	300	325	539	367	425
19	621	315	423	---	---	---	408	320	386	576	374	455
20	528	449	497	---	---	---	424	407	416	624	576	602
21	533	488	511	---	---	---	418	379	397	652	603	623
22	503	481	491	---	---	---	402	369	383	680	392	504
23	547	503	534	---	---	---	419	402	410	582	384	398
24	553	399	466	389	368	376	417	411	413	672	386	483
25	602	398	492	375	303	326	411	393	405	591	390	466
26	654	451	555	348	274	310	407	394	399	680	385	491
27	646	550	610	275	257	268	403	386	394	726	564	693
28	656	493	582	293	256	270	401	372	386	666	393	539
29	686	493	626	312	273	292	---	---	---	695	354	458
30	685	407	531	352	296	322	---	---	---	689	361	500
31	---	---	---	379	338	358	---	---	---	---	---	---
MONTH	686	315	483	---	---	---	468	300	407	726	256	442

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

SPECIFIC CONDUCTANCE, (US/CM AT 25 DEG. C), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	386	359	371	---	---	---	249	205	241	316	289	304
2	398	378	387	281	260	272	205	139	171	328	314	321
3	415	390	400	315	281	300	148	127	134	320	287	303
4	415	394	406	331	314	321	170	142	159	291	280	286
5	434	387	417	345	329	333	171	167	169	299	281	289
6	422	367	380	355	320	341	178	166	171	320	291	300
7	482	415	454	334	298	313	177	171	174	350	320	339
8	481	327	440	324	284	304	189	171	180	352	331	341
9	339	265	316	324	260	285	192	183	187	369	334	350
10	349	288	328	332	312	322	186	181	183	424	358	395
11	289	266	274	322	300	305	185	182	183	584	408	461
12	281	263	274	308	287	301	194	185	188	676	520	597
13	303	280	292	313	289	301	204	192	199	607	509	569
14	325	300	310	329	294	311	204	190	198	624	571	596
15	358	323	337	331	281	313	190	180	184	637	266	459
16	362	354	358	285	234	251	192	184	188	413	292	370
17	369	356	362	257	246	253	190	187	188	677	404	572
18	375	351	360	259	217	249	192	188	190	---	---	---
19	380	170	293	262	194	228	198	192	194	---	---	---
20	211	148	186	270	256	265	207	198	202	---	---	---
21	153	135	142	271	262	266	219	207	213	---	---	---
22	167	153	163	268	254	261	231	219	226	558	489	532
23	---	---	---	270	257	264	247	231	239	531	489	513
24	---	---	---	271	258	265	259	247	253	592	529	558
25	144	141	142	281	261	269	259	226	237	541	350	418
26	---	---	---	294	228	262	249	230	240	379	314	353
27	---	---	---	299	258	284	265	242	255	314	296	301
28	---	---	---	258	228	238	271	262	267	354	306	331
29	---	---	---	231	227	229	278	266	273	393	340	374
30	---	---	---	244	231	238	274	256	264	---	---	---
31	---	---	---	---	---	---	289	260	276	408	397	403
MONTH	---	---	---	355	194	281	289	127	207	677	266	409

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	397	383	391	445	430	437	299	251	277	335	316	327
2	390	381	385	452	435	443	258	241	249	343	333	337
3	393	390	391	446	427	441	276	248	263	355	233	304
4	394	388	390	529	446	494	278	248	266	244	225	236
5	408	382	390	930	529	776	266	240	252	235	222	229
6	389	368	379	868	671	766	263	234	247	251	231	242
7	380	359	369	702	598	644	263	246	255	---	---	---
8	359	353	355	601	548	577	293	257	276	303	265	287
9	354	351	352	556	502	522	309	288	298	309	303	307
10	395	354	372	609	464	518	332	295	317	313	299	307
11	421	395	409	613	529	555	349	330	341	323	300	316
12	439	420	429	541	444	486	354	312	342	339	321	331
13	439	432	436	577	497	546	312	257	271	348	332	340
14	546	419	463	572	503	542	288	264	274	338	325	331
15	838	481	663	503	406	446	342	288	321	348	332	339
16	784	654	725	423	408	418	359	339	350	359	335	345
17	654	584	622	431	419	424	373	356	366	347	336	341
18	584	532	553	426	424	425	371	295	343	358	337	347
19	532	499	518	426	422	424	298	269	276	360	313	343
20	499	457	482	422	419	421	316	280	301	395	313	352
21	457	406	428	422	417	419	329	313	322	383	359	369
22	411	360	386	424	409	419	334	322	328	381	367	374
23	362	344	352	---	---	---	339	325	331	397	374	386
24	384	342	355	---	---	---	338	328	331	418	391	404
25	417	383	403	---	---	---	350	325	337	418	375	397
26	429	412	421	---	---	---	353	341	346	471	408	441
27	436	423	428	402	367	379	350	337	343	430	401	408
28	442	424	435	423	402	417	340	261	297	406	395	400
29	---	---	---	425	416	420	287	275	282	416	396	406
30	---	---	---	429	419	423	316	278	300	438	414	422
31	---	---	---	429	266	340	---	---	---	474	435	445
MONTH	838	342	439	930	266	486	373	234	303	474	222	347

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

SPECIFIC CONDUCTANCE, (US/CM AT 25 DEG. C), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	481	459	471	599	538	570	375	308	338	491	392	439
2	487	407	452	616	558	586	438	375	402	521	480	501
3	---	---	---	633	556	584	476	438	465	527	438	478
4	---	---	---	633	519	579	547	455	517	499	442	464
5	---	---	---	643	521	575	578	494	539	530	448	494
6	---	---	---	627	541	579	545	494	511	520	467	500
7	---	---	---	624	530	586	500	389	432	548	494	522
8	---	---	---	---	---	---	498	441	473	556	510	529
9	---	---	---	---	---	---	525	477	503	598	516	561
10	---	---	---	---	---	---	551	479	512	598	520	549
11	---	---	---	---	---	---	584	497	525	544	272	402
12	---	---	---	---	---	---	612	523	562	373	275	328
13	585	544	570	---	---	---	631	599	616	290	247	265
14	590	562	578	---	---	---	640	523	583	334	290	317
15	595	565	583	---	---	---	630	549	580	392	333	358
16	595	552	578	---	---	---	639	490	572	416	389	397
17	602	558	582	---	---	---	655	430	557	469	415	428
18	611	563	590	---	---	---	564	302	363	552	451	481
19	615	558	591	---	---	---	420	333	401	618	476	529
20	597	437	499	---	---	---	430	419	425	649	598	624
21	519	472	496	---	---	---	510	419	458	683	633	657
22	493	467	477	---	---	---	449	356	382	697	545	633
23	527	493	519	---	---	---	436	339	379	619	521	565
24	557	459	526	430	384	395	456	436	449	715	526	605
25	588	544	568	436	211	351	482	454	469	680	522	578
26	665	576	619	211	174	186	496	463	481	662	497	572
27	670	570	649	197	173	187	519	482	503	737	626	715
28	683	597	651	232	196	210	535	405	474	696	525	595
29	696	593	664	248	222	235	640	526	584	723	409	614
30	691	517	618	281	248	265	535	483	500	715	486	605
31	---	---	---	311	278	292	537	466	506	---	---	---
MONTH	---	---	---	---	---	---	655	302	486	737	247	510

SPECIFIC CONDUCTANCE, (US/CM AT 25 DEG. C), AT RIGHT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	481	428	449	260	252	255	249	242	246	328	317	321
2	506	468	489	280	260	271	242	150	189	339	326	332
3	544	485	527	314	280	299	187	145	161	357	335	343
4	598	530	574	332	313	321	186	175	181	367	349	357
5	600	573	591	371	331	344	175	169	171	372	350	360
6	626	580	603	429	371	400	172	168	170	375	360	367
7	641	593	621	467	429	445	174	169	172	379	365	372
8	641	397	597	496	467	485	176	171	173	409	373	386
9	625	292	478	509	471	489	179	176	178	413	393	401
10	292	234	256	479	316	367	181	179	180	424	407	415
11	262	247	257	316	289	298	184	181	182	701	413	500
12	280	260	272	320	302	311	189	184	186	785	686	732
13	302	279	291	342	319	328	200	189	194	717	679	702
14	326	299	310	362	337	347	202	197	200	685	634	654
15	370	324	341	381	357	366	206	198	203	645	272	466
16	410	370	386	402	381	392	205	194	200	420	298	360
17	456	410	429	432	402	417	194	188	190	---	---	---
18	481	456	472	454	419	438	196	189	192	---	---	---
19	498	244	414	458	445	452	202	196	199	588	552	574
20	257	155	208	460	444	451	214	202	208	595	583	589
21	160	147	154	459	442	452	226	214	220	---	---	---
22	169	160	166	477	450	463	238	226	232	---	---	---
23	162	148	153	493	467	476	252	238	245	543	526	532
24	148	144	146	494	475	483	267	252	260	611	543	579
25	144	141	142	498	481	488	295	264	276	576	370	507
26	149	141	145	506	375	450	295	289	291	380	322	356
27	166	149	157	440	224	276	291	288	289	---	---	---
28	186	166	176	226	221	224	291	288	289	361	324	333
29	207	186	196	230	225	227	299	289	295	---	---	---
30	228	207	217	243	230	237	305	298	301	---	---	---
31	254	228	241	---	---	---	318	304	311	435	423	429
MONTH	641	141	337	509	221	375	318	145	219	---	---	---

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

SPECIFIC CONDUCTANCE, (US/CM AT 25 DEG.`C), AT RIGHT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	426	404	417	503	486	493	343	273	297	342	325	335
2	413	402	407	496	481	490	318	269	292	364	342	355
3	412	405	408	496	492	493	362	316	341	372	359	366
4	408	398	403	534	494	507	366	361	364	364	293	322
5	424	382	393	1010	534	842	361	350	354	298	282	285
6	419	388	402	951	818	868	350	348	349	289	283	287
7	388	365	376	818	662	734	348	344	346	302	289	297
8	365	359	362	662	635	647	346	344	345	314	302	308
9	361	357	359	636	625	629	355	346	351	328	314	321
10	402	361	379	630	613	620	371	355	363	343	328	338
11	430	402	417	963	609	751	385	371	379	358	343	353
12	467	430	448	976	826	902	398	385	393	367	355	361
13	479	467	472	826	646	724	415	375	395	384	367	376
14	514	470	480	646	526	596	375	348	361	414	383	399
15	1070	475	771	702	499	551	360	348	354	431	409	421
16	924	708	842	534	439	478	376	360	369	451	431	442
17	708	611	662	439	431	435	393	376	384	464	445	454
18	611	557	578	433	431	431	410	393	404	478	457	468
19	557	525	543	431	429	431	420	406	414	501	472	485
20	525	511	516	429	427	428	406	392	400	491	455	473
21	511	496	502	430	426	428	399	389	393	455	391	399
22	500	475	483	440	429	434	403	394	398	423	385	398
23	479	459	467	451	438	444	426	401	413	446	417	430
24	467	449	457	459	449	453	439	421	428	478	446	461
25	467	453	460	466	456	459	453	433	441	496	470	478
26	470	456	462	476	460	465	454	438	447	501	443	483
27	478	468	472	476	447	459	461	447	453	443	413	420
28	495	476	487	447	439	442	468	433	454	421	407	415
29	---	---	---	454	436	443	452	315	361	442	416	427
30	---	---	---	463	446	453	325	311	318	480	438	453
31	---	---	---	460	332	416	---	---	---	525	477	491
MONTH	1070	357	479	1010	332	547	468	269	379	525	282	397

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	525	506	516	705	675	692	371	322	342	604	529	557
2	534	508	522	716	689	703	435	371	397	629	589	612
3	524	371	469	717	691	706	491	435	471	615	518	554
4	371	323	337	717	691	706	543	482	520	631	528	583
5	355	330	347	719	701	712	575	496	541	665	623	638
6	398	355	376	719	682	702	544	497	513	692	661	673
7	435	396	414	722	698	710	497	389	435	711	685	698
8	473	435	444	---	---	---	507	442	480	708	684	698
9	499	472	476	---	---	---	551	489	529	736	695	723
10	529	494	505	---	---	---	578	530	555	747	718	735
11	548	529	536	---	---	---	596	543	568	745	407	679
12	567	548	562	---	---	---	626	588	600	695	281	418
13	595	556	581	---	---	---	659	620	634	294	247	265
14	606	574	593	---	---	---	675	649	663	338	294	321
15	624	585	607	---	---	---	701	675	688	399	337	362
16	615	583	602	---	---	---	711	682	702	435	399	409
17	632	587	612	---	---	---	722	575	677	478	435	462
18	638	594	620	---	---	---	699	421	561	555	472	525
19	645	591	625	---	---	---	520	435	497	616	540	579
20	627	459	521	---	---	---	528	481	495	646	597	622
21	542	496	518	---	---	---	571	479	535	680	630	654
22	514	489	498	---	---	---	479	364	390	700	659	681
23	552	514	541	---	---	---	436	336	374	708	671	692
24	595	552	580	431	384	396	463	436	451	711	679	699
25	613	577	596	443	221	359	522	463	503	710	684	700
26	662	610	633	221	183	196	578	508	538	732	702	715
27	669	643	660	205	183	196	625	562	588	735	696	719
28	686	655	672	240	205	218	645	612	628	724	691	708
29	699	669	685	255	231	243	672	576	641	728	674	709
30	701	668	686	290	255	274	576	514	527	713	526	621
31	---	---	---	323	290	304	564	528	553	---	---	---
MONTH	701	323	544	---	---	---	722	322	535	747	247	600

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT LEFT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

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

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT LEFT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

WATER TEMPERATURE (DEG. C), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

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

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT RIGHT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

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

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT RIGHT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

OXYGEN DISSOLVED (MG/L), AT LEFT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.9	8.7	9.3	9.4	8.8	9.0	---	---	---	14.1	13.3	13.8
2	9.7	8.7	9.2	9.5	9.2	9.3	---	---	---	13.7	13.0	13.2
3	9.4	8.7	8.9	9.8	9.3	9.5	---	---	---	13.5	12.5	13.0
4	9.7	8.8	9.3	10.3	9.8	10.0	---	---	---	13.5	13.1	13.3
5	10.5	9.3	10.0	10.3	10.1	10.2	---	---	---	13.1	12.3	12.6
6	10.9	9.7	10.4	10.1	9.7	9.9	---	---	---	12.9	12.0	12.4
7	11.1	9.6	10.5	10.0	9.5	9.6	12.2	12.0	12.1	13.1	12.4	12.7
8	10.5	8.6	9.6	9.7	8.7	9.1	12.2	12.0	12.1	13.8	12.9	13.3
9	9.4	8.6	9.0	9.2	8.3	8.7	12.3	12.0	12.2	13.7	13.0	13.2
10	9.4	9.0	9.2	9.9	9.2	9.6	12.5	12.3	12.4	13.2	12.7	12.9
11	10.0	9.3	9.6	10.3	9.6	9.9	12.3	12.1	12.2	13.7	12.7	13.1
12	10.2	9.8	10.0	11.0	10.2	10.5	12.2	12.1	12.2	14.0	13.6	13.8
13	10.1	9.7	9.9	11.2	10.7	10.9	12.2	12.1	12.2	14.1	13.8	13.9
14	9.9	9.3	9.5	11.2	10.9	11.0	12.4	12.1	12.2	13.9	13.6	13.8
15	9.5	9.1	9.3	11.9	11.0	11.4	12.5	12.3	12.4	13.9	13.4	13.6
16	9.7	9.4	9.5	12.6	11.6	11.9	12.3	11.9	12.2	13.7	12.6	13.1
17	9.7	9.1	9.4	12.1	11.6	11.9	11.9	11.5	11.7	14.4	12.7	13.5
18	9.6	8.5	9.0	12.0	11.3	11.6	12.9	11.4	11.8	14.4	13.9	14.1
19	8.8	8.4	8.6	11.3	10.7	11.1	12.9	12.2	12.4	14.3	13.8	14.1
20	---	---	---	11.8	10.9	11.3	13.5	11.9	12.8	14.1	13.4	13.6
21	---	---	---	12.0	11.2	11.7	14.1	13.3	13.7	14.0	13.4	13.7
22	---	---	---	12.1	11.3	11.7	13.9	13.4	13.7	14.1	13.5	13.7
23	---	---	---	12.3	11.3	11.9	13.7	13.2	13.4	13.7	12.8	13.1
24	---	---	---	12.3	11.4	11.8	13.3	12.5	12.9	13.5	12.9	13.2
25	8.4	7.6	8.1	12.8	11.3	12.1	13.8	12.3	13.0	13.6	13.0	13.2
26	8.5	7.6	8.1	12.6	10.7	11.3	14.0	13.4	13.8	14.2	13.2	13.8
27	8.5	7.3	8.1	12.5	11.4	12.1	13.7	13.1	13.4	14.3	14.0	14.2
28	8.5	7.5	8.0	13.1	12.5	12.8	13.3	13.0	13.1	14.0	13.2	13.4
29	8.8	8.1	8.5	13.1	12.8	12.9	13.0	12.5	12.6	14.3	13.4	14.0
30	8.9	8.3	8.6	13.0	12.7	12.9	13.5	12.4	12.9	14.1	13.7	13.9
31	8.9	8.3	8.7	---	---	---	13.3	12.7	12.9	14.0	13.1	13.4
MONTH	11.1	7.3	9.2	13.1	8.3	10.9	14.1	11.4	12.7	14.4	12.0	13.4

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT LEFT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.5	12.7	13.0	13.6	11.2	11.7	---	---	---	10.8	9.0	9.9
2	14.0	12.6	13.2	12.4	10.8	11.4	---	---	---	11.4	8.8	10.1
3	13.9	12.8	13.2	12.5	11.1	11.8	---	---	---	10.7	8.8	9.2
4	13.7	12.7	13.2	13.0	11.3	12.0	12.5	11.3	11.9	10.3	9.0	9.6
5	13.4	12.4	12.7	13.0	11.6	12.3	12.7	11.3	11.9	10.7	9.6	10.1
6	13.4	12.4	12.9	13.0	11.5	12.2	11.9	10.8	11.5	10.1	9.3	9.6
7	13.7	12.5	13.1	12.7	11.4	11.9	11.1	10.0	10.5	10.6	9.4	10.0
8	13.3	12.4	12.9	12.8	11.4	12.0	---	---	---	10.8	9.6	10.1
9	13.9	12.5	13.2	13.8	11.4	12.6	---	---	---	10.2	9.2	9.6
10	14.0	12.6	13.3	13.7	11.9	12.8	---	---	---	10.2	9.3	9.7
11	14.1	12.6	13.4	13.3	11.5	12.4	13.7	11.1	12.3	10.4	9.2	9.8
12	13.9	12.7	13.4	13.7	11.2	12.4	12.4	10.8	11.6	10.1	9.0	9.6
13	14.9	13.0	13.8	14.7	12.3	13.4	12.2	10.4	11.2	9.6	8.6	9.0
14	14.5	12.9	13.3	14.4	11.6	12.2	13.5	10.3	11.8	10.2	9.1	9.7
15	13.7	12.2	12.9	13.3	11.5	12.2	13.9	11.0	12.3	10.1	8.9	9.5
16	14.8	12.7	13.7	13.7	12.4	13.0	13.2	10.4	11.8	10.3	8.6	9.4
17	15.1	12.7	13.9	13.5	12.6	13.1	12.0	10.0	10.8	10.3	9.3	9.7
18	14.5	12.8	13.7	13.6	12.0	12.7	11.3	9.6	10.5	10.6	9.4	10.0
19	14.2	12.1	13.0	13.4	12.0	12.7	12.9	10.7	11.7	10.6	9.1	9.7
20	14.8	11.5	13.1	13.1	11.7	12.3	13.5	10.9	12.1	9.9	7.6	8.8
21	14.4	12.0	13.1	13.3	11.6	12.4	13.1	10.6	11.9	10.2	8.2	9.3
22	13.2	11.4	12.4	12.9	11.2	12.1	12.7	10.3	11.6	10.2	8.8	9.6
23	14.2	11.3	12.7	13.5	11.0	12.2	12.1	9.9	11.0	10.2	9.0	9.7
24	14.2	11.9	13.1	14.2	11.6	12.8	11.8	9.7	10.8	10.1	8.9	9.6
25	14.3	11.8	13.1	14.1	12.0	12.9	12.3	10.2	11.4	10.0	7.8	8.5
26	14.4	12.3	13.4	13.6	11.3	12.3	12.4	10.1	11.4	9.1	7.6	8.3
27	14.4	12.0	13.0	14.6	12.4	13.5	12.2	9.8	11.2	9.1	7.9	8.6
28	13.6	11.2	12.5	14.0	11.5	12.8	12.0	9.0	9.9	9.2	8.3	8.8
29	---	---	---	13.6	11.0	11.9	11.7	9.5	10.5	9.0	8.5	8.7
30	---	---	---	13.4	10.4	11.8	11.8	9.3	10.5	8.7	7.8	8.4
31	---	---	---	13.2	9.8	10.8	---	---	---	8.8	7.8	8.4
MONTH	15.1	11.2	13.2	14.7	9.8	12.3	13.9	9.0	11.3	11.4	7.6	9.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.6	7.3	8.2	7.8	5.4	6.5	9.0	6.3	7.5	---	---	---
2	7.6	6.9	7.3	7.1	5.8	6.5	9.2	6.7	8.0	---	---	---
3	8.6	7.1	7.8	7.2	5.5	6.3	10.2	8.0	9.0	---	---	---
4	9.1	8.4	8.7	8.1	5.6	6.8	9.1	6.7	8.0	10.4	7.0	8.5
5	9.1	8.6	8.8	8.3	5.8	7.0	9.3	5.4	7.2	10.4	7.0	8.6
6	8.9	8.3	8.6	8.5	6.2	7.2	8.5	6.0	7.3	11.2	7.8	9.3
7	8.8	8.3	8.5	9.1	6.7	7.7	9.6	6.9	8.1	11.6	8.2	9.8
8	10.1	8.4	9.1	---	---	---	9.8	8.1	8.8	11.4	8.5	10.0
9	10.4	8.6	9.3	---	---	---	10.2	8.1	8.9	10.6	8.5	9.5
10	10.2	8.3	9.1	---	---	---	10.5	7.5	9.0	9.5	7.9	8.6
11	10.9	6.4	8.3	---	---	---	9.9	7.8	8.8	8.6	7.1	7.8
12	9.0	6.1	7.2	---	---	---	10.2	7.3	8.6	8.7	7.6	8.1
13	7.9	6.3	7.0	---	---	---	8.0	6.5	7.3	9.0	7.6	8.3
14	9.3	6.4	7.7	---	---	---	9.9	6.4	7.8	8.9	7.8	8.4
15	11.2	7.8	9.2	---	---	---	10.1	7.4	8.7	8.8	7.7	8.2
16	10.9	7.9	9.4	---	---	---	11.5	7.8	9.4	8.9	7.7	8.1
17	11.3	9.0	10.0	---	---	---	9.6	6.5	7.8	9.4	6.3	8.2
18	9.1	7.0	8.3	---	---	---	7.9	5.8	7.0	9.5	6.0	7.4
19	7.9	6.4	7.1	---	---	---	9.8	6.1	7.8	9.8	6.1	7.6
20	7.5	5.8	6.6	---	---	---	9.0	6.7	7.5	7.9	6.0	6.6
21	8.4	6.6	7.4	---	---	---	7.9	6.6	7.1	8.6	6.3	7.2
22	9.4	6.6	7.8	---	---	---	9.3	7.2	8.2	8.4	6.5	7.6
23	11.2	7.3	8.8	---	---	---	9.6	8.2	8.8	8.4	7.4	7.7
24	9.8	7.5	8.6	8.4	6.4	7.0	9.7	7.5	8.4	8.5	7.3	8.0
25	11.7	6.9	9.1	8.1	6.2	7.2	11.5	7.7	9.4	8.9	7.6	8.3
26	---	---	---	8.3	6.9	7.6	12.9	8.2	10.3	9.2	7.9	8.6
27	11.8	8.2	9.9	7.7	6.3	6.9	13.6	8.7	11.1	10.4	8.1	9.2
28	11.8	7.3	9.4	7.5	5.9	6.5	11.3	7.3	9.1	9.6	8.4	8.8
29	12.9	7.1	10.1	7.0	5.5	6.2	---	---	---	9.4	7.9	8.5
30	10.2	6.3	8.4	7.4	5.6	6.3	---	---	---	9.1	6.9	8.3
31	---	---	---	7.9	5.8	6.7	---	---	---	---	---	---
MONTH	12.9	5.8	8.5	---	---	---	13.6	5.4	8.4	11.6	6.0	8.3

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.5	8.7	9.1	---	---	---	11.5	9.8	10.3	11.9	11.3	11.6
2	9.1	8.5	8.8	5.5	4.8	5.2	12.9	11.2	11.5	11.9	11.7	11.7
3	9.0	8.5	8.6	5.4	5.2	5.2	12.9	10.7	11.6	12.5	11.8	12.1
4	9.2	8.5	8.9	6.8	5.3	5.9	11.3	9.2	10.2	12.7	12.2	12.4
5	10.1	8.8	9.5	7.9	6.6	7.1	9.5	8.4	8.8	12.5	12.1	12.2
6	10.7	9.4	10.1	9.9	7.9	8.8	11.1	8.6	9.9	12.3	11.9	12.1
7	10.7	9.4	10.1	9.8	9.1	9.3	11.1	9.9	10.5	12.2	11.8	12.0
8	10.2	8.8	9.5	9.6	8.8	9.0	11.3	10.4	10.9	13.0	12.1	12.5
9	9.4	8.7	9.0	9.1	8.4	8.8	10.7	9.6	10.1	13.0	12.4	12.6
10	9.1	8.3	8.9	9.3	8.7	9.1	9.9	9.5	9.7	12.6	12.3	12.5
11	8.3	7.1	7.6	8.7	8.2	8.3	9.7	9.6	9.6	12.5	12.1	12.3
12	7.3	7.0	7.1	10.2	8.3	9.0	10.1	9.5	9.7	13.0	12.3	12.7
13	7.4	7.2	7.4	10.8	8.9	9.6	10.8	9.8	10.2	13.1	12.8	12.9
14	7.4	7.2	7.3	10.3	9.9	10.1	12.0	10.2	11.3	13.0	12.7	12.9
15	7.4	7.1	7.2	11.9	10.2	10.9	12.2	11.4	11.8	13.2	12.7	13.0
16	8.5	7.4	8.0	12.2	11.5	11.8	11.6	10.4	11.1	13.1	12.7	12.9
17	8.8	8.4	8.6	12.2	11.8	12.0	10.7	9.7	10.1	12.7	12.3	12.5
18	9.1	8.2	8.6	12.1	11.6	11.8	10.4	9.3	9.7	---	---	---
19	8.9	8.3	8.6	11.7	11.0	11.3	10.6	9.9	10.2	---	---	---
20	9.2	8.6	9.0	11.9	11.1	11.5	11.4	9.7	10.5	---	---	---
21	9.4	6.6	8.3	12.3	11.5	11.9	11.8	10.8	11.3	---	---	---
22	7.5	5.2	6.4	12.4	11.7	12.0	11.6	11.2	11.3	12.6	11.4	11.8
23	---	---	---	12.5	11.7	12.1	11.4	11.0	11.2	12.9	11.9	12.2
24	---	---	---	12.5	11.8	12.1	11.4	10.8	11.0	12.5	11.7	12.1
25	3.8	3.7	3.7	12.7	11.7	12.2	12.7	11.4	12.1	13.4	12.3	13.0
26	---	---	---	12.7	10.9	11.5	12.7	12.4	12.6	13.2	12.8	13.0
27	---	---	---	12.2	11.5	11.9	12.6	11.8	12.1	12.8	12.1	12.4
28	---	---	---	12.0	10.1	11.1	12.0	11.6	11.7	12.1	11.8	12.0
29	---	---	---	10.2	9.8	9.9	11.7	11.2	11.4	11.9	11.3	11.5
30	---	---	---	9.9	9.8	9.9	11.9	11.2	11.5	---	---	---
31	---	---	---	---	---	---	11.9	11.3	11.5	11.2	10.8	10.9
MONTH	---	---	---	12.7	4.8	10.0	12.9	8.4	10.8	13.4	10.8	12.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	10.8	10.6	10.7	13.9	11.2	12.0	12.2	10.5	11.5	9.1	8.3	8.7
2	10.8	10.6	10.7	12.0	10.7	11.4	12.6	11.7	12.2	9.6	8.1	8.8
3	10.9	10.7	10.8	12.2	10.7	11.4	11.8	11.0	11.5	9.3	8.4	8.8
4	11.1	10.8	10.9	12.7	10.8	11.8	11.3	10.4	10.9	10.2	9.0	9.5
5	12.2	11.1	11.6	12.9	11.5	12.3	11.5	10.0	10.7	10.5	9.4	9.9
6	12.6	11.9	12.3	12.8	11.5	12.3	11.4	9.9	10.6	9.8	8.7	9.0
7	12.0	11.6	11.7	12.8	11.5	12.2	11.3	9.5	10.4	10.3	8.7	9.4
8	12.4	11.4	11.8	12.9	12.0	12.5	11.4	9.2	10.2	9.4	8.6	9.0
9	12.6	11.4	12.3	13.6	11.9	12.7	11.6	9.5	10.5	9.2	8.7	8.8
10	12.5	11.9	12.2	14.2	12.1	13.1	12.3	10.4	11.3	9.3	8.5	8.8
11	12.9	12.1	12.5	14.2	12.1	12.9	13.1	11.2	12.2	9.5	8.6	9.0
12	12.9	11.9	12.4	14.3	11.8	12.9	12.6	11.2	11.7	9.1	8.4	8.8
13	12.9	11.8	12.4	14.2	12.4	13.4	12.5	10.6	11.4	8.6	7.8	8.2
14	12.8	12.1	12.5	13.9	12.3	12.9	12.9	10.2	11.5	9.1	7.8	8.5
15	12.6	11.9	12.2	13.2	12.0	12.5	11.6	10.5	11.1	9.5	8.1	8.7
16	12.7	11.9	12.3	12.6	11.9	12.3	11.6	10.5	11.0	9.3	8.0	8.6
17	12.8	12.2	12.5	11.9	11.4	11.6	11.0	10.0	10.5	9.2	8.1	8.7
18	12.9	12.4	12.6	11.5	11.2	11.3	10.7	9.4	10.0	10.1	8.5	9.2
19	12.8	12.2	12.5	11.6	11.2	11.4	12.6	10.1	11.2	10.1	8.7	9.3
20	13.4	12.0	12.6	11.5	11.3	11.4	13.3	10.6	11.9	10.0	7.4	8.2
21	13.3	12.1	12.8	11.7	11.1	11.4	13.1	10.5	11.9	8.0	6.5	7.3
22	13.9	11.8	12.8	11.8	11.2	11.6	12.9	10.2	11.7	8.4	7.2	7.8
23	14.1	11.1	12.6	---	---	---	12.2	9.7	11.1	8.8	7.7	8.3
24	14.3	12.1	13.3	---	---	---	11.7	9.5	10.6	8.7	7.8	8.3
25	14.0	11.8	13.0	---	---	---	12.2	9.5	10.8	8.6	7.2	7.7
26	14.7	12.1	13.4	---	---	---	12.7	9.7	11.2	7.2	6.7	6.9
27	---	---	---	13.3	11.0	12.3	12.6	9.7	11.3	7.3	6.3	6.8
28	---	---	---	12.6	10.8	11.7	12.6	9.0	10.1	7.6	6.7	7.2
29	---	---	---	11.7	10.3	11.0	12.0	9.5	10.5	7.7	7.1	7.4
30	---	---	---	11.6	9.5	10.7	10.7	8.8	9.6	7.4	6.8	7.1
31	---	---	---	11.2	9.2	10.0	---	---	---	7.7	6.8	7.2
MONTH	14.7	10.6	12.2	14.3	9.2	12.0	13.3	8.8	11.0	10.5	6.3	8.4

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.1	6.4	6.8	11.9	6.8	8.7	5.8	4.9	5.3	10.5	7.3	8.7
2	6.7	6.2	6.5	9.8	7.6	8.6	7.5	4.9	6.0	9.0	6.7	7.7
3	---	---	---	9.0	6.4	7.4	8.5	5.3	6.7	9.7	6.2	7.8
4	---	---	---	10.0	6.5	8.0	7.6	5.3	5.8	10.7	7.2	8.7
5	---	---	---	12.3	7.5	9.2	6.7	5.2	5.7	10.9	7.9	9.2
6	---	---	---	12.9	8.7	10.4	6.5	5.1	5.8	12.0	8.3	9.9
7	---	---	---	14.8	8.6	11.4	7.7	5.0	6.2	12.0	8.7	10.3
8	---	---	---	---	---	---	7.7	5.8	6.5	11.5	8.8	10.2
9	---	---	---	---	---	---	8.8	6.0	7.3	10.9	8.7	9.9
10	---	---	---	---	---	---	10.4	6.9	8.6	9.9	8.4	9.1
11	---	---	---	---	---	---	14.8	7.8	10.7	8.8	7.3	7.9
12	---	---	---	---	---	---	12.9	8.3	10.5	7.8	6.4	7.2
13	8.0	6.1	6.9	---	---	---	9.8	7.1	8.4	6.4	5.3	5.7
14	8.9	6.1	7.5	---	---	---	9.8	6.1	7.8	5.7	5.2	5.4
15	11.3	7.5	9.1	---	---	---	11.3	6.8	8.9	6.4	5.4	5.9
16	12.4	7.8	9.9	---	---	---	12.7	7.6	10.0	7.3	6.1	6.6
17	12.8	9.6	11.2	---	---	---	11.4	6.7	8.5	7.9	6.3	7.1
18	9.6	7.4	8.6	---	---	---	7.2	5.3	6.5	8.4	6.3	7.1
19	8.7	7.1	7.7	---	---	---	8.3	5.6	6.9	8.5	6.2	7.2
20	7.8	5.6	6.7	---	---	---	7.7	6.3	6.8	7.9	6.2	6.7
21	8.5	6.8	7.5	---	---	---	6.4	5.7	6.1	8.3	6.4	7.1
22	9.5	6.7	7.8	---	---	---	6.6	6.2	6.4	8.5	6.5	7.5
23	---	---	---	---	---	---	6.6	5.9	6.3	8.3	7.2	7.8
24	9.5	7.5	8.5	6.3	5.7	5.9	7.6	6.1	6.8	8.9	7.5	8.3
25	---	---	---	7.3	6.0	6.8	9.6	6.6	8.1	9.3	7.7	8.6
26	---	---	---	7.3	6.1	6.8	11.1	7.3	9.1	9.5	8.2	8.9
27	12.8	7.5	9.6	6.1	5.5	5.8	11.8	7.8	9.7	10.5	8.4	9.4
28	11.9	7.8	9.8	5.5	5.1	5.4	9.9	6.9	8.6	---	---	---
29	13.1	7.7	10.2	5.1	4.9	5.0	7.4	6.2	6.7	---	---	---
30	11.2	7.3	9.1	5.2	4.8	5.0	8.4	6.4	7.2	8.5	7.2	7.9
31	---	---	---	5.3	5.0	5.1	9.9	6.7	8.0	---	---	---
MONTH	---	---	---	---	---	---	14.8	4.9	7.5	12.0	5.2	8.0

OXYGEN DISSOLVED (MG/L), AT RIGHT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.7	6.9	7.4	5.0	3.8	4.5	9.6	9.5	9.6	11.5	10.9	11.2
2	7.7	7.5	7.6	5.6	4.8	5.2	10.9	9.5	10.4	11.7	11.4	11.6
3	7.8	7.4	7.6	5.5	5.3	5.3	10.9	7.5	9.5	11.4	11.1	11.3
4	8.0	7.6	7.8	6.2	5.4	5.8	8.3	7.6	8.0	11.2	11.0	11.1
5	8.8	7.8	8.4	6.6	6.2	6.4	8.3	8.1	8.3	11.1	10.8	11.0
6	9.6	8.5	9.0	7.3	6.6	7.0	8.8	8.2	8.6	10.8	10.7	10.7
7	10.1	9.0	9.4	7.3	7.2	7.3	8.9	8.4	8.5	11.2	10.7	11.0
8	9.5	8.7	9.1	7.2	6.6	6.9	8.9	8.8	8.9	11.8	11.2	11.5
9	8.8	7.9	8.4	6.6	5.9	6.3	9.1	8.8	8.9	11.9	11.7	11.8
10	7.9	7.0	7.4	6.7	5.7	6.0	9.4	9.1	9.3	11.9	11.7	11.7
11	7.0	6.7	6.8	7.7	6.7	7.3	9.4	9.4	9.4	12.0	11.6	11.7
12	7.2	6.7	7.0	8.1	7.7	8.0	9.4	9.2	9.3	12.3	11.7	12.0
13	7.3	7.2	7.2	8.7	8.1	8.4	9.2	9.0	9.1	12.4	12.2	12.3
14	7.2	6.9	7.1	9.3	8.7	9.1	10.2	9.0	9.6	12.6	12.3	12.4
15	6.9	6.8	6.9	9.8	9.3	9.5	10.3	9.4	9.8	12.8	12.4	12.6
16	7.3	6.8	7.1	10.1	9.8	10.0	9.6	9.2	9.3	12.7	12.2	12.5
17	7.5	7.2	7.4	10.3	10.1	10.2	9.2	8.9	9.0	---	---	---
18	7.5	6.9	7.2	10.2	10.0	10.1	8.9	8.5	8.7	---	---	---
19	8.5	6.8	7.5	10.0	9.6	9.8	8.9	8.5	8.7	---	---	---
20	8.7	6.3	8.2	9.6	9.4	9.5	9.1	8.5	8.8	12.0	11.4	11.7
21	6.8	3.0	4.3	9.7	9.4	9.6	10.9	8.9	10.2	---	---	---
22	4.1	3.5	3.9	9.9	9.7	9.8	11.0	10.9	11.0	---	---	---
23	4.1	3.8	3.9	10.0	9.7	9.9	11.1	10.9	11.0	11.6	11.3	11.5
24	3.8	3.6	3.7	10.0	9.7	9.9	11.0	10.4	10.6	12.5	11.3	11.8
25	3.7	3.6	3.7	10.0	9.7	9.9	10.6	10.3	10.4	12.4	12.0	12.2
26	3.8	3.7	3.8	10.3	9.2	9.6	11.2	10.6	10.9	12.4	12.2	12.3
27	4.0	3.8	3.9	9.2	8.6	8.9	11.3	11.2	11.2	---	---	---
28	3.8	3.3	3.5	9.4	9.2	9.4	11.2	11.1	11.1	12.1	11.5	11.7
29	3.3	2.9	3.1	9.4	9.3	9.3	11.1	10.7	10.9	---	---	---
30	3.3	3.0	3.1	9.5	9.4	9.5	10.7	10.6	10.6	---	---	---
31	3.8	3.3	3.5	---	---	---	10.9	10.6	10.7	11.2	10.8	10.9
MONTH	10.1	2.9	6.3	10.3	3.8	8.3	11.3	7.5	9.7	---	---	---

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT RIGHT INTAKE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.8	10.6	10.7	12.8	10.8	11.6	11.3	9.8	10.6	8.6	7.7	8.2
2	11.0	10.7	10.8	11.8	10.3	11.0	11.3	9.8	10.5	8.6	7.7	8.2
3	11.0	10.9	11.0	11.6	10.1	10.8	9.8	9.1	9.3	8.5	7.5	8.1
4	11.3	11.0	11.2	12.2	10.3	11.3	9.2	8.4	8.8	7.7	7.1	7.4
5	11.4	11.2	11.3	12.6	11.1	11.8	9.1	8.0	8.6	7.9	7.5	7.8
6	11.5	11.4	11.4	12.4	11.1	11.7	9.1	7.9	8.5	7.8	7.2	7.4
7	11.7	11.5	11.6	12.1	11.0	11.7	9.7	7.4	8.5	8.1	7.0	7.4
8	11.7	11.5	11.5	12.3	11.6	12.0	10.6	7.7	9.0	8.6	7.9	8.2
9	11.9	11.5	11.7	12.7	11.6	12.1	11.5	8.8	10.0	8.5	7.9	8.2
10	12.1	11.9	12.0	13.0	11.9	12.5	12.0	10.3	11.1	8.2	7.6	7.9
11	12.3	12.0	12.2	13.0	11.9	12.4	12.1	11.3	11.7	8.6	8.0	8.3
12	12.5	12.0	12.2	12.8	11.3	12.0	11.7	10.6	11.4	8.7	8.0	8.3
13	12.8	11.9	12.4	13.7	12.0	12.8	10.6	9.9	10.3	8.0	7.0	7.6
14	12.7	12.0	12.3	13.3	12.0	12.7	10.4	9.9	10.1	7.3	6.6	7.0
15	12.4	11.7	12.1	12.0	11.2	11.5	10.6	10.0	10.4	7.3	6.7	7.0
16	12.4	11.9	12.2	11.3	11.1	11.2	10.8	10.1	10.5	7.1	6.5	6.8
17	12.7	12.1	12.4	11.3	11.1	11.2	10.5	9.3	10.1	6.9	6.4	6.6
18	12.8	12.2	12.5	11.1	10.8	10.9	9.8	9.1	9.4	7.3	6.8	7.0
19	12.7	12.1	12.4	11.2	10.7	10.9	10.6	9.1	9.9	7.4	7.1	7.2
20	12.6	11.9	12.2	11.1	10.9	11.0	11.7	10.1	10.9	7.2	6.0	6.6
21	12.5	11.6	12.0	11.4	10.8	11.1	11.9	10.6	11.2	7.1	4.9	6.1
22	12.1	11.3	11.7	11.7	11.1	11.4	11.6	10.2	10.9	7.4	6.5	7.0
23	11.9	10.7	11.4	11.9	10.9	11.4	11.2	9.6	10.3	7.7	6.7	7.2
24	12.8	11.2	12.1	12.5	11.0	11.8	10.5	8.9	9.8	7.4	6.8	7.1
25	13.2	11.5	12.4	12.9	11.3	12.1	10.6	8.8	9.8	6.9	6.3	6.5
26	13.7	11.9	12.8	12.8	11.0	11.9	11.2	9.3	10.3	6.3	6.1	6.2
27	13.5	12.2	13.0	12.1	10.8	11.4	10.6	9.1	10.0	6.8	5.9	6.3
28	13.2	11.5	12.3	11.9	10.5	11.2	10.3	8.5	9.1	7.0	6.2	6.7
29	---	---	---	11.4	9.9	10.7	8.8	7.5	8.2	6.9	6.5	6.7
30	---	---	---	11.2	9.2	10.2	8.9	8.0	8.6	6.6	6.1	6.3
31	---	---	---	10.1	9.1	9.7	---	---	---	6.7	6.0	6.3
MONTH	13.7	10.6	11.9	13.7	9.1	11.5	12.1	7.4	9.9	8.7	4.9	7.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.2	5.7	6.0	14.5	9.3	11.7	5.6	4.6	5.1	7.3	5.8	6.4
2	5.8	5.6	5.7	12.9	9.8	11.2	6.0	4.8	5.3	7.1	5.8	6.3
3	7.0	5.8	6.4	12.0	8.2	9.6	6.9	5.2	5.8	8.1	5.3	6.6
4	8.0	7.0	7.6	14.4	7.7	10.3	6.0	5.2	5.5	12.4	7.3	9.5
5	7.6	6.9	7.4	16.6	8.6	12.2	6.9	5.2	5.8	13.1	8.7	10.6
6	7.2	6.7	7.0	16.2	10.3	13.1	6.8	5.2	5.9	13.8	9.3	11.2
7	6.9	6.4	6.6	17.3	10.5	13.8	6.8	5.1	5.9	12.6	9.1	10.8
8	7.1	6.5	6.8	---	---	---	7.6	5.9	6.5	11.3	8.6	10.0
9	7.4	6.8	7.0	---	---	---	8.8	6.2	7.3	11.2	8.4	9.9
10	7.3	6.4	6.8	---	---	---	12.4	6.7	9.1	10.3	8.7	9.4
11	7.3	6.0	6.6	---	---	---	15.0	8.3	11.2	8.8	7.3	7.9
12	8.3	5.7	6.7	---	---	---	13.6	8.5	10.8	7.4	5.5	6.2
13	7.8	5.8	6.7	---	---	---	9.9	7.8	8.6	5.5	4.7	5.1
14	9.0	5.8	7.4	---	---	---	11.0	6.4	8.5	5.2	4.7	5.0
15	11.5	7.3	9.1	---	---	---	12.1	7.0	9.2	5.5	4.9	5.2
16	12.2	7.7	9.7	---	---	---	13.8	7.8	10.2	5.9	5.4	5.7
17	11.7	9.2	10.4	---	---	---	10.6	7.0	8.5	6.3	5.8	5.9
18	9.2	7.1	8.3	---	---	---	7.3	4.8	5.5	6.9	5.8	6.2
19	8.6	6.8	7.5	---	---	---	6.4	4.9	5.7	7.4	6.1	6.6
20	7.6	5.2	6.4	---	---	---	6.3	5.7	6.0	7.8	6.0	6.6
21	8.4	6.6	7.4	---	---	---	6.2	5.6	5.8	8.1	6.2	7.0
22	9.6	6.5	7.7	---	---	---	6.3	5.7	6.1	8.3	6.4	7.2
23	11.2	7.0	8.7	---	---	---	6.2	5.3	5.6	8.3	6.8	7.5
24	9.2	7.2	8.1	6.1	5.5	5.7	6.9	6.0	6.5	9.2	7.4	8.2
25	12.1	6.9	9.0	7.0	5.7	6.5	7.6	6.5	7.0	9.4	7.5	8.5
26	---	---	---	6.9	5.7	6.4	8.6	6.8	7.6	9.9	7.9	8.9
27	14.5	8.1	10.6	5.7	5.1	5.4	8.7	7.1	7.9	10.4	8.3	9.3
28	14.9	8.6	11.2	5.1	4.7	5.0	7.7	6.3	7.2	9.8	7.9	8.8
29	14.6	8.7	11.2	4.8	4.5	4.6	6.3	5.6	5.9	9.3	7.7	8.5
30	16.4	8.4	11.5	4.9	4.5	4.7	6.7	5.7	6.1	8.5	7.0	7.6
31	---	---	---	5.0	4.7	4.8	7.2	6.1	6.5	---	---	---
MONTH	16.4	5.2	8.0	---	---	---	15.0	4.6	7.1	13.8	4.7	7.8

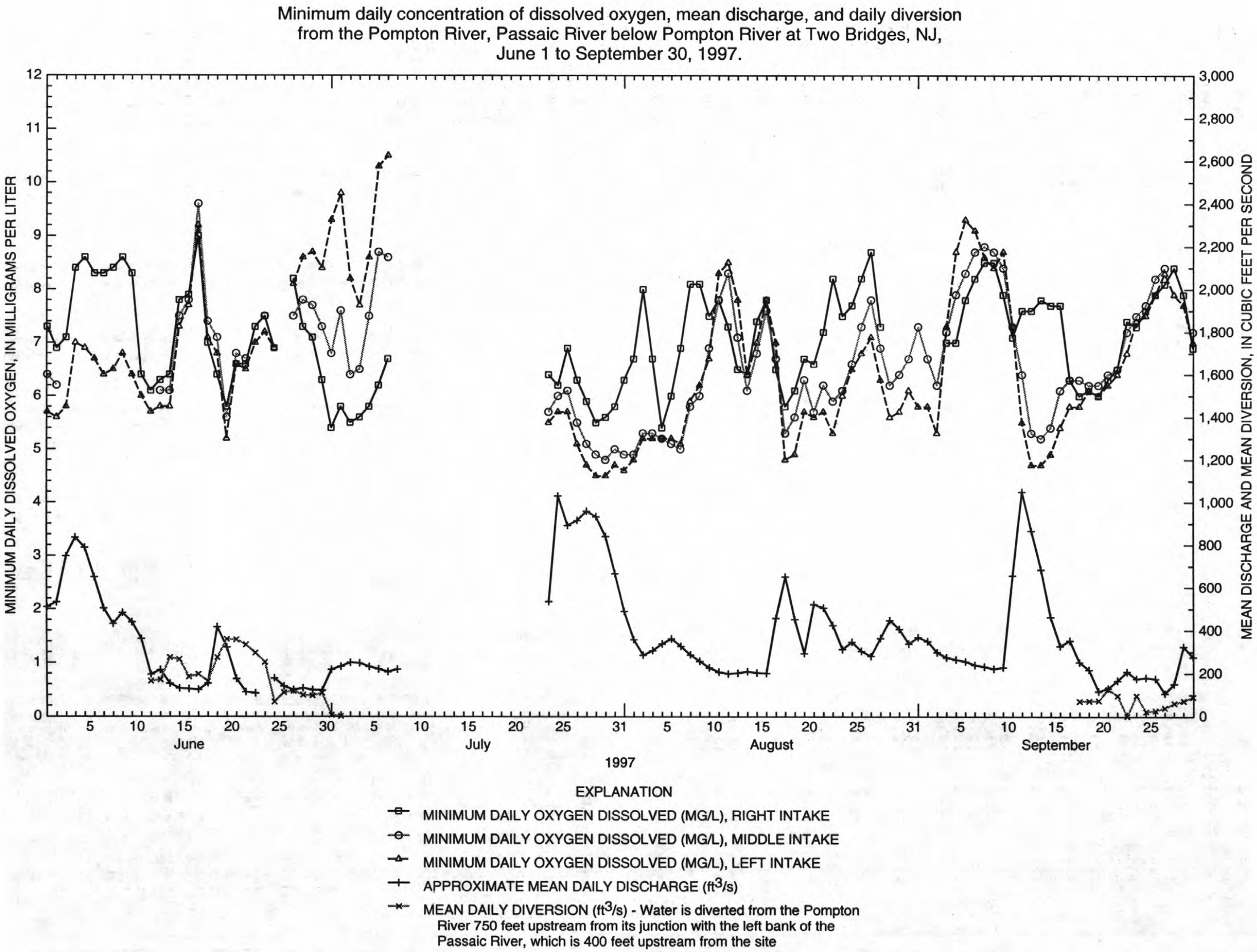


Figure 13. Minimum daily dissolved oxygen, mean discharge, and daily diversion at Passaic River belowPompton River at Two Bridges.

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

Cross section of specific conductance, water temperature, and dissolved oxygen concentration measurements (distance from left bank looking downstream); and recorded hourly specific conductance, water temperature, and dissolved oxygen concentration measurements from the water-quality monitor at the station, Passaic River below Pompton River at Two Bridges, NJ.

June 20, 1997

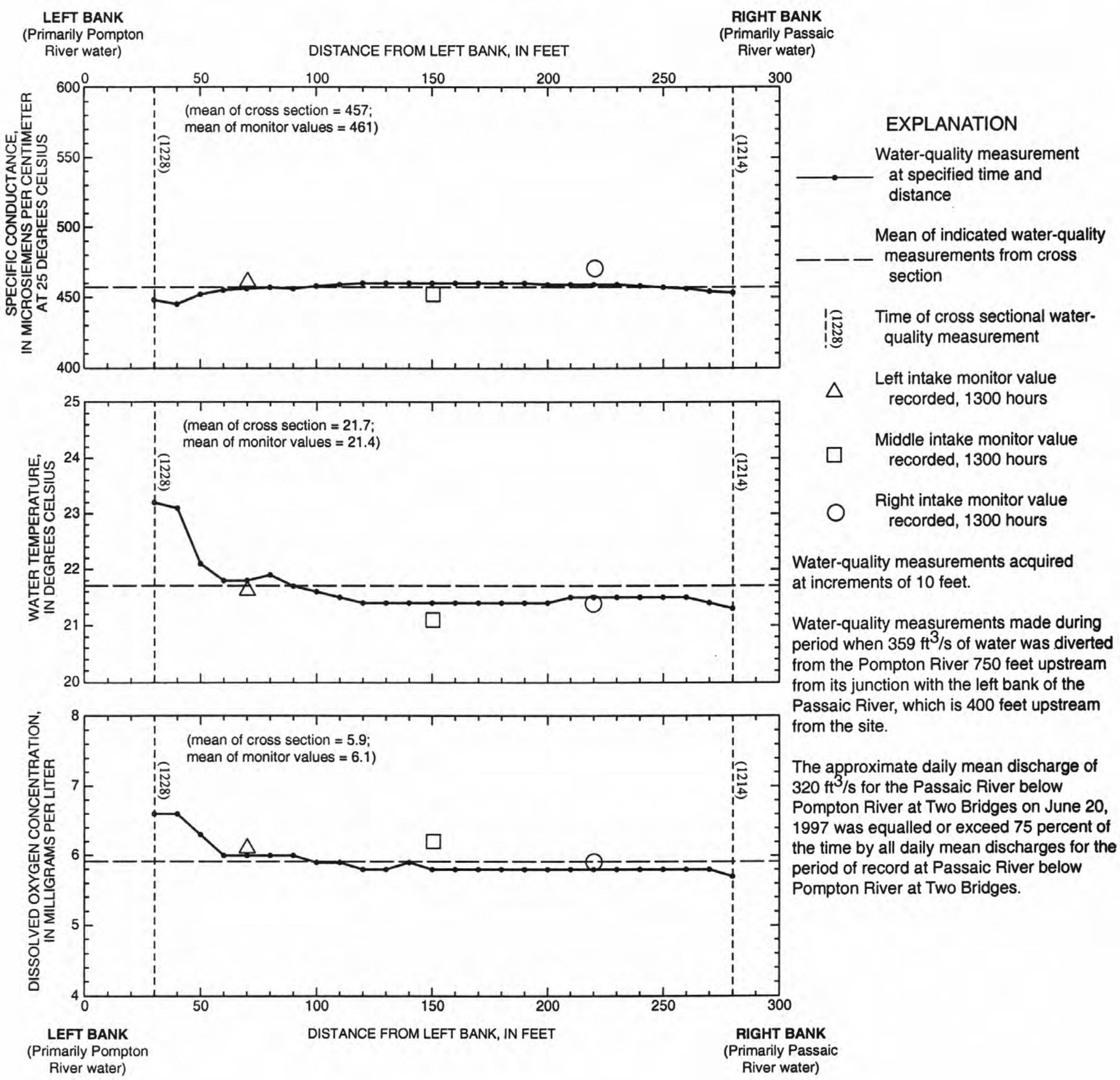


Figure 14. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River at Two Bridges, June 20, 1997.

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

Cross section of specific conductance, water temperature, and dissolved oxygen concentration measurements (distance from left bank looking downstream); and recorded hourly specific conductance, water temperature, and dissolved oxygen concentration measurements from the water-quality monitor at the station, Passaic River below Pompton River at Two Bridges, NJ.

August 12, 1997

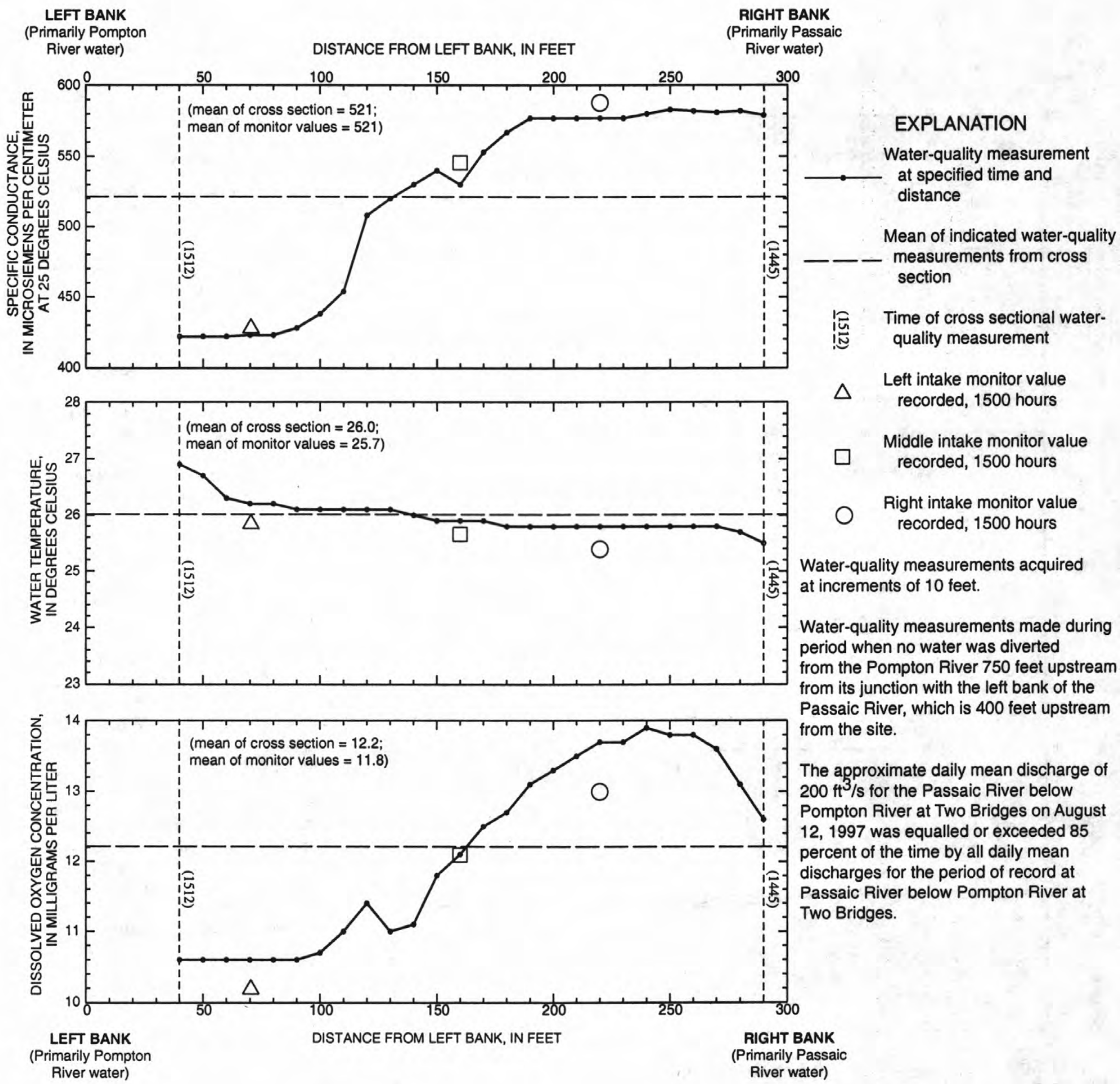


Figure 15. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River at Two Bridges, August 12, 1997.

01389130 DEEPAVAAL BROOK NEAR FAIRFIELD, NJ

LOCATION.--Lat 40°52'07", long 74°17'43", Essex County, Hydrologic Unit 02030103, on right bank at the end of Fairfield Place, 2.4 mi upstream from Passaic River, and 1.6 mi southwest of Fairfield.

DRAINAGE AREA.--1.37 mi^2.

PERIOD OF RECORD.--December 1992 to September 1997 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 162.58 ft above sea level.

REMARKS.--Records good. Record is stage only and is collected in cooperation with the U.S. Army Corps of Engineers. Stage is occasionally affected by backwater from Passaic River and Green Brook.

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 8.38 ft, Oct. 19; minimum recorded, 3.64 ft, July 8.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 8.38 ft, Oct. 19, 1996; minimum recorded, 3.02 ft, Aug. 5, 1993.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 5-7, 1984, reached a stage of 8.5 feet, present datum, from floodmarks, affected by backwater from Passaic River, discharge not determined.

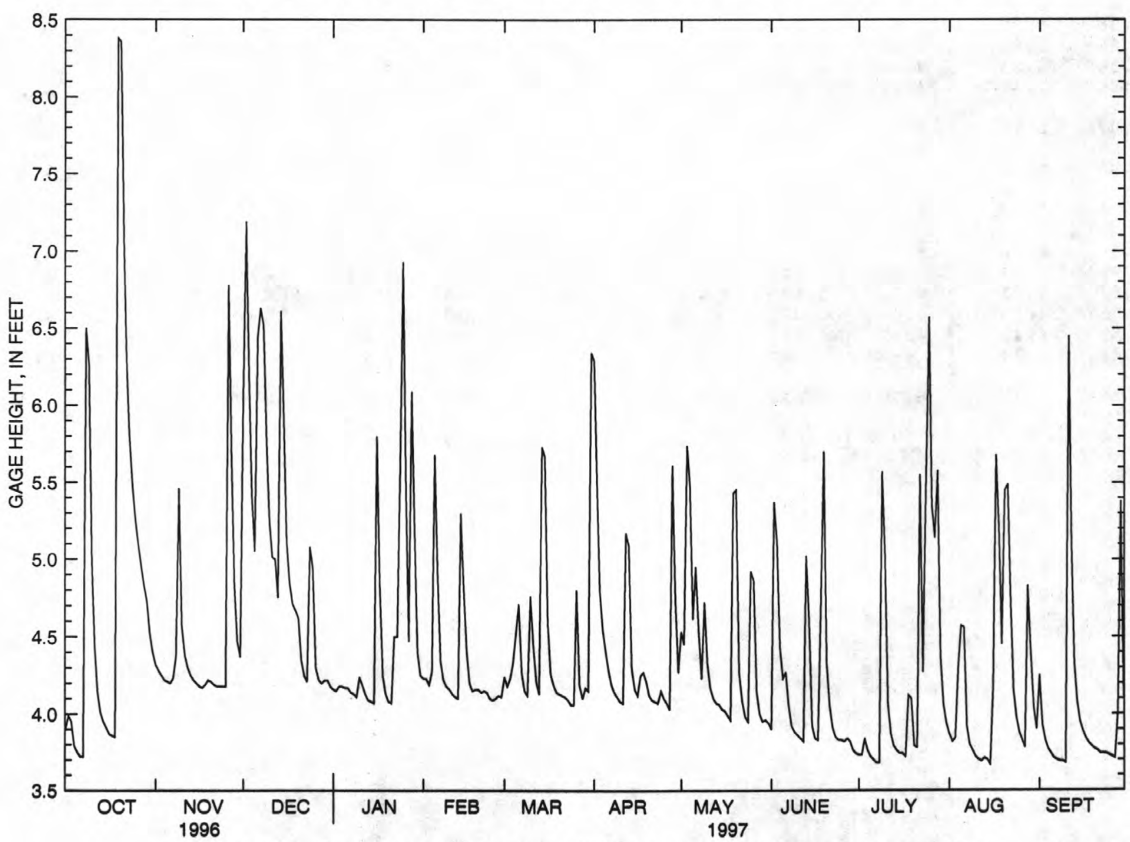
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3.90	3.82	4.32	4.28	6.07	4.35	4.16	4.13	4.23	4.20	4.24	4.06
2	3.99	3.79	4.28	4.25	7.19	5.91	4.15	4.13	4.23	4.19	4.18	4.15
3	3.95	3.79	4.25	4.22	6.18	5.41	4.18	4.15	4.19	4.19	4.23	4.11
4	3.79	3.74	4.22	4.21	5.41	5.05	4.18	4.15	4.27	4.15	4.33	4.23
5	3.75	3.72	4.21	4.20	5.05	4.83	4.17	4.15	5.68	4.27	4.52	4.26
6	3.72	3.72	4.20	4.19	6.44	4.82	4.17	4.14	4.91	4.34	4.71	4.27
7	3.72	3.71	4.23	4.20	6.63	5.50	4.14	4.13	4.34	4.22	4.27	4.15
8	6.50	3.71	4.37	4.23	6.52	5.77	4.13	4.11	4.22	4.18	4.15	4.12
9	6.26	4.79	5.46	4.33	5.77	5.25	4.11	4.10	4.18	4.16	4.12	4.09
10	5.01	4.44	4.57	4.38	5.25	4.92	4.24	4.11	4.16	4.13	4.76	4.09
11	4.44	4.14	4.38	4.30	5.01	4.78	4.19	4.13	4.13	4.11	4.44	4.21
12	4.14	4.01	4.30	4.25	5.00	4.66	4.13	4.09	4.11	4.10	4.21	4.13
13	4.01	3.95	4.25	4.22	4.75	4.56	4.09	4.08	4.10	4.08	4.13	4.10
14	3.95	3.91	4.22	4.20	6.61	4.55	4.08	4.07	5.30	4.08	5.73	4.11
15	3.91	3.87	4.20	4.18	5.92	5.12	4.07	4.06	4.81	4.41	5.67	4.59
16	3.87	3.86	4.18	4.17	5.12	4.85	5.80	4.07	4.41	4.20	4.59	4.26
17	3.86	3.85	4.17	4.17	4.85	4.71	4.84	4.25	4.20	4.15	4.26	4.19
18	3.85	3.83	4.19	4.17	4.71	4.54	4.25	4.13	4.15	4.13	4.19	4.14
19	8.38	3.83	4.22	4.19	4.67	4.53	4.13	4.08	4.16	4.14	4.14	4.12
20	8.36	7.07	4.21	4.19	4.62	4.35	4.08	4.06	4.16	4.13	4.13	4.11
21	7.07	6.29	4.19	4.18	4.35	4.25	4.07	4.04	4.14	4.12	4.12	4.10
22	6.29	5.81	4.18	4.18	4.25	4.21	4.50	4.04	4.15	4.13	4.11	4.09
23	5.81	5.48	4.18	4.18	4.21	4.20	4.50	4.19	4.14	4.10	4.09	4.06
24	5.48	5.26	4.18	4.18	5.08	4.20	5.59	4.13	4.10	4.08	4.06	4.05
25	5.26	5.10	4.18	4.18	4.94	4.30	6.93	5.45	4.09	4.07	4.06	4.05
26	5.10	4.96	6.78	4.18	4.30	4.22	5.45	4.47	4.10	4.07	4.80	4.06
27	4.96	4.83	5.68	4.84	4.22	4.20	4.47	4.28	4.12	4.10	4.19	4.10
28	4.83	4.73	4.84	4.47	4.20	4.18	6.09	4.28	4.11	4.07	4.10	4.07
29	4.73	4.52	4.47	4.37	4.22	4.18	5.20	4.40	---	---	4.17	4.06
30	4.52	4.40	4.37	4.34	4.22	4.18	4.40	4.25	---	---	4.15	4.07
31	4.40	4.32	---	---	4.18	4.16	4.25	4.20	---	---	6.34	4.06
MONTH	8.38	3.71	6.78	4.17	7.19	4.16	6.93	4.04	5.68	4.07	6.34	4.05

01389130 DEEPAVAAL BROOK NEAR FAIRFIELD, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.29	5.52	4.53	4.13	3.90	3.89	3.73	3.72	3.87	3.82	4.25	3.81
2	5.52	4.80	4.45	4.10	5.37	3.89	3.73	3.72	3.82	3.79	3.93	3.83
3	4.80	4.55	5.74	4.09	5.11	4.43	3.84	3.72	3.84	3.79	3.83	3.77
4	4.55	4.41	5.48	4.61	4.43	4.10	3.76	3.72	4.30	3.78	3.77	3.74
5	4.41	4.28	4.61	4.31	4.23	4.05	3.72	3.70	4.57	3.94	3.74	3.71
6	4.28	4.19	4.95	4.29	4.27	3.97	3.70	3.68	4.56	3.92	3.71	3.70
7	4.19	4.14	4.53	4.23	4.05	3.92	3.68	3.66	3.92	3.80	3.70	3.68
8	4.14	4.10	4.23	4.14	3.92	3.88	3.68	3.64	3.80	3.76	3.69	3.68
9	4.11	4.07	4.72	4.14	3.88	3.86	5.57	3.68	3.76	3.72	3.69	3.68
10	4.08	4.07	4.33	4.17	3.86	3.84	5.03	4.06	3.72	3.69	3.68	3.67
11	4.07	4.05	4.17	4.10	3.84	3.82	4.06	3.87	3.70	3.69	6.45	3.67
12	5.17	4.05	4.10	4.07	3.82	3.81	3.87	3.79	3.69	3.68	5.11	4.33
13	5.09	4.30	4.07	4.06	5.02	3.81	3.79	3.76	3.71	3.68	4.33	4.08
14	4.30	4.16	4.06	4.03	4.61	3.92	3.76	3.73	3.70	3.67	4.08	3.95
15	4.16	4.11	4.03	4.02	3.92	3.84	3.74	3.73	3.67	3.66	3.95	3.89
16	4.12	4.07	4.02	3.97	3.84	3.82	3.74	3.72	4.17	3.66	3.89	3.84
17	4.25	4.05	3.99	3.96	3.83	3.82	3.72	3.70	5.68	4.17	3.84	3.81
18	4.27	4.12	3.96	3.94	4.69	3.82	4.12	3.69	5.21	4.20	3.81	3.79
19	4.21	4.12	5.43	3.94	5.70	4.32	4.10	3.79	4.45	4.02	3.79	3.77
20	4.12	4.09	5.45	4.27	4.32	4.05	3.79	3.70	5.45	3.93	3.77	3.76
21	4.09	4.08	4.27	4.08	4.05	3.91	3.78	3.69	5.49	4.74	3.76	3.74
22	4.08	4.07	4.08	3.98	3.91	3.85	5.55	3.78	4.74	4.15	3.74	3.73
23	4.07	4.05	3.98	3.95	3.85	3.82	4.27	3.94	4.15	3.98	3.74	3.73
24	4.15	4.05	3.95	3.93	3.83	3.81	5.53	3.92	3.98	3.88	3.74	3.73
25	4.10	4.07	4.92	3.92	3.83	3.81	6.57	5.35	3.88	3.83	3.73	3.72
26	4.07	4.03	4.86	4.14	3.82	3.79	5.35	4.45	3.83	3.78	3.72	3.71
27	4.03	3.99	4.14	4.00	3.84	3.78	5.14	4.11	3.78	3.76	3.71	3.70
28	5.61	3.99	4.00	3.95	3.82	3.75	5.58	4.37	4.83	3.75	4.01	3.70
29	4.74	4.27	3.95	3.90	3.76	3.74	4.37	4.06	4.41	4.04	5.38	4.01
30	4.27	4.15	3.96	3.90	3.74	3.73	4.06	3.94	4.04	3.90	4.11	3.92
31	---	---	3.94	3.90	---	---	3.94	3.87	3.90	3.82	---	---
MONTH	6.29	3.99	5.74	3.90	5.70	3.73	6.57	3.64	5.68	3.66	6.45	3.67



01389130 DEEPAVAAL BROOK NEAR FAIRFIELD, NJ, MAXIMUM DAILY GAGE HEIGHT

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ

LOCATION.--Lat 40°53'05", long 74°13'35", Passaic County, Hydrologic Unit 02030103, on left bank 0.6 mi downstream from Beatties Dam in Little Falls, and 1.0 mi upstream from Peckman River.

DRAINAGE AREA.--762 mi^2. Area at site used prior to Oct. 1, 1955, 799 mi^2.

PERIOD OF RECORD.--September 1897 to current year. Monthly discharge only for September 1897, published in WSP 1302. Published as "at Paterson", September 1897 to September 1955.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 120.00 ft above sea level (levels by Passaic Valley Water Commission). Prior to Jan. 8, 1933, nonrecording gage and Jan. 8, 1933, to Sept. 30, 1955, water-stage recorder, at site 3.7 mi downstream at sea level (levels from New Jersey Geological Survey bench mark).

REMARKS.--Records good except in June and September, which are fair. Diurnal fluctuation at medium and low flow caused by hydroelectric plant at Beattie's Dam. Flow regulated by reservoirs in Rockaway, Pequannock, Wanaque, and Ramapo River subbasins (see Passaic River basin, reservoirs in). Large diversions for municipal supply from Passaic River above Beattie's Dam, and from Rockaway, Pequannock, Pompton, Ramapo, and Wanaque Rivers (see Passaic River basin, diversions and Hackensack River basin, diversions). In addition, the New Jersey-American Water Company (formerly Commonwealth Water Co.) diverts from Canoe Brook near Summit and from Passaic River (see Passaic River basin, diversions); that company, the city of East Orange, and others also divert water for municipal supply by pumping wells in the basin. Several measurements of water temperature, other than those published, were made during the year. National Weather Service rain-gage and gage-height telemetry and USGS satellite telemeters at station.

COOPERATION.--Gage-height record collected in cooperation with the Passaic Valley Water Commission.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 22	0500	*8,180	*8.16	Dec. 15	2300	6,020	6.90
Dec. 4	0030	6,550	7.23	Apr. 3	1445	4,960	6.20

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	530	1790	2040	1540	2200	788	3780	1600	427	121	496	299
2	441	1580	4320	1330	2020	800	4560	1530	554	140	294	278
3	389	1350	6100	1310	1820	817	4890	1710	891	159	210	220
4	338	1130	6410	1290	1650	899	4880	2400	1010	159	231	190
5	296	896	5760	1260	2010	962	4710	2530	978	144	271	180
6	314	728	5630	1220	2220	1130	4380	2450	785	133	300	167
7	328	674	5890	1080	2120	1250	3880	2380	588	120	256	152
8	425	692	6410	997	2000	1160	3310	2150	442	127	208	147
9	1270	1140	6440	890	1860	996	2800	1970	401	227	175	138
10	1530	1420	5900	841	1700	965	2360	1840	354	406	146	144
11	1440	1380	5170	828	1540	1090	1960	1660	260	276	130	718
12	1280	1310	4680	768	1350	1160	1730	1420	95	186	119	1260
13	1130	1180	4500	692	1190	1080	1980	1210	150	152	121	1090
14	959	998	5070	670	1140	1210	2040	1040	89	128	131	918
15	765	880	5840	822	1380	2020	1860	905	54	96	119	666
16	605	873	5940	1240	1490	2150	1690	793	69	78	118	415
17	498	804	5520	1420	1460	2090	1510	737	61	67	422	285
18	432	807	4970	1110	1360	2060	1450	665	83	60	748	178
19	1690	823	4470	1020	1280	1980	1570	675	375	134	604	143
20	4700	737	4050	991	1260	1850	1570	941	259	145	398	65
21	7160	708	3520	875	1280	1720	1430	1020	108	103	692	79
22	8090	691	3030	734	1260	1590	1260	903	51	450	726	104
23	7420	658	2650	765	1230	1440	1130	719	50	425	546	145
24	6460	637	2380	840	1140	1180	1040	573	95	505	357	116
25	5530	596	2560	2170	968	955	948	584	104	1150	271	119
26	4650	1470	2490	2270	853	1010	878	764	70	1020	220	115
27	3880	2150	2310	2210	812	1190	804	780	54	1040	190	65
28	3320	2060	2130	2740	806	1110	1270	683	58	1080	293	92
29	2870	1880	1990	2990	---	1010	1740	518	54	1050	398	274
30	2430	1770	1930	2710	---	960	1710	435	60	953	349	225
31	2080	---	1790	2460	---	1960	---	445	---	778	266	---
TOTAL	73250	33812	131890	42083	41399	40582	69120	38030	8629	11612	9805	8987
MEAN	2363	1127	4255	1358	1479	1309	2304	1227	288	375	316	300
MAX	8090	2150	6440	2990	2220	2150	4890	2530	1010	1150	748	1260
MIN	296	596	1790	670	806	788	804	435	50	60	118	65

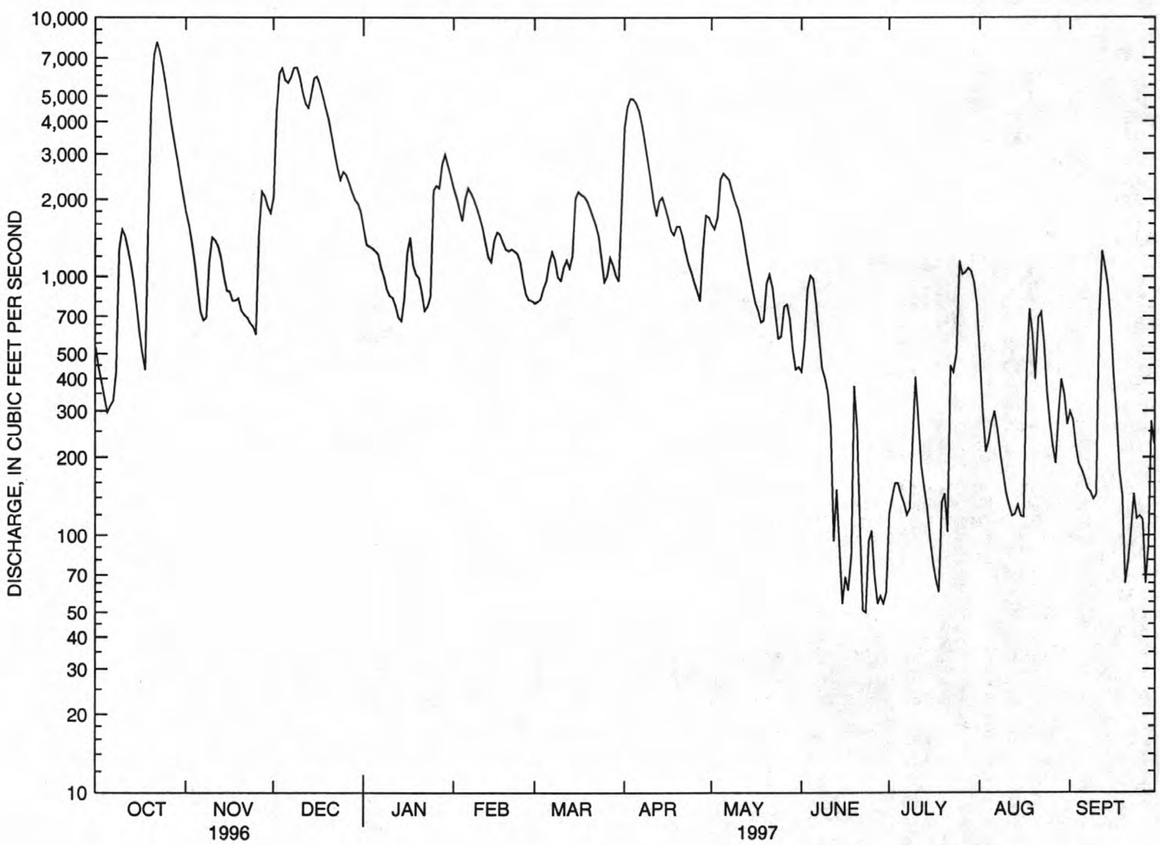
01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 1997, BY WATER YEAR (WY)

MEAN	630	949	1279	1346	1436	2365	2089	1310	763	536	542	524
MAX	5613	4757	4497	4039	3787	6755	5761	4554	4290	3124	2859	3561
(WY)	1904	1908	1903	1979	1973	1936	1983	1989	1972	1945	1942	1971
MIN	44.5	79.2	111	104	178	423	228	227	84.6	60.3	30.4	28.9
(WY)	1931	1932	1981	1981	1901	1981	1985	1965	1965	1954	1923	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1898 - 1997	
ANNUAL TOTAL	659383		509199			
ANNUAL MEAN	1802		1395		1146	
HIGHEST ANNUAL MEAN					2394	1903
LOWEST ANNUAL MEAN					269	1965
HIGHEST DAILY MEAN	9270	Jan 29	8090	Oct 22	28000	Oct 10 1903
LOWEST DAILY MEAN	56	Jun 29	50	Jun 23	.00	Jul 3 1904
ANNUAL SEVEN-DAY MINIMUM	131	Aug 31	69	Jun 22	13	Sep 19 1932
INSTANTANEOUS PEAK FLOW			8180	Oct 22	31700a	Oct 10 1903
INSTANTANEOUS PEAK STAGE			8.16	Oct 22	---	
INSTANTANEOUS LOW FLOW			37	Sep 20	.00	Jul 3 1904
10 PERCENT EXCEEDS	4530		3310		2770	
50 PERCENT EXCEEDS	1380		968		634	
90 PERCENT EXCEEDS	296		128		125	

a Present site.



01389500 PASSAIC RIVER AT LITTLE FALLS, NJ, DAILY MEAN DISCHARGE

01389880 PASSAIC RIVER AT ROUTE 46 AT ELMWOOD PARK, NJ

LOCATION.--Lat 40°53'37", long 74°07'46", Passaic County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at Elmwood Park, and 0.8 mi upstream from Dundee Dam.

DRAINAGE AREA.--803 mi^2.

PERIOD OF RECORD.--Water years 1974-81, 1991 to September 1997 (discontinued).

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
29...	1220	E2960	215	7.6	13.0	760	10.2	97	2.2	1600	920	57
JAN 1997												
15...	1052	E885	576	7.7	0.5	767	13.6	94	E1.3	350	100	130
MAR												
18...	1112	E2130	442	7.6	4.5	767	14.5	111	E1.6	<200	200	76
MAY												
19...	1205	E735	409	7.8	16.0	754	8.0	82	E1.2	3500	200	100
JUL												
30...	1120	E1030	274	7.5	23.0	766	6.3	73	2.5	1100	400	71

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
29...	15	4.7	16	2.6	40	13	29	<.1	9.5	128	115	15
JAN 1997												
15...	34	11	62	2.5	66	26	110	<.1	13	322	309	1
MAR												
18...	20	6.3	50	1.7	41	15	91	<.1	7.7	237	221	8
MAY												
19...	27	8.4	35	2.4	63	22	66	<.1	7.6	245	215	7
JUL												
30...	19	5.9	22	2.4	42	22	36	<.1	9.5	181	146	17

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
29...	.008	.37	.03	.04	.5	.33	.87	.7	.190	.14	8.3	.7
JAN 1997												
15...	.020	2.4	.04	.06	.3	.27	2.7	2.7	.240	.22	2.9	.4
MAR												
18...	.010	1.0	.04	.04	.4	.27	1.4	1.3	.08	.03	3.8	.4
MAY												
19...	.023	1.9	<.03	<.03	.4	.21	2.4	2.2	.25	.18	3.4	.6
JUL												
30...	.020	1.1	.08	.08	.8	.66	1.9	1.8	.34	.27	6.6	1.3

01390500 SADDLE RIVER AT RIDGEWOOD, NJ

LOCATION.--Lat 40°59'05", long 74°05'30", Bergen County, Hydrologic Unit 02030103, on left bank 15 ft upstream from bridge on State Highway 17 in Ridgewood and 2.8 mi upstream from Hohokus Brook.

DRAINAGE AREA.--21.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1954 to September 1974, October 1977 to current year. Operated as a maximum-stage gage water years 1975-77.

REVISED RECORDS.--WRD-NJ 1974: 1971.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 71.74 ft above sea level (levels from New Jersey Geological Survey bench mark).

REMARKS.--Records fair except for estimated daily discharges, which are poor. The flow past this station is affected by pumpage from wells by United Water New Jersey and others. Several measurements of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of July 23, 1945, reached a discharge of 6,400 ft^3/s, at site 1.6 mi upstream, drainage area, 19.1 mi^2, by slope-area measurement.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 380 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	2315	833	5.22	Dec. 7	2215	416	3.92
Nov. 26	1045	535	4.33	Dec. 14	1015	535	4.33
Dec. 2	0800	*928	*5.47	Jan. 25	0615	747	4.98
Dec. 6	0930	424	3.95	Mar. 31	1430	535	4.33

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	16	114	34	42	27	153	39	18	6.1	6.6	15
2	8.7	16	352	34	37	27	82	37	26	6.2	6.0	12
3	9.0	16	67	37	36	28	61	93	30	8.0	5.4	9.2
4	7.5	16	51	34	33	31	55	78	19	7.2	5.6	8.2
5	7.4	16	43	34	143	32	49	43	16	5.9	6.9	7.7
6	7.3	16	196	33	54	44	48	41	15	5.4	6.0	7.6
7	6.3	16	153	30	42	34	49	41	15	8.3	5.3	7.7
8	48	22	151	28	38	30	49	35	13	10	5.1	7.5
9	75	79	71	28	36	29	49	33	13	22	5.3	7.3
10	29	37	57	32	33	41	48	33	12	29	4.2	7.5
11	13	31	54	29	32	45	48	33	11	8.0	4.4	27
12	9.8	27	63	25	31	34	52	31	9.8	6.1	4.3	15
13	9.0	26	56	24	30	30	88	30	43	5.4	4.7	9.7
14	8.6	25	228	24	54	90	61	28	42	4.8	8.2	8.6
15	8.2	24	82	23	58	102	54	27	14	4.3	5.9	7.9
16	8.5	23	63	111	40	50	52	25	11	4.1	6.1	7.5
17	9.1	22	61	42	35	43	52	24	9.6	4.1	44	7.2
18	10	22	56	e30	33	41	52	24	27	4.0	85	7.2
19	231	23	61	e30	33	39	52	36	88	4.5	17	7.0
20	238	22	53	e28	32	39	51	52	16	3.6	13	7.1
21	43	22	44	24	31	39	48	28	12	3.4	43	6.9
22	23	22	42	24	33	41	47	24	28	39	21	6.8
23	17	22	42	35	30	37	46	23	17	7.8	13	9.2
24	16	22	53	28	28	34	45	21	11	28	12	7.5
25	15	22	70	279	27	34	44	32	9.6	72	10	7.4
26	15	172	43	48	26	57	41	34	8.7	14	9.9	7.7
27	15	43	41	35	27	41	39	21	11	10	9.4	6.9
28	21	28	39	147	27	36	120	19	7.8	12	29	6.8
29	19	25	44	50	---	35	58	18	6.8	9.2	15	25
30	17	23	46	37	---	36	43	18	6.3	8.3	11	8.4
31	17	---	38	35	---	269	---	18	---	7.2	9.4	---
TOTAL	970.6	896	2534	1432	1101	1495	1736	1039	566.6	367.9	431.7	286.5
MEAN	31.3	29.9	81.7	46.2	39.3	48.2	57.9	33.5	18.9	11.9	13.9	9.55
MAX	238	172	352	279	143	269	153	93	88	72	85	27
MIN	6.3	16	38	23	26	27	39	18	6.3	3.4	4.2	6.8
CFSM	1.45	1.38	3.78	2.14	1.82	2.23	2.68	1.55	.87	.55	.64	.44
IN.	1.67	1.54	4.36	2.47	1.90	2.57	2.99	1.79	.98	.63	.74	.49

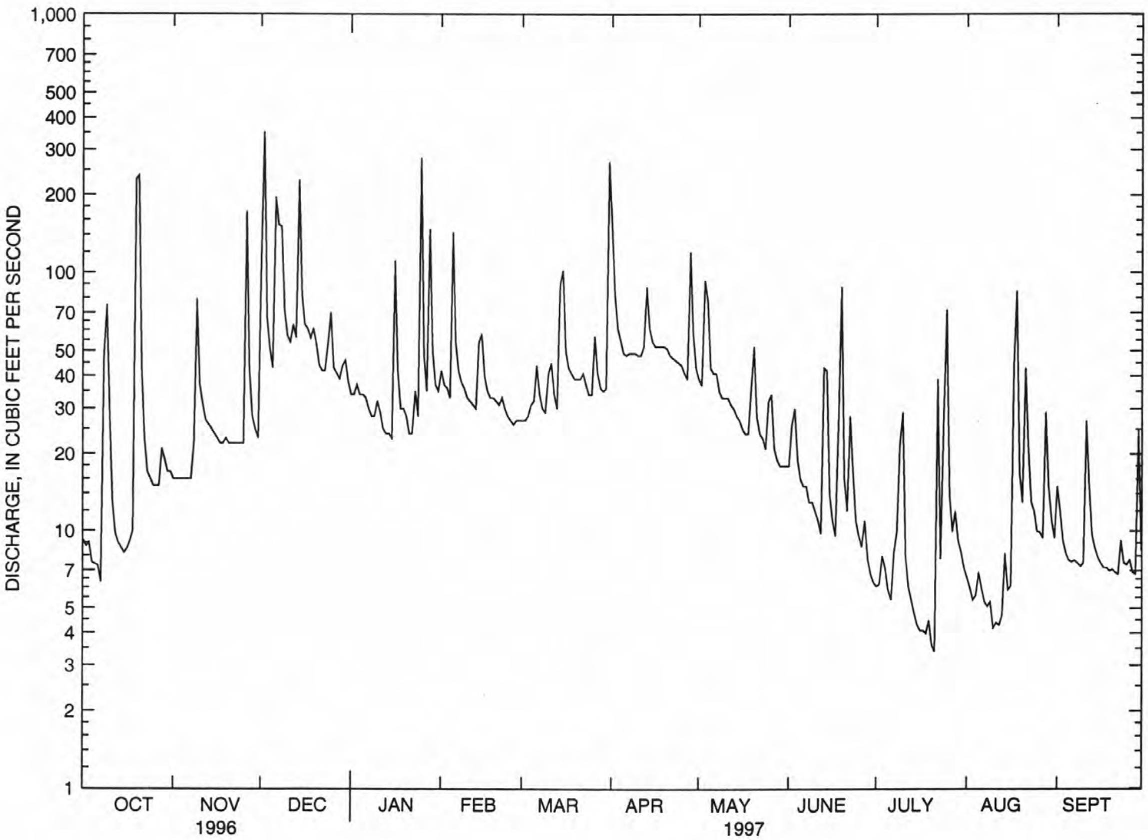
01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1997, BY WATER YEAR (WY)

MEAN	22.3	34.5	36.9	36.8	40.5	55.1	59.1	42.5	27.3	20.6	19.4	17.8
MAX	104	109	109	115	86.9	104	153	118	121	87.6	77.1	70.6
(WY)	1956	1978	1973	1979	1961	1983	1983	1989	1972	1984	1955	1971
MIN	5.79	8.41	7.49	6.43	11.8	15.6	11.0	12.4	7.46	3.23	2.69	2.34
(WY)	1983	1982	1981	1981	1980	1985	1985	1995	1965	1966	1995	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1955 - 1997	
ANNUAL TOTAL	16298.1		12856.3			
ANNUAL MEAN	44.5		35.2		34.4	
HIGHEST ANNUAL MEAN					58.7	1984
LOWEST ANNUAL MEAN					14.7	1995
HIGHEST DAILY MEAN	450	Jan 19	352	Dec 2	1250	Nov 8 1977
LOWEST DAILY MEAN	5.5	Sep 5	3.4	Jul 21	.20	Sep 17 1966
ANNUAL SEVEN-DAY MINIMUM	6.1	Aug 31	4.0	Jul 15	.75	Sep 10 1995
INSTANTANEOUS PEAK FLOW			928	Dec 2	4650	Nov 8 1977
INSTANTANEOUS PEAK STAGE			5.47	Dec 2	12.25	Nov 8 1977
INSTANTANEOUS LOW FLOW			3.8	Aug 10	---	
ANNUAL RUNOFF (CFSM)	2.06		1.63		1.59	
ANNUAL RUNOFF (INCHES)	28.07		22.14		21.61	
10 PERCENT EXCEEDS	76		61		68	
50 PERCENT EXCEEDS	31		28		22	
90 PERCENT EXCEEDS	9.4		7.0		6.8	

e Estimated.



01390500 SADDLE RIVER AT RIDGEWOOD, NJ, DAILY MEAN DISCHARGE

01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 20 ft upstream from bridge.

REMARKS.--On Jan. 28 and June 9, water-column synoptic studies were conducted at this site as part of the LINJ NAWQA program. For synoptic data from other sites, see section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 1996									
16...	1250	8.2	510	7.9	20.0	11.0	757	11.0	103
NOV									
12...	1310	28	500	7.9	6.5	7.0	767	12.6	106
DEC									
11...	1330	53	510	8.0	6.5	6.0	757	11.9	100
JAN 1997									
07...	1350	30	580	8.6	7.0	4.5	755	14.3	116
28...	1010	270	730	8.8	4.0	2.0	--	--	--
FEB									
27...	1420	27	580	8.8	20.0	10.0	747	16.9	151
APR									
02...	1420	75	580	7.4	18.0	10.0	759	12.7	113
23...	1350	46	540	8.7	24.5	12.5	751	13.2	126
MAY									
21...	1240	31	500	8.2	13.0	14.0	757	10.3	100
JUN									
09...	1210	13	540	7.8	23.0	15.5	754	9.5	96
JUL									
23...	1430	9.1	470	8.2	28.0	20.5	764	9.1	101
AUG									
27...	1320	7.6	520	8.2	25.0	19.0	760	10.8	117
SEP									
23...	1340	7.9	530	7.6	17.0	14.0	759	--	--

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 1996											
16...	170	48	11	30	1.8	140	--	110	123	18	69
NOV											
12...	160	47	11	33	1.7	140	--	120	121	18	70
DEC											
11...	150	42	9.8	44	1.6	120	--	94	96	19	81
JAN 1997											
07...	170	49	12	45	1.7	140	7.2	110	115	19	96
28...	--	--	--	--	--	--	--	--	--	--	--
FEB											
27...	160	45	11	43	1.4	130	7.2	100	112	20	95
APR											
02...	120	35	7.6	67	1.5	87	--	71	77	16	120
23...	160	47	11	39	1.3	130	2.4	100	111	19	85
MAY											
21...	150	43	11	34	1.6	130	--	110	110	16	76
JUN											
09...	180	52	12	34	1.2	140	--	120	123	18	82
JUL											
23...	140	41	9.7	31	1.7	120	--	96	99	14	66
AUG											
27...	170	50	12	34	1.4	140	--	110	120	15	72
SEP											
23...	170	49	13	33	1.4	150	--	120	125	18	73

01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
OCT 1996											
16...	<.1	9.5	300	263	.02	1.6	.04	.2	.15	1.8	1.8
NOV											
12...	<.1	10	218	268	.03	1.6	.04	.1	.12	1.7	1.7
DEC											
11...	<.1	10	288	272	.01	1.8	.02	.2	.10	2.0	1.9
JAN 1997											
07...	<.1	9.2	317	315	<.01	1.8	<.02	.1	.06	1.9	1.9
28...	--	--	--	--	--	--	--	--	--	--	--
FEB											
27...	<.1	5.2	302	298	<.01	1.7	<.02	.3	.04	2.0	1.7
APR											
02...	<.1	7.7	325	305	.01	1.6	<.02	.3	<.20	1.9	--
23...	<.1	5.2	286	279	.02	1.5	.02	.1	.03	1.6	1.5
MAY											
21...	<.1	7.5	281	259	.02	1.4	.03	.2	.21	1.6	1.6
JUN											
09...	<.1	9.6	306	287	.02	1.7	.03	.2	.10	1.9	1.8
JUL											
23...	<.1	7.4	267	234	<.01	1.2	<.02	.3	<.03	1.5	--
AUG											
27...	<.1	8.0	284	267	<.01	1.5	<.02	<.2	<.20	--	--
SEP											
23...	<.1	9.0	285	278	<.01	1.8	.04	<.2	<.20	--	--

DATE	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996										
16...	.04	.02	.02	43	14	18	2.0	.30	.20	<.01
NOV										
12...	.02	<.01	.01	42	26	27	2.5	.20	.50	.04
DEC										
11...	.02	<.01	<.01	40	52	52	2.7	.30	1	.14
JAN 1997										
07...	.01	<.01	<.01	40	21	44	1.7	.30	7	.55
28...	--	--	--	--	--	--	--	--	--	--
FEB										
27...	.02	<.01	<.01	35	38	40	1.9	.30	2	.12
APR										
02...	.03	<.01	.01	32	59	46	3.5	.20	7	1.3
23...	<.01	<.01	<.01	35	47	24	2.1	.30	2	.19
MAY										
21...	.02	<.01	.01	40	31	35	2.6	.20	2	.13
JUN										
09...	.03	<.01	.03	36	31	13	1.5	.30	28	.97
JUL										
23...	.06	<.01	.02	44	21	9	3.3	.60	1	.02
AUG										
27...	.02	<.01	.02	40	18	10	1.6	.20	3	.05
SEP										
23...	<.01	<.01	.02	39	13	5	1.1	.40	3	.06

01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels in the "Explanation of Records" section). Only pesticides measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
JUN 1997							
09...	1210	<.002	<.002	.005	E.0023	<.002	<.003

DATE	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
JUN 1997								
09...	<.003	<.004	<.004	<.002	E.0022	<.004	<.005	E.0026

DATE	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 1997								
09...	<.004	<.003	<.004	E.0089	<.004	.015	<.010	E.0027

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Samples were analyzed for volatile organic compounds (VOCs) on schedule 2020 (listed with minimum reporting levels in the "Explanation of Records" section). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	PREH- NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)
NOV 1996										
12...	1310	ENVIRONMENTAL	<.05	E.090	<.05	<.05	E.010	<.05	<.05	<.05
DEC										
11...	*1325*	*CANNISTER BLANK*	*<.05*	*<.05*	*<.05*	*<.05*	*<.10*	*<.05*	*<.05*	*<.05*
11...	1330	ENVIRONMENTAL	<.10	E.100	<.10	<.10	<.20	<.10	<.10	<.10
11...	*1335*	*FIELD BLANK*	*<.05*	*<.05*	*<.05*	*<.05*	*<.10*	*<.05*	*<.05*	*<.05*
JAN 1997										
28...	1010	ENVIRONMENTAL	<.10	E.020	<.10	<.10	<.20	<.10	<.10	<.10

DATE	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)
NOV 1996											
12...	<.20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<5.0
DEC											
11...	*<.20*	*E.007*	*<.05*	*<.05*	*E.020*	*<.05*	*E.010*	*E.030*	*<.05*	*<.05*	*<5.0*
11...	<.40	E.010	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
11...	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*	*E.010*	*E.040*	*<.05*	*<.05*	*<5.0*
JAN 1997											
28...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10

01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	ACRO- LEIN TOTAL (UG/L) (34210)	METHYL- ISO- BUTYL- KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)
NOV 1996										
12...	<.05	<2.0	<5.0	<5.0	<.05	<.10	E.009	<.05	<.10	<.10
DEC										
11...	<.05	<2.0	<5.0	<5.0	<.05	<.10	<.05	E.030	<.10	<.10
11...	<.10	<4.0	<10	<10	<.10	<.20	E.020	<.10	<.20	<.20
11...	<.05	<2.0	<5.0	<5.0	<.05	<.10	E.020	E.020	<.10	<.10
JAN 1997										
28...	<.10	<4.0	<10	E3.80	<.10	<.20	E.010	<.10	<.20	<.20

DATE	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
NOV 1996										
12...	E.010	<.05	<.20	<.10	<.10	<.05	<.05	<.05	.15	<.05
DEC										
11...	<.20	<.05	<.20	<.10	<.10	E.040	<.05	E.040	<.10	<.05
11...	<.40	<.10	<.40	<.23	<.20	<.10	<.10	<.10	.53	<.10
11...	<.20	<.05	<.20	<.11	<.10	E.040	<.05	E.040	<.10	<.05
JAN 1997										
28...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	<.10	.73	<.10

DATE	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH- ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT- PENTYL METHYL- UNFLTRD RECOVER (UG/L) (50005)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	BROMO- FORM TOTAL (UG/L) (32104)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	CHLORO- FORM TOTAL (UG/L) (32106)
NOV 1996										
12...	<.05	<.20	E.003	<.10	<.05	<5.0	<.20	<.05	<.10	E.010
DEC										
11...	<.05	<.20	E.020	<.10	E.010	8.5	<.20	<.05	<.10	E.030
11...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	E.010
11...	<.05	<.20	E.020	<.10	<.05	8.1	<.20	<.05	<.10	E.020
JAN 1997										
28...	<.10	E.030	<.10	<.20	<.10	<10	<.40	<.10	<.20	E.010

01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.0	17.0	17.5	21.0	19.5	20.5	21.0	18.5	20.0	20.0	18.5	19.5
2	17.5	15.0	16.0	20.5	20.0	20.0	22.0	19.5	21.0	21.5	19.5	20.0
3	15.0	13.5	14.0	20.5	19.5	20.0	22.5	20.0	21.5	21.0	17.5	19.5
4	16.0	13.5	14.5	21.0	19.5	20.0	21.0	20.0	20.5	17.5	15.5	16.0
5	16.5	13.5	15.0	20.5	19.0	19.5	20.5	19.0	20.0	16.5	13.5	15.5
6	16.0	14.5	15.0	20.0	18.0	19.0	20.0	18.0	19.0	17.0	14.5	16.0
7	15.0	14.0	14.5	20.0	18.5	19.5	19.5	17.0	18.5	17.5	15.5	16.5
8	16.0	13.0	14.5	21.0	19.0	20.0	18.5	16.5	18.0	18.0	16.5	17.5
9	17.0	13.5	15.0	22.0	19.5	21.0	20.5	17.5	19.0	17.5	16.5	17.0
10	18.5	15.0	16.5	21.5	20.5	21.0	22.0	18.5	20.5	17.0	16.0	16.5
11	20.0	17.0	18.5	21.0	19.0	20.0	22.5	19.5	21.0	18.5	17.0	17.5
12	20.0	18.0	19.0	21.0	19.0	20.0	22.0	20.5	21.5	19.5	18.0	19.0
13	20.0	18.5	19.5	22.0	19.5	21.0	21.5	20.5	21.0	19.0	17.5	18.0
14	20.0	19.0	19.5	23.5	20.5	22.0	21.5	20.0	21.0	19.0	17.0	18.0
15	19.0	17.0	18.0	24.0	21.5	22.5	21.5	19.5	20.5	18.5	16.5	18.0
16	18.0	16.0	17.0	24.0	22.5	23.5	24.0	21.0	22.0	19.0	16.5	18.0
17	17.5	16.0	16.5	25.0	22.5	23.5	24.0	22.0	23.0	18.5	16.5	17.5
18	17.5	16.5	17.0	25.5	21.5	23.5	23.5	20.5	21.5	19.0	18.0	18.5
19	19.5	17.5	18.0	22.5	19.5	21.5	21.0	18.5	19.5	18.5	16.0	17.5
20	20.0	18.5	19.0	20.5	17.5	19.0	18.5	17.5	18.0	19.0	17.0	18.0
21	22.0	19.5	20.5	21.5	18.0	19.5	18.0	17.0	17.5	17.0	13.5	15.0
22	23.0	21.0	22.0	22.0	19.5	21.0	19.0	17.5	18.0	14.5	11.5	13.0
23	23.0	20.5	21.5	21.0	19.5	20.0	18.5	17.5	18.0	14.0	13.0	13.5
24	21.5	19.0	20.0	20.0	18.0	18.5	18.5	16.0	17.5	13.5	12.0	13.0
25	22.0	19.5	20.5	20.0	17.5	18.5	19.0	17.0	18.0	13.0	10.5	12.0
26	22.5	21.5	22.0	21.5	18.0	19.5	19.5	17.5	18.5	14.5	12.0	13.5
27	22.0	20.0	21.0	22.0	19.5	21.0	19.5	17.5	18.5	14.0	11.5	13.0
28	21.0	19.0	20.0	23.0	21.0	22.0	19.0	18.0	18.5	14.5	12.0	13.0
29	21.0	18.5	20.0	22.0	19.5	21.0	19.0	18.0	18.5	16.0	14.5	15.5
30	21.0	19.0	20.5	20.5	17.5	19.0	19.5	17.5	18.5	16.0	15.0	15.5
31	---	---	---	21.0	17.5	19.5	19.5	17.5	18.5	---	---	---
MONTH	23.0	13.0	18.0	25.5	17.5	20.5	24.0	16.0	19.5	21.5	10.5	16.5

01391500 SADDLE RIVER AT LODI, NJ

LOCATION.--Lat 40°53'25", long 74°04'51", Bergen County, Hydrologic Unit 02030103, on left bank 560 ft upstream from bridge on Outwater Lane in Lodi and 3.2 mi upstream from mouth. Water-quality samples collected at bridge on Outwater Lane at high flows.

DRAINAGE AREA.--54.6 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 781: Drainage area. WSP 1031: 1940(M). WSP 1552: 1929(M), 1936(M), 1938. WRD-NJ 1969: 1967. WRD-NJ 1970: 1968, 1969.

GAGE.--Water-stage recorder. Concrete control since Nov. 2, 1938. Datum of gage is 25.00 ft above sea level. Prior to Nov. 2, 1938, at site 560 ft downstream at datum 2.54 ft lower.

REMARKS.--Records fair. Occasional regulation at low flow. Diversion upstream from station at Paramus by United Water New Jersey, for municipal supply (see Hackensack River Basin, diversions). The flow past this station is affected by pumpage from wells by United Water New Jersey and others. Several measurements of water temperature, other than those published, were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0545	*2,080	*6.53	Jan. 25	0800	1,720	5.60
Dec. 2	1115	1,760	5.85	Mar. 31	1715	1,440	5.05

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	73	246	113	123	89	555	107	64	39	47	68
2	41	73	1090	112	122	95	270	104	115	39	45	48
3	45	71	272	115	112	93	189	248	135	45	42	26
4	36	68	176	112	108	113	161	257	78	45	42	26
5	33	66	147	109	359	100	142	130	66	39	57	26
6	33	66	519	109	190	132	138	149	60	36	46	25
7	34	67	392	101	134	100	136	129	58	35	40	26
8	91	81	563	96	120	90	125	103	56	43	39	26
9	411	205	247	93	114	86	116	126	54	57	39	26
10	143	105	186	107	108	116	110	114	52	173	37	23
11	88	83	169	103	103	122	107	98	50	54	35	151
12	69	76	185	92	100	96	138	91	49	43	34	77
13	64	71	168	88	95	87	235	89	99	37	35	32
14	61	69	616	85	166	189	131	88	145	33	36	28
15	56	65	310	84	188	330	112	84	62	20	23	28
16	55	65	207	302	130	138	108	81	54	16	26	25
17	54	68	192	165	111	113	107	79	50	18	213	24
18	52	66	176	100	104	106	125	77	73	40	317	24
19	485	66	187	87	104	100	120	110	294	27	72	24
20	1180	63	173	88	100	100	103	184	90	22	59	23
21	243	61	141	85	97	99	98	90	61	19	149	26
22	152	60	135	84	101	102	96	77	58	151	92	26
23	122	60	134	114	96	94	93	73	90	43	60	21
24	107	61	143	91	91	88	104	69	55	118	53	22
25	95	61	230	865	87	85	92	102	50	e450	49	23
26	88	538	136	190	87	146	88	124	48	86	46	22
27	84	183	129	126	91	106	86	76	49	62	44	23
28	94	106	124	387	88	92	357	67	46	62	112	23
29	92	91	124	196	---	90	165	64	44	56	73	135
30	82	85	142	127	---	91	114	64	41	51	55	41
31	78	---	122	116	---	715	---	66	---	50	48	---
TOTAL	4312	2873	7781	4642	3429	4103	4521	3320	2246	2009	2065	1118
MEAN	139	95.8	251	150	122	132	151	107	74.9	64.8	66.6	37.3
MAX	1180	538	1090	865	359	715	555	257	294	450	317	151
MIN	33	60	122	84	87	85	86	64	41	16	23	21

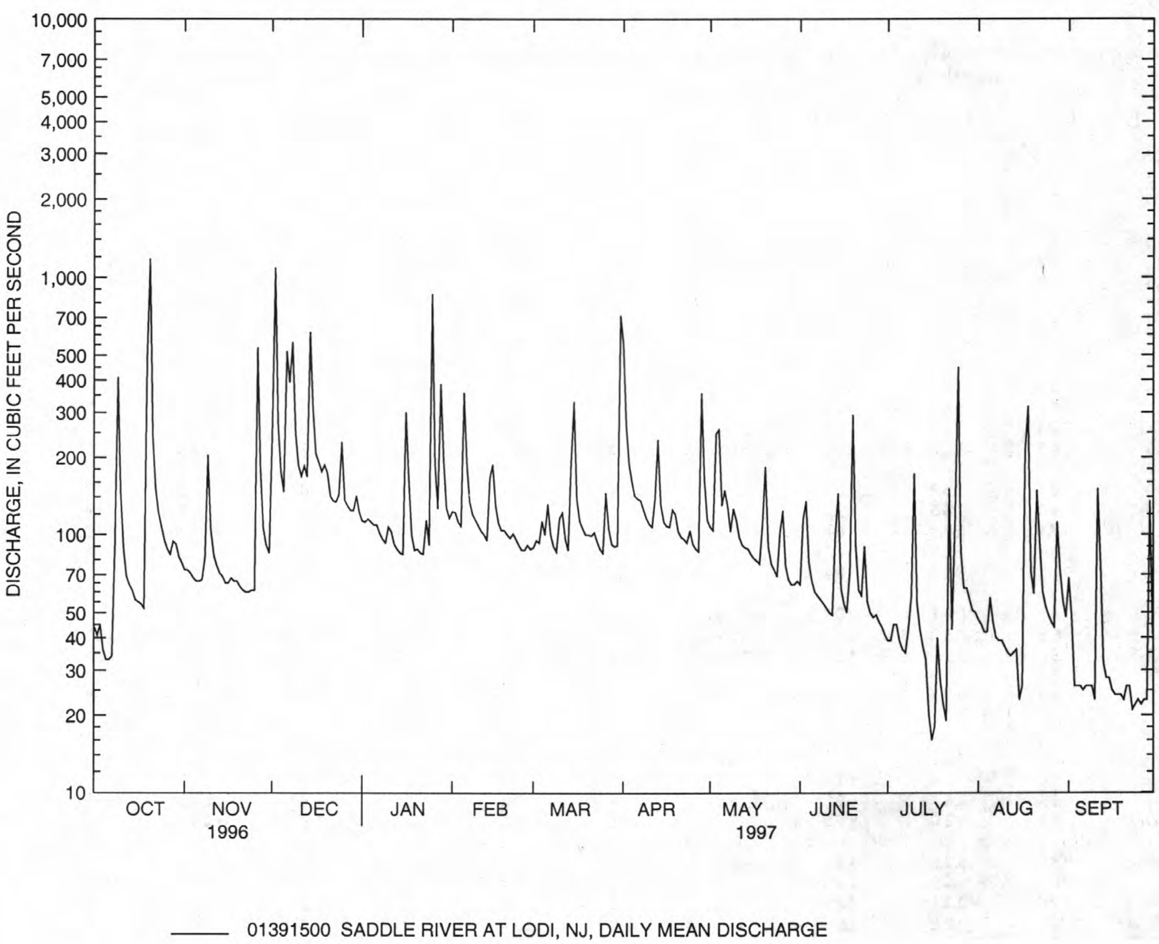
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	65.8	89.6	101	106	119	155	156	118	84.3	72.4	68.2	67.6
MAX	257	284	301	331	258	333	457	315	336	371	225	256
(WY)	1956	1978	1984	1979	1973	1953	1983	1984	1972	1945	1955	1971
MIN	16.5	25.5	17.0	12.1	38.1	40.1	32.9	44.9	31.8	14.1	15.1	11.4
(WY)	1936	1982	1981	1981	1980	1981	1985	1941	1965	1966	1966	1932

01391500 SADDLE RIVER AT LODI, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1924 - 1997	
ANNUAL TOTAL	53610		42419			
ANNUAL MEAN	146		116		100	
HIGHEST ANNUAL MEAN					187	1984
LOWEST ANNUAL MEAN					45.2	1981
HIGHEST DAILY MEAN	1240	Apr 16	1180	Oct 20	2970	Apr 5 1984
LOWEST DAILY MEAN	31	Sep 11	16	Jul 16	4.9	Sep 15 1995
ANNUAL SEVEN-DAY MINIMUM	33	Aug 29	23	Sep 22	7.1	Sep 10 1995
INSTANTANEOUS PEAK FLOW			2080	Oct 20	4500	Nov 9 1977
INSTANTANEOUS PEAK STAGE			6.53	Oct 20	12.36a	Nov 9 1977
INSTANTANEOUS LOW FLOW			16	Sep 28	1.0	May 25 1938
10 PERCENT EXCEEDS	249		190		191	
50 PERCENT EXCEEDS	110		90		69	
90 PERCENT EXCEEDS	45		34		26	

a From high-water mark in gage house.
e Estimated.



01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY RECORDS

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

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
29...	1021	90	639	7.4	12.0	760	7.8	73	2.9	5400	480	180
JAN 1997												
15...	0935	82	794	7.6	1.5	767	11.2	80	3.0	3500	270	220
MAR												
18...	0930	104	799	8.0	6.5	767	11.6	94	>11	1300	80	190
MAY												
19...	1005	111	677	7.7	14.5	753	6.8	68	5.9	4900	1000	190
JUL												
30...	0910	52	742	7.8	19.0	765	5.6	60	3.4	4900	800	210

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
29...	52	13	48	4.0	122	26	98	<.1	15	336	345	11
JAN 1997												
15...	61	16	66	3.6	125	30	130	<.1	13	426	417	1
MAR												
18...	53	13	73	3.1	116	26	140	.1	10	429	405	8
MAY												
19...	52	14	54	3.9	115	25	110	<.1	9.9	390	356	11
JUL												
30...	57	16	58	5.2	127	28	120	<.1	13	444	397	5

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
29...	.129	3.4	.40	.40	.9	.76	4.3	4.2	.53	.50	4.6	.4
JAN 1997												
15...	.085	4.7	1.37	1.38	1.9	1.9	6.6	6.6	.66	.61	2.9	.9
MAR												
18...	.078	3.8	.62	.61	1.1	.94	4.9	4.7	.39	.31	3.7	.2
MAY												
19...	.187	4.4	.59	.58	1.3	1.2	5.8	5.7	.63	.54	5.0	--
JUL												
30...	.324	6.0	.60	.60	1.3	1.1	7.3	7.0	.93	.81	3.8	.5

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 1997								
19...	1005	30	<1	<10	80	<1	1.8	9

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
MAY 1997							
19...	580	4	170	<.1	3	<1	20

01392210 THIRD RIVER AT PASSAIC, NJ

LOCATION.--Lat 40°49'47", long 74°08'32", Passaic County, Hydrologic Unit 02030103, on right bank 400 ft upstream from bridge on State Highway 3, 0.8 mi south of Passaic, 1.2 mi upstream from Passaic River.

DRAINAGE AREA.--11.8 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 22.15 ft above sea level.

REMARKS.--Records fair except for estimated discharges, which are poor. Some regulation from ponds upstream. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 550 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 8	2115	690	4.57	Jan. 25	0245	796	4.83
Oct. 19	1645	*1,690	*6.93	Mar. 31	1045	555	4.23
Nov. 26	0800	742	4.70	July 24	1030	848	4.95
Dec. 2	0345	629	4.41	July 25	0245	1,450	6.39

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	121	13	15	21	82	18	11	9.1	e11	e12
2	14	11	192	13	13	15	25	17	87	11	e11	e7.8
3	12	10	22	15	14	18	21	84	24	10	e12	e8.1
4	11	9.8	17	14	17	25	20	24	12	10	e10	e8.4
5	11	11	14	13	93	17	17	15	12	9.1	e17	e7.8
6	10	11	128	13	18	26	18	32	11	8.7	e17	e7.9
7	11	12	120	13	16	17	17	14	12	21	e9.4	e7.7
8	143	18	68	14	15	16	15	14	10	9.3	e10	e7.7
9	57	47	23	14	16	15	15	24	10	15	e10	e8.6
10	27	11	20	18	14	37	15	14	10	15	e9.4	e7.8
11	13	9.9	27	15	13	17	14	13	9.7	8.9	e9.5	e61
12	12	10	24	13	15	14	67	13	10	8.5	e9.5	e8.3
13	11	9.7	21	13	13	14	40	13	20	8.3	e11	e7.9
14	11	10	167	13	67	110	16	13	15	8.1	e9.3	e7.4
15	10	11	25	13	30	35	15	15	10	8.2	e8.8	e7.3
16	10	9.7	20	92	16	17	16	14	9.7	8.1	e9.5	e7.5
17	10	9.3	20	20	15	16	15	13	9.0	8.0	e12	e7.4
18	11	9.4	17	35	15	14	19	13	19	14	e30	8.3
19	552	10	24	16	13	14	16	21	54	14	e8.1	8.6
20	129	9.6	18	13	13	14	15	42	12	8.6	e24	8.6
21	45	9.9	15	12	15	14	14	12	11	8.1	e50	8.2
22	19	10	15	13	15	15	14	12	10	66	e8.5	8.0
23	17	11	15	15	14	14	13	12	10	9.5	e8.8	9.0
24	16	12	31	22	14	14	19	12	9.8	180	e8.6	9.0
25	15	12	26	204	13	13	14	40	9.6	362	e8.4	8.6
26	13	180	16	16	13	38	14	18	9.6	18	e8.3	8.0
27	13	16	15	14	15	13	14	12	10	17	e8.3	8.4
28	19	13	15	94	16	13	111	12	9.7	51	e22	8.2
29	13	13	15	17	---	15	16	12	9.3	e13	e8.1	74
30	18	13	15	14	---	13	15	11	9.2	e12	e8.1	8.5
31	12	---	14	14	---	222	---	11	---	e11	e7.7	---
TOTAL	1276	540.3	1280	818	556	856	722	590	465.6	960.5	395.3	366.0
MEAN	41.2	18.0	41.3	26.4	19.9	27.6	24.1	19.0	15.5	31.0	12.8	12.2
MAX	552	180	192	204	93	222	111	84	87	362	50	74
MIN	10	9.3	14	12	13	13	13	11	9.0	8.0	7.7	7.3
CFSM	3.49	1.53	3.50	2.24	1.68	2.34	2.04	1.61	1.32	2.63	1.08	1.03
IN.	4.02	1.70	4.04	2.58	1.75	2.70	2.28	1.86	1.47	3.03	1.25	1.15

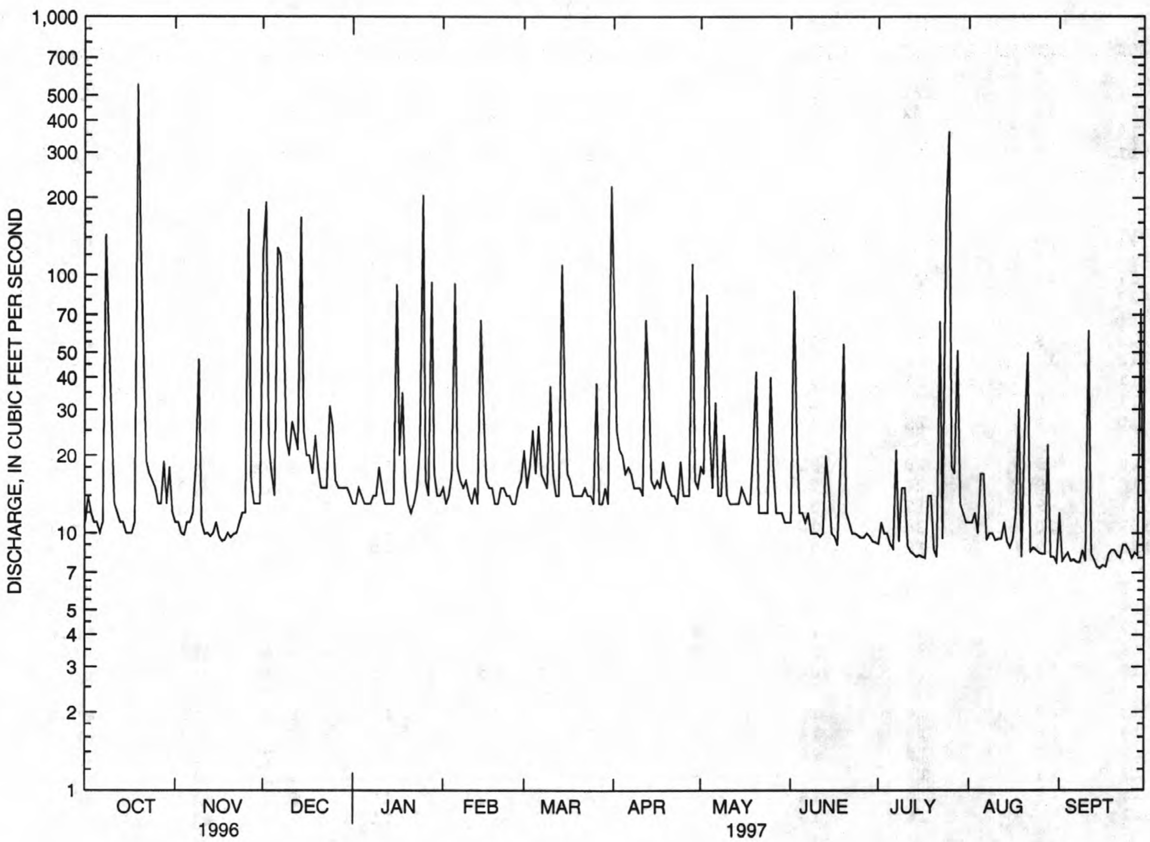
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.3	22.2	20.9	23.0	19.0	25.6	27.8	25.5	18.3	18.3	17.6	15.7
MAX	41.2	66.1	60.2	64.3	31.0	48.1	70.4	56.4	38.8	31.7	44.1	29.4
(WY)	1997	1978	1984	1979	1984	1983	1983	1989	1992	1984	1978	1989
MIN	6.00	9.31	7.55	7.25	10.4	9.94	7.56	12.0	9.61	7.23	6.23	8.43
(WY)	1983	1982	1981	1981	1985	1985	1985	1995	1987	1993	1995	1982

01392210 THIRD RIVER AT PASSAIC, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	9733.1		8825.7			
ANNUAL MEAN	26.6		24.2		21.0	
HIGHEST ANNUAL MEAN					32.7	1978
LOWEST ANNUAL MEAN					12.7	1995
HIGHEST DAILY MEAN	552	Oct 19	552	Oct 19	798	Nov 8 1977
LOWEST DAILY MEAN	6.8	Jan 8	7.3	Sep 15	3.9	Sep 16 1980
ANNUAL SEVEN-DAY MINIMUM	7.9	Jan 6	7.7	Sep 12	4.2	Aug 24 1995
INSTANTANEOUS PEAK FLOW			1690	Oct 19	2300a	Nov 8 1977
INSTANTANEOUS PEAK STAGE			6.93	Oct 19	8.25	Nov 8 1977
INSTANTANEOUS LOW FLOW			7.2	Jul 18	.84	Jul 3 1981
ANNUAL RUNOFF (CFSM)	2.25		2.05		1.78	
ANNUAL RUNOFF (INCHES)	30.68		27.82		24.14	
10 PERCENT EXCEEDS	45		39		38	
50 PERCENT EXCEEDS	16		14		11	
90 PERCENT EXCEEDS	9.6		8.6		6.3	

a From rating curve extended above 700 ft^3/s by culvert computation at bridge on Kingsland Street, 0.2 mi upstream of gage.
e Estimated.



01392210 THIRD RIVER AT PASSAIC, NJ, DAILY MEAN DISCHARGE

01392590 PASSAIC RIVER AT NEWARK, NJ

LOCATION.--Lat 40°44'00", long 74°09'30", Essex County, Hydrologic Unit 02030103, on right bank at Newark Fire Training Academy in Newark, 800 ft upstream from bridge on South Fourth Street, 0.3 mi downstream from railroad bridges on AMTRAK mainline, and 4.2 mi upstream from Newark Bay.

DRAINAGE AREA.--923 mi^2.

PERIOD OF RECORD.--June 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level. Gage-height record converted to elevation above or below (-) sea level for publication.

REMARKS.--No gage-height or doubtful record, Dec. 21 to Jan. 6 and Feb. 5-24. Summaries for months with short periods of no gage-height record have been estimated with little or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (---) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 7.54 ft, Oct. 19, 1996; minimum recorded, -4.77 ft, Nov. 5, 1994.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 10.9 ft, Dec. 11, 1992, from high-water mark.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 7.54 ft, Oct. 19; minimum recorded, -4.45 ft, Mar. 7.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	7.54	5.27	6.50	6.59	e5.9	5.79	5.85	5.31	5.84	5.59	6.35	5.64
high tide	Date	19	9	13	10	9	9	24	3	2	25	20	17
Minimum	Elevation	-2.29	-2.79	-2.40	-4.37	e-3.1	-4.45	-2.80	-3.52	-2.49	-2.81	-2.93	-2.82
low tide	Date	15	12	21	12	23	7	9	7	23	21	19	16
Mean high tide		4.34	4.05	---	---	---	3.86	4.32	3.95	4.29	4.06	4.14	4.10
Mean water level		1.81	1.46	---	---	---	1.21	1.66	1.24	1.60	1.36	1.48	1.42
Mean low tide		-.95	-1.29	---	---	---	-1.60	-1.15	-1.69	-1.28	-1.52	-1.37	-1.42

e Estimated.

RESERVOIRS IN PASSAIC RIVER BASIN

01379990 SPLITROCK RESERVOIR.--Lat 40°57'40", long 74°27'45", Morris County, Hydrologic Unit 02030103, at dam on Beaver Brook, 2 mi northeast of Hibernia. DRAINAGE AREA, 5.50 mi^2. PERIOD OF RECORD, September 1925 to September 1931, December 1948 to September 1950, October 1953 to current year. Monthend contents only 1925-31, 1948-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, water-stage recorder. Datum of gage is sea level.

REVISED RECORDS.--WDR NJ-94-1: 1993.

REMARKS.--Reservoir is formed by a concrete gravity dam with earth embankment; present dam constructed 1946-48 and sluice gate first closed Dec. 22, 1948. Prior to 1946, reservoir was formed by earthfill dam with crest about 20 ft lower. Capacity of spillway level, 3,310,000,000 gal, elevation, 835 ft. Flow is regulated by two 30-inch sluice gates. Flow is released for diversion for municipal supply of United Water New Jersey.

COOPERATION.--Records provided by United Water New Jersey, Bureau of Water.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 3,652,500,000 gal, Apr. 5, 1973, elevation, 836.75 ft; minimum, 1,522,800,000 gal, Jan. 4, 1954, elevation, 824.20 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 3,504,000,000 gal, Oct. 20, elevation, 836.00 ft; minimum, 3,137,000,000 gal, Aug. 15, elevation, 834.15 ft.

01380900 BOONTON RESERVOIR.--Lat 40°53'45", long 74°23'55", Morris County, Hydrologic Unit 02030103, at dam on Rockaway River at Boonton. DRAINAGE AREA, 119 mi^2. PERIOD OF RECORD, April 1904 to September 1950, October 1953 to current year. Monthend contents only 1904-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. REVISED RECORDS.--WDR NJ-85-1: 1984. GAGE, hook gage. Datum of gage is sea level.

REVISED RECORDS.--WDR NJ-94-1: 1993.

REMARKS.--Reservoir is formed by a cyclopean masonry dam with earth wings; dam completed and storage began in 1904. Total capacity at spillway level, 7,620,000,000 gal elevation, 305.25 ft of which 7,366,000,000 gal is usable contents above elevation 259.75 ft, sill of lowest outlet gate. Spillway is topped with two Bascule gates, 2 ft high; prior to 1952, flashboards were used. Flow regulated by Bascule gates, three outlets in gatehouse at head of conduit and by two 48-inch pipes (bottom of sluice pipes at elevation 205 ft). Water is diverted from reservoir for municipal supply of United Water New Jersey.

COOPERATION.--Records provided by United Water New Jersey, Bureau of Water.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 8,545,600,000 gal, May 31, 1984, elevation, 308.81 ft; minimum, 1,445,000,000 gal, Jan. 31, 1981, elevation 274.71 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,299,000,000 gal, Dec. 3, elevation, 308.46 ft; minimum, 6,060,000,000 gal, Sept. 11, elevation, 299.56 ft.

01382100 CANISTEAR RESERVOIR.--Lat 41°06'30", long 74°29'30", Sussex County, Hydrologic Unit 02030103, at dam on Pacock Brook, 1.8 mi northeast of Stockholm. DRAINAGE AREA, 5.6 mi^2. PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents 1923-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is sea level.

REVISED RECORDS.--WDR NJ-94-1: 1993.

REMARKS.--Reservoir is formed by earth-embankment type dam, completed about 1896. Capacity at spillway level, 2,407,000,000 gal, elevation, 1,086.0 ft. Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply for City of Newark. Outflow is controlled mostly by operation of gates in pipes through dam.

COOPERATION.--Records provided by City of Newark, Division of Water Supply.

01382200 OAK RIDGE RESERVOIR.--Lat 41°02'30", long 74°30'10", Passaic County, Hydrologic Unit 02030103, at dam on Pequannock River, 0.9 mi southwest of Oak Ridge. DRAINAGE AREA, 27.3 mi^2. PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents only 1924-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam with concrete-core wall and ogee overflow section; dam constructed between 1880-92; dam raised 10 ft during 1917-19. Capacity at spillway level, 3,895,000,000 gal, elevation, 846.0 ft. Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and diversion at Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of City of Newark. Outflow is controlled mostly by operation of gates in pipes through dam.

COOPERATION.--Records provided by City of Newark, Division of Water Supply.

01382300 CLINTON RESERVOIR.--Lat 41°04'30", long 74°27'00", Passaic County, Hydrologic Unit 02030103, at dam on Clinton Brook, 2.0 mi north of Newfoundland. DRAINAGE AREA, 10.5 mi^2. PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents only 1923-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam constructed between 1889-92. Capacity at spillway level, 3,518,000,000 gal, elevation, 992.0 ft. Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir since May 21, 1961, for municipal supply of City of Newark. Outflow is controlled mostly by operation of gates in pipes through dam.

COOPERATION.--Records provided by City of Newark, Division of Water Supply.

01382380 CHARLOTTEBURG RESERVOIR.--Lat 41°01'34", long 74°25'30", Passaic County, Hydrologic Unit 02030103, at dam on Pequannock River, 1.1 mi upstream from Macopin River, and 1.5 mi southeast of Newfoundland, NJ. DRAINAGE AREA, 56.2 mi^2. PERIOD OF RECORD, May 1961 to current year. REVISED RECORDS.--WRD NJ-74: Station number. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete-masonry dam and earth embankment, with concrete spillway at elevation 738.00 ft; storage began May 19, 1961. Spillway equipped with automatic Bascule gate 5 ft high. Capacity, 2,964,000,000 gal, elevation, 743.00 ft, top of Bascule gate. No dead storage. Outflow is controlled by sluice and automatic Bascule gates. Water diverted from reservoir since May 21, 1961, for municipal supply of City of Newark.

COOPERATION.--Records provided by City of Newark, Division of Water Supply.

01382400 ECHO LAKE.--Lat 41°03'00", long 74°24'30", Passaic County, Hydrologic Unit 02030103, at Echo Lake Dam on Macopin River, 1.6 mi north of Charlotteburg, and 1.9 mi upstream from mouth. DRAINAGE AREA, 4.35 mi^2. PERIOD OF RECORD, October 1927 to September 1950, October 1953 to current year. Monthend contents only 1928-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is sea level.

REMARKS.--Lake is formed by earth-embankment type dam completed about 1925. Capacity at spillway level, 1,583,000,000 gal, elevation, 893.0 ft, with provision for additional storage of 180,000,000 gal at elevation 894.9 ft with flashboards. Usable contents, 1,045,000,000 gal above elevation 880.0 ft. Lake used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and water diverted to Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of City of Newark. Outflow to Macopin River controlled by operation of gates in gatehouse at dam and water released through pipe and canal to Charlotteburg Reservoir.

COOPERATION.--Records provided by City of Newark, Division of Water Supply.

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

01383000 GREENWOOD LAKE.--Lat 41°09'36", long 74°20'03", Passaic County, Hydrologic Unit 02030103, in gatehouse near right end of Greenwood Lake Dam on Wanaque River at Awosting. DRAINAGE AREA, 27.1 mi^2. PERIOD OF RECORD, June 1898 to November 1903, June 1907 to current year (gage heights only prior to October 1953). GAGE, water-stage recorder. Datum of gage is 608.86 ft above sea level (levels from New Jersey Geological Survey bench mark). Prior to Oct. 1, 1931, staff gage on former railroad bridge at site 100 ft upstream at datum 89.75 ft lower.

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway; dam completed about 1837 and reconstruction completed in 1928 with crest of spillway 0.25 ft lower. Usable capacity, 6,860,000,000 gal between gage heights -4.00 ft, sill of gate, and 10.00 ft, crest of spillway. Dead storage, 7,140,000,000 gal. Outflow mostly regulated by two gates, 3.5 by 5.0 ft. Records given herein represent usable capacity. Lake used for recreation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,528,000,000 gal, Oct. 9-14, 1903, gage height, 14.25 ft, present datum; minimum, 3,160,000,000 gal, several days in November 1900, gage height, 3.50 ft, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 7,350,000,000 gal, Apr. 1, gage height, 10.79 ft; minimum, 6,070,000,000 gal, Nov. 23, gage height, 8.70 ft.

REVISED RECORDS.--WDR NJ-94-1: 1993.

01384002 MONKSVILLE RESERVOIR.--Lat 41°07'20", long 74°17'49", Passaic County, Hydrologic Unit 02030103, at dam on Wanaque River at Monks. DRAINAGE AREA, 40.4 mi^2. PERIOD OF RECORD, September 1988 to current year. GAGE, measurement from reference point. Datum of gage is sea level.

REMARKS.--Reservoir is formed by a roller compacted concrete dam constructed in 1988. Total capacity at spillway level, 7,000,000,000 gal, elevation 400.0 ft. Reservoir used for storage and water released to Wanaque Reservoir. Outflow is controlled by a 60-inch fixed-cone valve in a 72-inch pipe and 10-inch cone valve which can discharge directly into Wanaque Reservoir or into the 72-inch pipe.

COOPERATION.--Records provided by North Jersey District Water Supply Commission.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 7,150,000,000 gal, Oct. 20, 1989, elevation 401.1 ft (corrected); minimum, 860,000,000, Sept. 28, 1988 (first filling), elevation 339.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 7,000,000,000 gal, many days, elevation 400.0 ft; minimum, 7,000,000,000 gal, many days, elevation 400.0 ft.

01386990 WANAQUE RESERVOIR.--Lat 41°02'42", long 74°17'44", Passaic County, Hydrologic Unit 02030103, at Raymond Dam on Wanaque River at Wanaque. DRAINAGE AREA, 90.4 mi^2. PERIOD OF RECORD, February 1928 to September 1950, October 1953 to current year. Monthend contents only 1928-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, water-stage recorder. Datum of gage is sea level (levels by North Jersey District Water Supply Commission).

REMARKS.--Reservoir is formed by earthfill with concrete-core wall main dam and seven secondary dams; dams completed in 1927 and storage began in March 1928. Total capacity at spillway level, 29,630,000,000 gal, revised, elevation, 302.4 ft, revised, prior to 1986, 300.3 ft. Capacity available by gravity at spillway level, 27,850,000,000 gal, revised. Outflow mostly controlled by sluice gates in intake conduits in gage house. Water is diverted from reservoir for municipal supply. Diversion to reservoir from Posts Brook, Pompton River, and Ramapo River (see Passaic River basin, diversions).

COOPERATION.--Records provided by North Jersey District Water Supply Commission.

REVISED RECORDS.--WDR NJ-85-1: 1984 (M).

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 31,280,000,000 gal, Apr. 5, 1984, elevation, 304.52 ft; minimum, 5,110,000,000 gal, Dec. 26, 1964, elevation, 256.06 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 28,300,000,000 gal, Dec. 15, elevation, 302.99 ft; minimum, 13,500,000,000 gal, Sept. 30, elevation, 280.51 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)*	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)*	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01379990 SPLITROCK RESERVOIR			01380900 BOONTON RESERVOIR			01382100 CANISTEAR RESERVOIR		
Sept. 30.........	834.80	3,266	--	305.43	7,523	--	1,086.00	2,407	--
Oct. 31.........	835.20	3,345	+3.9	307.55	8,066	+27.1	1,086.10	2,417	+.5
Nov. 30.........	835.15	3,335	-.5	307.46	8,045	-1.1	1,086.10	2,417	0
Dec. 31.........	835.15	3,335	0	307.60	8,079	+1.7	1,086.00	2,407	-.5
CAL YR 1996			+.1			+2.5			0
Jan. 31.........	835.20	3,345	+.5	305.67	7,584	-24.7	1,086.00	2,407	0
Feb. 28.........	835.10	3,325	-1.1	305.37	7,508	-4.2	1,086.00	2,407	0
Mar. 31.........	835.20	3,345	+1.0	307.50	8,053	+27.2	1,086.10	2,417	+.5
Apr. 30.........	835.20	3,345	0	307.56	8,068	+.8	1,086.00	2,407	-.5
May 31.........	835.05	3,315	-1.5	307.29	7,999	-3.4	1,085.90	2,396	-.5
June 30.........	834.80	3,266	-2.5	306.23	7,726	-14.1	1,085.90	2,396	0
July 31.........	834.35	3,177	-4.4	303.00	6,912	-40.6	1,085.90	2,396	0
Aug. 31.........	834.25	3,157	-1.0	300.33	6,249	-33.1	1,086.00	2,407	+.5
Sept. 30.........	835.00	3,306	+7.7	304.73	7,346	+56.6	1,085.80	2,386	-1.1
WTR YR 1997			+.2			-.8			-.1

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01382200 OAK RIDGE RESERVOIR			01382300 CLINTON RESERVOIR			01382380 CHARLOTTEBURG RESERVOIR		
Sept. 30.........	843.5	3,544	--	992.1	3,531	--	735.20	2,129	--
Oct. 31.........	846.1	3,909	+18.2	992.1	3,531	0	743.10	2,977	+42.3
Nov. 30.........	846.1	3,909	0	992.0	3,518	-.7	737.25	2,329	-33.4
Dec. 31.........	846.1	3,909	0	992.0	3,518	0	737.25	2,329	0
CAL YR 1996			+.5			+1.6			-.2
Jan. 31.........	846.0	3,895	-.7	992.0	3,518	0	738.35	2,444	+5.7
Feb. 28.........	846.0	3,895	0	992.0	3,518	0	736.45	2,249	-10.8
Mar. 31.........	846.4	3,952	+2.8	992.3	3,556	+1.9	739.55	2,573	+16.2
Apr. 30.........	846.4	3,953	+.1	992.2	3,544	-.6	743.30	3,002	+22.1
May 31.........	845.9	3,881	-3.6	992.1	3,531	-.6	742.20	2,871	-6.5
June 30.........	845.6	3,838	-2.2	992.1	3,531	0	738.20	2,428	-22.8
July 31.........	842.2	3,366	-23.6	990.1	3,275	-12.8	734.70	2,082	-17.3
Aug. 31.........	841.5	3,272	-4.7	988.5	3,070	-10.2	731.50	1,794	-14.4
Sept. 30.........	838.2	2,836	-22.5	990.3	3 300	+11.9	735.00	2,110	+16.3
WTR YR 1997			-3.0			-1.0			-.1

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)**	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)**	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01382400 ECHO LAKE			01383000 GREENWOOD LAKE (WY 1995)			01383000 GREENWOOD LAKE (WY 1996)		
Sept. 30.........	893.4	1,621	--	10.23a	7,003a	--	9.47b	6,537b	--
Oct. 31.........	893.3	1,611	-.5	10.19a	6,978a	-1.2a	10.33b	7,065b	+26.3b
Nov. 30.........	893.3	1,611	0	10.40a	7,108a	+6.7a	10.18b	6,972b	-4.8b
Dec. 31.........	893.4	1,621	+.5	10.13a	6,941a	-8.3a	10.12b	6,934b	-1.9b
CAL YR 1996			+.2	--	--	+18.0a			-.05b
Jan. 31.........	893.4	1,621	0	10.22a	6,996a	+2.7a	10.29b	7,040b	+5.3b
Feb. 28.........	893.4	1,621	0	10.26a	7,021a	+1.4a	10.45b	7,139b	+5.3b
Mar. 31.........	893.5	1,630	+.4	10.09a	6,916a	-5.2a	10.24b	7,009b	-6.5b
Apr. 30.........	893.6	1,638	+.4	10.15a	6,953a	+1.9a	10.51b	7,176b	+8.6b
May 31.........	893.6	1,638	0	10.09a	6,916a	-1.8a	10.04b	6,885b	-14.5b
June 30.........	893.6	1,638	0	9.99a	6,854a	-3.2a	10.05b	6,891b	+.3b
July 31.........	893.6	1,638	0	10.12a	6,934a	+4.0a	10.10b	6,922b	+1.5b
Aug. 31.........	893.8	1,658	1.0	9.64a	6,640a	-14.7a	9.88b	6,787b	-6.7b
Sept. 30.........	893.7	1,648	-.5	9.47a	6,537a	-5.3a	10.17b	6,965b	+9.5b
WTR YR 1997			+.1	--	--	-1.9a			+1.9b

Date	Elevation (feet)**	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01383000 GREENWOOD LAKE (WY 1997)			01384002 MONKSVILLE RESERVOIR			01386990 WANAQUE RESERVOIR		
Sept. 30.........	10.17	6,965	--	400.0	7,000	--	291.58	21,860	--
Oct. 31.........	9.95	6,829	-6.8	400.0	7,000	0	295.23	24,330	+123.3
Nov. 30.........	9.44	6,518	+6.0	400.0	7,000	0	296.20	25,010	+35.1
Dec. 31.........	10.31	7,052	+26.6	400.0	7,000	0	302.52	29,720	+235.1
CAL YR 1996			+.5			0			+33.1
Jan. 31.........	10.30	7,046	-.3	400.0	7,000	0	301.67	29,070	-32.4
Feb. 28.........	10.20	6,984	-3.4	400.0	7,000	0	302.08	29,380	+17.1
Mar. 31.........	10.72	7,306	+16.4	400.0	7,000	0	302.30	29,550	+8.5
Apr. 30.........	10.26	7,021	-14.7	400.0	7,000	0	302.42	29,650	+5.2
May 31.........	10.05	6,891	-6.5	400.0	7,000	0	300.89	28,460	-59.4
June 30.........	9.94	6,823	-3.5	400.0	7,000	0	299.18	27,160	-67.0
July 31.........	9.82	6,750	-3.6	400.0	7,000	0	291.72	21,940	-260.5
Aug. 31.........	10.04	6,885	+6.7	400.0	7,000	0	284.90	17,710	-211.1
Sept. 30.........	10.06	6,897	+.6	400.0	7,000	0	280.61	15,350	-121.7
WTR YR 1997			-.4			0			-27.6

e Estimated.
* Elevation at 0900.
** Gage height at 2400.
† Elevation at 0800 on first day of following month.
a Corrected figures for 1995.
b Corrected figures for 1996.

DIVERSIONS WITHIN PASSAIC RIVER BASIN

01368720 North Jersey District Water Supply Commission diverts water from Upper Greenwood Lake (Hudson River basin) near Moe, NJ to the Green Brook, a tributary of Greenwood Lake, for municipal supply. Consult North Jersey District Water Supply Commission for data available.

01379510 New Jersey-American Water Company diverts water from Passaic River, 1.2 mi upstream from Canoe Brook for municipal supply. Records provided by New Jersey-American Water Company.

01379530 New Jersey-American Water Company diverts water from Canoe Brook near Summit, 0.5 mi from mouth, for municipal supply. Records provided by New Jersey-American Water Company.

01380280 The Town of Boonton diverts water from a tributary of Stony Brook about 1 mi downstream from Taylortown Reservoir for Municipal Water Supply. Records furnished by Town of Boonton.

01380800 Jersey City diverts water from Boonton Reservoir on Rockaway River at Boonton for municipal supply. Records provided by United Water New Jersey.

01382370 City of Newark diverts water from Charlotteburg Reservoir on Pequannock River since May 21, 1961 for municipal supply. Prior to May 21, 1961 water was diverted from reservoir formed by Macopin intake dam on Pequannock River (former diversion 01382490). Records provided by City of Newark, Division of Water Supply. REVISED RECORDS.--WDR NJ-82-1: Station number.

01386980 North Jersey District Water Supply Commission diverts water for municipal supply from Wanaque Reservoir on Wanaque River. Records provided by North Jersey District Water Supply Commission.

01387020 North Jersey District Water Supply Commission diverts water from Posts Brook near Wanaque into Wanaque Reservoir for municipal supply. Records not available.

01387990 North Jersey District Water Supply Commission diverts water from Ramapo River by pumping from Pompton Lakes into Wanaque Reservoir. Records provided by North Jersey District Water Supply Commission.

01388490 Passaic Valley Water Commission supplements the dependable yield of its supply at Little Falls by diverting water at high flows at the Jackson Avenue Pumping Station into Point View Reservoir on Haycock Brook for release as required to sustain minimum flow requirements. Also water may be released into Haycock Brook for maintenance of flow in that stream. These diversions and releases occur upstream from Pompton Plains gaging station. Records provided by Passaic Valley Water Commission. No diversion or release during the year. REVISED RECORDS.--WDR NJ-82-1: Station number.

01388980 North Jersey District Water Supply Commission diverts water from the Wanaque South pumping station on the Pompton River at Two Bridges, 750 ft upstream from the Passaic River, to Wanaque Reservoir since January 1987. Record provided by the North Jersey District Water Supply Commission.

01388981 United Water New Jersey diverts water from the Wanaque South pumping station on the Pompton River at Two Bridges, 750 ft upstream from the Passaic River, to Oradell Reservoir. Water can also be diverted from Wanaque Reservoir to Oradell Reservoir in the Hackensack River basin. Figures given herein include diversion from both sources. Prior to water year 1989, diversion was from Ramapo River at Pompton Lakes. Records provided by the United Water New Jersey.

01389490 The Passaic Valley Water Commission diverts water from Passaic River above Beatties Dam at Little Falls for municipal supply. Records provided by Passaic Valley Water Commission.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

MONTH	01379510 New Jersey - American Water Company from Passaic River	01379530 New Jersey - American Water Company from Canoe Brook	01380280 Stony Brook tributary at Taylortown	01380800 Jersey City	01380800 Jersey City	01382370 Newark
October	8.70	9.00	.61	75.7	63.5a	58.2
November	13.5	2.94	.52	79.5	64.1a	84.1
December	.79	12.0	.77	66.2	60.5a	79.1
CAL YR 1996	6.08	6.22	.78	23.9	66.6a	72.0
January	9.91	2.03	.78	63.4	60.1a	80.6
February	18.9	.18	.74	77.9	47.6a	83.3
March	11.1	1.62	.65	83.8	65.1a	75.4
April	1.21	4.56	.72	73.4	63.6a	76.4
May	11.1	4.73	.92	69.3	63.6a	65.1
June	0	.91	.70	84.7	70.0a	67.0
July	0	5.73	.82	109	84.2a	70.4
August	0	1.53	.76	102	85.9a	65.1
September	0	.96	.83	94.6	81.2a	65.4
WTR YR 1997	6.27	3.85	.73	81.6	67.4a	72.5

a Revised 1996 data.

DIVERSIONS WITHIN PASSAIC RIVER BASIN--Continued

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997, Continued

MONTH	01386980 Wanaque Reservoir	01387990 Ramapo River to Wanaque Reservoir	01388980 Pompton River to Wanaque Reservoir	01388981* To Oradell Reservoir	01389490 Passaic Valley Water Commission
October	180	0	0	0.04	66.1
November	161	0	0	0	69.2
December	159	0	0	0	56.7
CAL YR 1996	179	.08	14.7	5.41	68.3
January	171	0	0	0	53.8
February	161	0	0	0	59.8
March	158	0	0	0	61.8
April	162	0	0	0	63.7
May	172	0	0	0	68.3
June	190	0	130	9.58	82.3
July	201	0	0	42.73	78.7
August	185	0	0	22.43	71.0
September	180	0	27.9	34.80	77.5
WTR YR 1997	173	0	12.7	9.13	67.4

* Diversion is to the Hackensack River Basin from Pompton River or Wanaque Reservoir.

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ

LOCATION.--Lat 40°40'30", long 74°13'20", Union County, Hydrologic Unit 02030104, on left bank at Ursino Lake Dam in Elizabeth, 75 ft upstream from bridge on Trotters Lane and 3.8 mi upstream from mouth.

DRAINAGE AREA.--16.9 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1552: Drainage area, 1922-23, 1927-29(M), 1932, 1933-34(M), 1938(P), 1942(M) 1944(P), 1945(M), 1948(P), 1952-53(M). WDR NJ-84-1: 1974.

GAGE.--Water-stage recorder, two crest-stage gages, and two concrete weirs. The right concrete weir was lowered 5 ft on Dec. 18, 1985. Datum of gage is sea level (levels by Corps of Engineers). Prior to Oct. 1, 1922, nonrecording gage at site 2,800 ft downstream at datum 4.14 ft higher and Oct. 1, 1922 to May 18, 1923, at same site at datum 5.23 ft higher. May 19, 1923 to Dec. 27, 1972, at site 2,800 ft downstream at datum 5.23 ft higher and published as "Elizabeth River at Elizabeth" (station 01393500), drainage area 18.0 mi^2.

REMARKS.--Records fair. Diversion by pumpage from Hammock Well Field in Union for municipal supply by Elizabethtown Water Co., probably reduces the flow past the station. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct, 19	1900	2,360	19.88	July 24	1300	2,030	19.53
Nov. 26	0845	1,540	18.92	July 25	0445	*3,080	*20.55
Dec. 2	0500	1,580	18.98				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	11	132	13	17	22	129	27	9.7	9.5	9.4	18
2	8.7	11	227	14	14	15	35	17	143	15	8.6	9.0
3	8.9	10	35	13	14	28	22	152	33	14	8.8	8.7
4	7.3	10	21	12	18	40	18	36	17	9.4	9.1	7.9
5	7.1	10	16	12	180	22	16	18	13	8.5	46	7.8
6	6.9	10	160	12	28	27	16	46	11	8.3	22	7.6
7	7.1	11	256	11	20	14	15	18	11	8.4	9.7	7.7
8	26	12	84	11	16	12	14	14	9.9	8.7	8.9	8.0
9	67	57	31	12	18	12	15	43	9.8	17	8.8	8.2
10	40	12	21	24	16	50	13	17	9.7	18	8.4	8.7
11	15	11	36	14	15	17	13	13	9.6	7.4	8.9	139
12	11	9.6	33	11	14	14	116	13	9.7	7.2	8.8	16
13	9.7	9.1	32	11	13	12	44	13	21	7.4	14	9.7
14	9.0	9.2	233	10	140	223	19	13	10	7.9	9.0	8.1
15	8.1	8.7	48	10	41	59	16	12	8.2	9.7	7.8	7.9
16	8.4	8.6	27	166	21	23	15	11	8.1	9.8	9.4	7.8
17	8.1	8.5	25	23	17	17	16	11	8.2	9.4	11	7.7
18	7.4	8.9	19	15	15	15	26	11	9.8	53	54	7.6
19	980	11	37	12	15	14	16	12	41	19	11	7.4
20	191	8.9	19	12	14	17	13	34	9.2	8.5	92	7.7
21	71	8.7	15	11	14	15	13	12	9.7	7.3	124	8.4
22	25	8.4	15	16	18	13	14	11	14	139	15	7.1
23	16	8.1	14	19	13	12	13	10	11	12	10	6.8
24	13	8.2	44	21	13	12	28	9.9	9.5	628	8.7	6.7
25	12	8.5	29	318	12	12	15	77	12	945	8.6	6.7
26	11	336	16	31	12	58	12	26	12	71	8.8	6.6
27	10	34	14	18	17	15	12	13	9.8	27	8.8	6.4
28	17	17	14	115	12	12	206	11	9.4	21	32	6.6
29	11	13	17	25	---	27	26	10	9.8	13	11	101
30	12	12	15	18	---	14	17	11	10	11	8.2	11
31	11	---	14	16	---	358	---	9.9	---	9.9	7.7	---
TOTAL	1644.4	701.4	1699	1026	757	1201	943	731.8	509.1	2140.3	608.4	477.8
MEAN	53.0	23.4	54.8	33.1	27.0	38.7	31.4	23.6	17.0	69.0	19.6	15.9
MAX	980	336	256	318	180	358	206	152	143	945	124	139
MIN	6.9	8.1	14	10	12	12	12	9.9	8.1	7.2	7.7	6.4

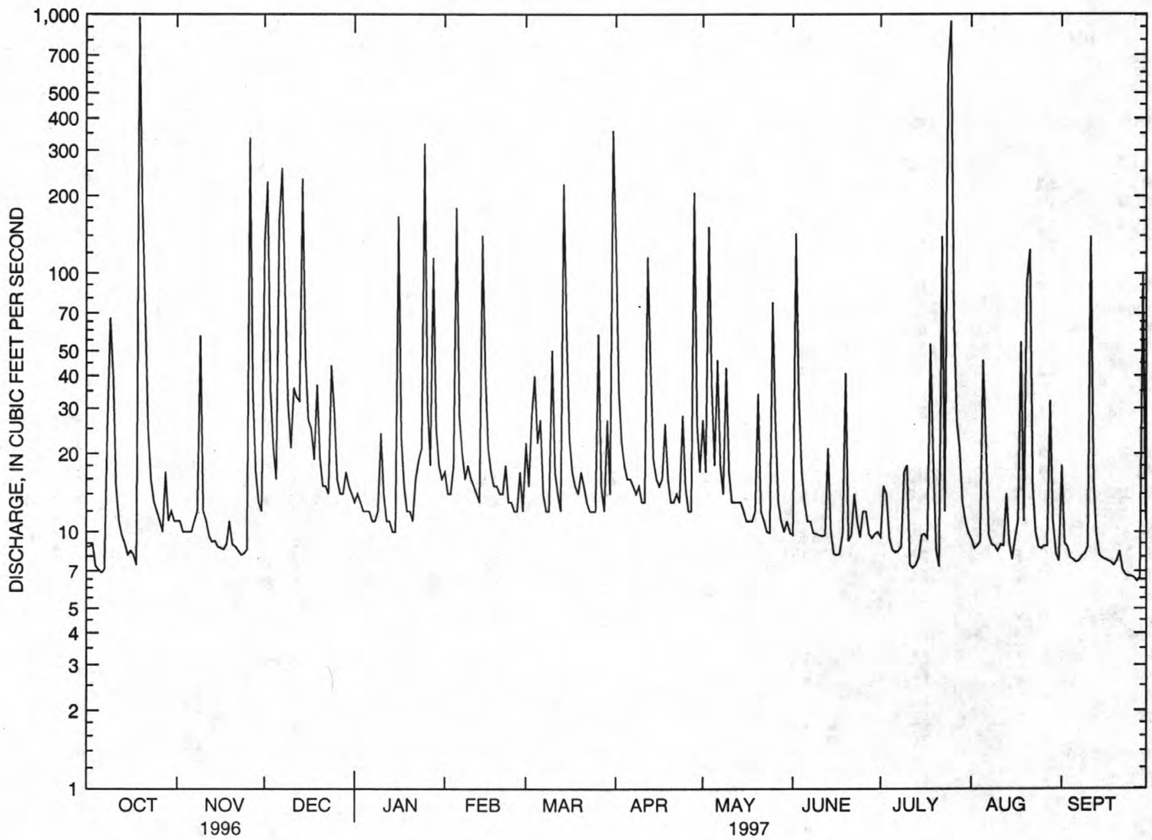
01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

MEAN	20.7	24.8	23.5	23.7	26.1	32.0	29.6	26.8	23.0	27.6	27.6	25.0
MAX	60.1	90.7	85.1	86.3	55.1	75.6	97.0	83.8	57.4	83.1	195	102
(WY)	1928	1973	1984	1979	1971	1983	1983	1968	1972	1922	1971	1966
MIN	1.58	5.05	6.25	3.71	6.56	6.03	10.3	5.97	3.94	3.24	.068	1.99
(WY)	1922	1923	1981	1925	1934	1981	1963	1923	1923	1923	1923	1923

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	10917.2		12439.2			
ANNUAL MEAN	29.8		34.1		25.9	
HIGHEST ANNUAL MEAN					48.3	1971
LOWEST ANNUAL MEAN					10.2	1923
HIGHEST DAILY MEAN	980	Oct 19	980	Oct 19	1900	Aug 28 1971
LOWEST DAILY MEAN	5.7	Jan 7	6.4	Sep 27	.00	Jul 14 1922
ANNUAL SEVEN-DAY MINIMUM	6.0	Aug 30	6.7	Sep 22	.00	Aug 7 1923
INSTANTANEOUS PEAK FLOW			3080	Jul 25	4110	Aug 28 1971
INSTANTANEOUS PEAK STAGE			20.55	Jul 25	18.70a	Aug 28 1971
INSTANTANEOUS LOW FLOW			6.4	Sep 27	.00	Many days
10 PERCENT EXCEEDS	54		53		51	
50 PERCENT EXCEEDS	13		13		11	
90 PERCENT EXCEEDS	7.7		8.2		5.5	

a From floodmark, site and datum then in use, from rating curve extended above 1,100 ft^3/s on basis of contracted-opening measurement of peak flow. Maximum gage height at current site and datum was 25.77 ft, Aug. 2, 1973.



——— 01393450 ELIZABETH RIVER AT URSINO LAKE AT ELIZABETH, NJ, DAILY MEAN DISCHARGE

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to September 1997 (discontinued).

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
06...	1305	9.7	881	8.0	13.0	770	11.6	109	<1.0	200	70	270
JAN 1997												
21...	1207	12	949	8.0	2.0	772	12.7	91	E1.5	350	<100	270
MAR												
20...	0937	14	887	8.1	6.5	757	11.1	91	<1.3	800	<100	240
MAY												
21...	1242	12	619	7.8	17.0	759	8.0	83	2.4	3100	100	210
JUL												
29...	1202	14	591	7.8	23.5	761	7.7	91	E1.3	2300	400	180

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
06...	84	14	60	3.5	152	54	140	<.1	17	506	478	<1
JAN 1997												
21...	84	14	78	2.1	144	60	160	<.1	16	552	513	<1
MAR												
20...	76	12	66	3.1	146	57	140	.1	13	496	468	5
MAY												
21...	66	10	40	2.7	118	44	84	<.1	11	369	335	9
JUL												
29...	58	9.2	40	2.5	106	45	79	.1	14	364	317	9

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
06...	.169	3.3	.05	.06	.2	.23	3.5	3.5	.08	.05	2.6	.3
JAN 1997												
21...	.021	2.8	<.03	<.03	.3	.38	3.1	3.2	.06	.02	2.3	.3
MAR												
20...	.152	3.1	<.03	<.03	.3	.21	3.4	3.3	.05	.02	2.9	.2
MAY												
21...	.074	1.6	.06	.09	.6	.45	2.1	2.0	.10	.04	5.8	.3
JUL												
29...	.035	1.4	.13	.14	.6	.24	2.0	1.6	.09	.03	4.9	.6

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
06...	1305	12	<1	<10	90	<1	<1.0	5

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
06...	220	1	50	<.1	2	<1	20

01394200 RAHWAY RIVER AT SPRINGFIELD, NJ

LOCATION.--Lat 40°42'26", long 74°18'06", Union County, Hydrologic Unit 02030105, at Washington Park, 790 ft downstream from Morris Avenue, 0.3 mi south of Springfield, and 1.0 mi northeast of Milltown.

DRAINAGE AREA.--18.1 mi^2.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 790 ft downstream from bridge.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	17.5	13.0	15.0
2	---	---	---	---	---	---	---	---	---	17.5	11.0	14.0
3	---	---	---	---	---	---	---	---	---	15.0	13.0	13.5
4	---	---	---	---	---	---	---	---	---	16.0	13.0	14.0
5	---	---	---	---	---	---	---	---	---	17.5	11.0	14.0
6	---	---	---	---	---	---	---	---	---	15.5	13.0	14.0
7	---	---	---	---	---	---	---	---	---	14.5	11.0	12.5
8	---	---	---	---	---	---	---	---	---	14.5	10.0	12.5
9	---	---	---	---	---	---	---	---	---	13.5	12.0	13.0
10	---	---	---	---	---	---	12.0	5.5	8.0	15.5	12.0	13.5
11	---	---	---	---	---	---	13.0	7.5	10.0	16.5	11.5	13.5
12	---	---	---	---	---	---	11.0	8.5	9.5	18.5	13.0	15.5
13	---	---	---	---	---	---	14.0	10.0	11.5	17.0	13.5	15.0
14	---	---	---	---	---	---	14.0	9.0	11.5	16.5	12.0	14.0
15	---	---	---	---	---	---	15.0	8.5	11.5	18.0	14.0	16.0
16	---	---	---	---	---	---	15.5	9.5	12.0	16.5	13.5	15.0
17	---	---	---	---	---	---	13.0	11.0	12.0	15.0	12.5	13.5
18	---	---	---	---	---	---	11.5	7.5	9.0	15.5	12.0	13.5
19	---	---	---	---	---	---	11.0	7.0	9.0	18.0	14.0	15.5
20	---	---	---	---	---	---	13.5	8.5	11.0	20.0	17.0	18.0
21	---	---	---	---	---	---	13.5	9.0	11.5	17.0	13.5	15.0
22	---	---	---	---	---	---	16.5	10.0	12.5	16.0	12.0	14.0
23	---	---	---	---	---	---	13.5	11.0	12.5	18.0	12.5	14.5
24	---	---	---	---	---	---	13.5	10.5	12.0	18.5	14.0	16.0
25	---	---	---	---	---	---	15.0	10.0	12.0	17.5	16.0	16.5
26	---	---	---	---	---	---	17.0	11.0	13.5	18.5	15.5	16.5
27	---	---	---	---	---	---	16.0	11.5	13.5	18.0	15.0	16.0
28	---	---	---	---	---	---	14.5	11.0	12.5	17.5	14.0	15.5
29	---	---	---	---	---	---	18.0	10.5	14.0	17.0	15.0	16.0
30	---	---	---	---	---	---	19.0	12.0	15.0	16.5	15.0	15.5
31	---	---	---	---	---	---	---	---	---	19.0	15.5	16.5
MONTH	---	---	---	---	---	---	---	---	---	20.0	10.0	15.0

01394200 RAHWAY RIVER AT SPRINGFIELD, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	17.5	18.0	22.5	20.5	21.5	23.0	19.5	21.0	22.5	19.5	21.0
2	19.0	15.5	17.0	22.0	20.5	21.0	23.0	20.0	21.5	22.0	20.0	21.0
3	15.5	14.5	15.0	23.0	20.5	21.5	24.0	20.0	21.5	21.5	19.0	20.0
4	17.0	14.0	15.5	24.0	20.5	22.0	22.0	20.0	21.0	19.0	16.0	17.0
5	18.0	14.5	16.0	22.5	19.5	21.0	22.5	19.0	20.5	19.0	15.0	16.5
6	17.5	15.5	16.5	22.5	19.0	20.5	22.5	19.0	20.5	19.0	16.0	17.5
7	17.5	15.0	16.0	22.5	19.5	21.0	22.0	18.0	20.0	20.0	16.5	18.0
8	18.0	14.5	16.0	23.0	20.0	21.0	20.5	18.0	19.0	19.5	18.0	19.0
9	18.5	15.0	16.5	24.0	20.5	22.0	23.0	18.5	20.0	19.5	18.0	18.5
10	19.5	16.0	18.0	23.5	20.5	22.0	23.5	19.5	21.0	19.0	17.5	17.5
11	21.0	18.0	19.5	22.5	19.5	21.0	24.0	20.0	21.5	21.0	17.5	19.5
12	21.5	19.0	20.0	24.0	19.5	21.5	23.0	21.0	22.0	22.0	19.5	20.5
13	21.0	19.5	20.0	24.5	20.5	22.0	22.0	20.5	21.0	21.0	19.0	19.5
14	20.0	18.5	19.5	25.0	21.5	23.0	24.0	20.5	21.5	20.5	18.5	19.0
15	20.0	17.0	18.5	26.0	22.0	23.5	22.5	20.0	21.5	20.0	18.0	19.0
16	19.5	16.5	18.0	26.0	23.0	24.0	24.5	21.0	22.5	20.5	18.0	19.0
17	19.0	16.5	17.5	26.5	23.0	24.5	25.5	21.5	23.5	20.5	18.0	19.0
18	18.5	17.0	17.5	25.5	23.0	24.0	24.5	20.0	22.0	20.5	19.0	19.5
19	22.5	18.0	20.0	24.5	21.0	22.5	21.5	18.5	20.0	20.0	18.0	19.0
20	23.5	19.0	21.0	22.5	18.5	20.0	20.0	18.0	18.5	20.0	18.0	19.0
21	25.0	20.0	22.5	22.5	18.5	20.5	20.0	18.0	19.0	19.0	16.0	17.0
22	25.5	21.5	23.5	23.0	20.5	21.5	22.0	18.5	19.5	16.5	14.0	15.0
23	24.5	20.5	22.5	22.0	20.0	21.0	20.5	18.0	19.0	16.0	14.5	15.0
24	22.0	19.0	20.5	21.0	16.5	18.5	21.0	17.0	18.5	15.5	14.0	14.5
25	25.0	19.5	21.5	20.0	16.0	18.0	20.5	18.0	19.0	15.0	12.5	13.5
26	25.5	22.0	23.5	22.0	18.0	19.5	21.5	18.0	19.5	16.0	13.5	14.5
27	24.0	20.0	22.0	23.0	19.5	21.0	21.5	19.0	20.0	16.0	14.0	15.0
28	24.0	19.5	21.5	24.0	21.0	22.5	20.5	19.5	19.5	16.0	14.0	15.0
29	24.5	19.5	21.5	23.0	20.0	21.5	21.5	18.5	19.5	18.5	16.0	17.0
30	23.0	20.0	21.5	22.5	17.5	20.0	21.5	18.5	20.0	17.5	16.0	16.5
31	---	---	---	23.0	18.0	20.5	21.5	19.0	20.0	---	---	---
MONTH	25.5	14.0	19.0	26.5	16.0	21.5	25.5	17.0	20.5	22.5	12.5	17.5

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ

LOCATION.--Lat 40°41'11", long 74°18'44", Union County, Hydrologic Unit 02030104, on left bank 50 ft downstream from bridge on eastbound U.S. Highway 22, 100 ft downstream from Pope Brook, and 1.5 mi south of Springfield.

DRAINAGE AREA.--25.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 1622: 1945. WRD-NJ 1973: 1938(M), 1968(M), 1971(M).

GAGE.--Water-stage recorder. Former concrete control is no longer effective. Datum of gage is 66.17 ft above sea level.

REMARKS.--Records good except for estimated discharges, which are fair. Water for municipal supply diverted from river by city of Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co. Several measurements of water temperature, other than those published, were made during the year. Satellite telemeter at station. Since 1980, the site may be affected during high flows by backwater from the Lenapi Park flood control dam, about 1 mi downstream. Regulation from Round Valley Reservoir.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	2145	4,510	9.26	Jan. 25	0415	1,100	5.88
Nov. 26	1045	1,020	5.66	July 24	1330	1,340	6.39
Dec. 2	1045	1,010	5.63	July 25	0430	*5,150	*9.56
Dec. 14	1200	1,130	5.97				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	17	190	18	28	22	312	32	13	10	14	14
2	14	16	536	18	22	17	94	31	140	11	13	8.8
3	14	16	59	19	21	22	54	209	50	12	16	8.7
4	12	15	34	18	21	41	42	92	19	10	13	9.2
5	12	16	22	18	221	39	33	34	16	9.7	24	8.4
6	12	16	365	17	48	49	29	54	14	9.8	26	8.4
7	12	17	242	17	33	33	28	33	14	10	12	8.1
8	223	21	292	15	26	31	24	24	14	9.5	12	8.1
9	206	62	55	16	25	30	22	48	13	29	12	9.4
10	64	14	37	25	22	73	20	27	13	23	11	8.4
11	23	9.9	39	17	20	42	18	20	13	12	11	125
12	16	8.8	65	15	18	32	94	18	13	8.8	11	12
13	13	7.8	51	15	17	19	98	17	21	8.6	13	8.7
14	13	7.7	560	14	131	229	32	17	12	8.3	11	7.8
15	12	7.7	94	14	78	135	21	17	12	8.2	10	7.5
16	12	7.6	49	195	37	46	23	17	11	8.1	11	7.8
17	12	7.6	41	36	28	34	22	17	12	8.3	15	7.7
18	15	7.7	32	17	24	29	39	16	25	53	53	8.1
19	e1500	9.1	44	15	21	26	27	19	72	32	10	7.4
20	e900	8.0	31	15	20	26	20	56	14	8.8	37	7.2
21	73	8.2	21	14	18	23	19	17	12	8.7	110	7.6
22	35	7.0	19	18	24	22	19	15	14	118	12	7.5
23	24	7.1	18	24	19	19	19	14	12	10	10	8.4
24	18	7.2	36	21	17	17	25	14	10	e375	9.6	8.3
25	15	7.2	56	458	16	17	17	66	11	e1700	9.2	8.4
26	13	414	21	45	16	65	16	32	10	e100	9.0	8.3
27	12	43	19	25	19	23	15	15	10	27	9.0	7.9
28	18	19	19	237	16	17	229	13	10	36	31	8.7
29	13	14	21	46	---	41	44	13	10	19	9.9	72
30	15	12	21	29	---	22	25	13	9.9	16	8.9	9.7
31	16	---	19	27	---	445	---	13	---	14	8.1	---
TOTAL	3350	830.6	3108	1478	1006	1686	1480	1023	619.9	2713.8	561.7	437.5
MEAN	108	27.7	100	47.7	35.9	54.4	49.3	33.0	20.7	87.5	18.1	14.6
MAX	1500	414	560	458	221	445	312	209	140	1700	110	125
MIN	12	7.0	18	14	16	17	15	13	9.9	8.1	8.1	7.2

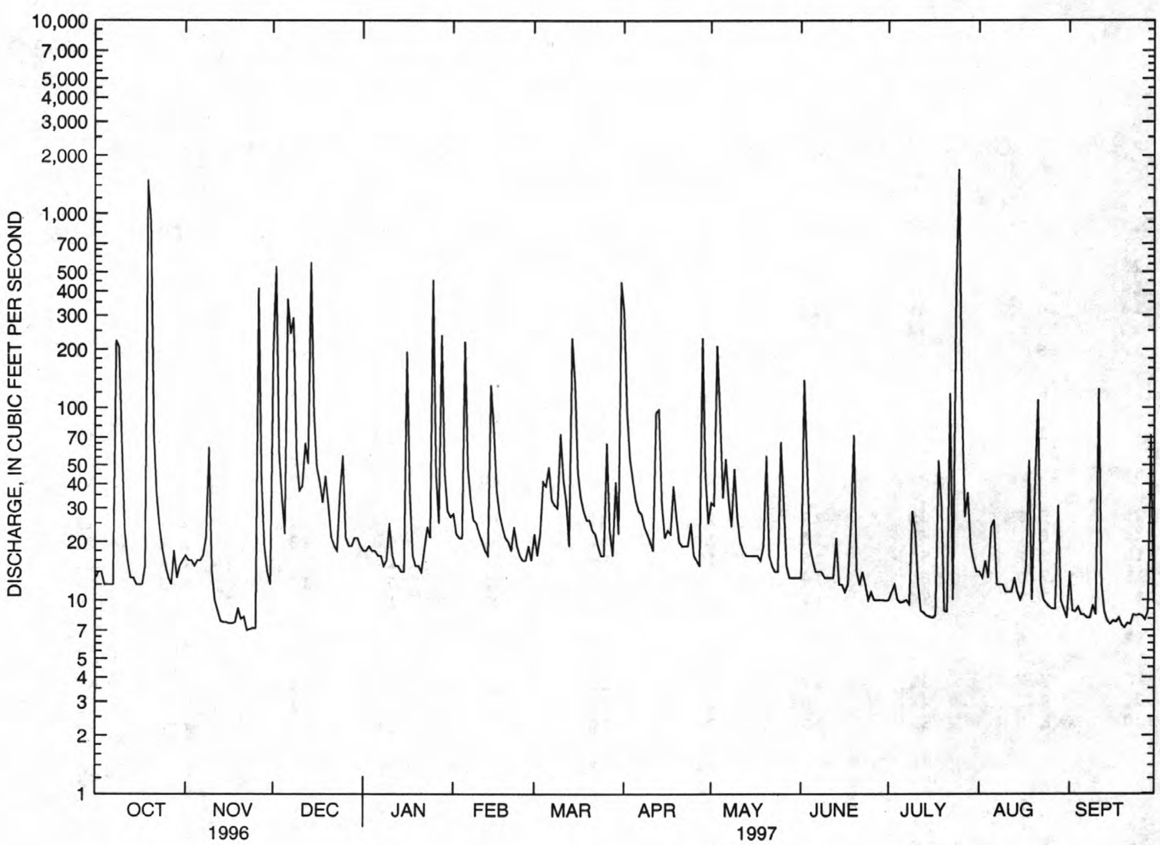
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	18.8	27.6	31.0	30.9	33.9	47.7	42.8	34.0	23.9	25.6	22.8	21.1
MAX	108	107	129	116	77.7	120	139	112	110	138	112	100
(WY)	1997	1973	1984	1979	1939	1994	1983	1989	1972	1975	1942	1975
MIN	2.17	2.73	4.02	4.26	7.01	8.08	7.37	6.31	4.14	2.23	2.10	2.97
(WY)	1964	1950	1940	1966	1954	1981	1963	1965	1965	1966	1964	1964

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1939 - 1997	
ANNUAL TOTAL	19854.0		18294.5			
ANNUAL MEAN	54.2		50.1		30.0	
HIGHEST ANNUAL MEAN					55.9	1973
LOWEST ANNUAL MEAN					10.0	1965
HIGHEST DAILY MEAN	1500	Oct 19	1700	Jul 25	1700	Jul 25 1997
LOWEST DAILY MEAN	7.0	Nov 22	7.0	Nov 22	.40	Sep 11 1966
ANNUAL SEVEN-DAY MINIMUM	7.7	Nov 19	7.6	Sep 15	.71	Oct 8 1970
INSTANTANEOUS PEAK FLOW			5150	Jul 25	5430a	Aug 2 1973
INSTANTANEOUS PEAK STAGE			9.56	Jul 25	9.76b	Aug 2 1973
INSTANTANEOUS LOW FLOW			6.8	Many days	.10	Sep 11 1966
10 PERCENT EXCEEDS	93		73		60	
50 PERCENT EXCEEDS	21		18		10	
90 PERCENT EXCEEDS	11		8.5		3.4	

a From rating curve extended above 1,600 ft^3/s on basis of slope-area measurement of peak flow.
b From floodmark.
e Estimated.



——— 01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ, DAILY MEAN DISCHARGE

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

WATER-QUALITY RECORDS

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

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites." For the definitions of split and concurrent replicate samples, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Analyses of the split and concurrent replicate samples were performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 1996									
30...	1010	ENVIRONMENTAL	11	678	7.6	11.5	752	7.0	65
JAN 1997									
16...	0945	ENVIRONMENTAL	538	1140	7.0	2.0	747	12.4	92
MAR									
19...	0855	ENVIRONMENTAL	26	739	8.1	6.0	767	10.7	86
MAY									
15...	0938	ENVIRONMENTAL	18	684	7.7	15.0	750	6.9	70
15...	0938	SPLIT REPLICATE	--	--	--	--	--	--	--
15...	0939	CONCURRENT REPLICATE	--	685	7.7	--	--	--	--
JUL									
22...	1140	ENVIRONMENTAL	53	180	7.3	20.5	762	5.7	63
22...	1140	SPLIT REPLICATE	--	--	--	--	--	--	--
22...	1141	CONCURRENT REPLICATE	--	--	--	--	--	--	--

DATE	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 1996										
30...	<1.0	1400	100	200	61	12	41	2.7	125	35
JAN 1997										
16...	5.5	16000	3500	90	28	4.8	180	2.4	37	13
MAR										
19...	E1.1	1400	180	170	51	11	64	1.8	94	30
MAY										
15...	<1.0	7900	1000	210	62	12	46	2.1	112	32
15...	--	--	--	200	61	12	49	3.0	111	31
15...	--	--	--	200	62	12	49	3.0	110	31
JUL										
22...	3.8	54000	22000	45	14	2.5	12	2.0	29	13
22...	--	--	--	47	14	3.0	12	2.0	31	12
22...	--	--	--	47	14	3.0	12	2.0	32	12

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 1996										
30...	110	.2	20	372	365	2	.014	1.8	<.03	<.03
JAN 1997										
16...	290	<.1	5.0	550	549	178	.025	.77	.21	.17
MAR										
19...	140	.1	14	402	375	1	.009	1.6	<.03	<.03
MAY										
15...	120	.1	15	395	359	2	.030	1.6	.05	<.03
15...	120	.18	--	397	346	<3	.033	1.52	.10	.09
15...	120	.18	--	432	347	<3	.033	1.58	.10	.09
JUL										
22...	20	<.1	5.1	108	91	16	.033	1.2	.06	<.07
22...	19	.11	--	116	85	<10	.030	1.02	.18	.17
22...	19	.11	--	122	86	15	.030	1.01	.18	.18

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996								
30...	.2	.20	2.0	2.0	.04	.03	3.2	.3
JAN 1997								
16...	2.0	.55	2.8	1.3	.51	.08	3.6	>7.9
MAR								
19...	.2	.15	1.8	1.8	.03	<.01	2.4	.3
MAY								
15...	.2	.12	1.8	1.7	.04	<.01	2.4	.5
15...	*.45*	*.33*	*2.0*	*1.9*	*.08*	*.05*	*2.0*	--
15...	*.40*	*.33*	*2.0*	*1.9*	*.08*	*.05*	*1.9*	--
JUL								
22...	1.6	.46	2.7	1.6	.09	.09	5.6	1.6
22...	*.58*	*.37*	*1.6*	*1.4*	*.24*	*.04*	*5.6*	--
22...	*.85*	*.33*	*1.9*	*1.3*	*.07*	*.03*	*5.9*	--

DATE	TIME	SAMPLE TYPE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
OCT 1996								
30...	1010	ENVIRONMENTAL	<10	<1	<10	90	<1	<1.0
MAY 1997								
15...	0938	ENVIRONMENTAL	<10	1	<10	70	<1	1.0
15...	*0938*	*SPLIT REPLICATE*	*<10*	*<3*	*<5.0*	--	*<1*	*<10*
15...	*0939*	*CONCURRENT REPLICATE*	*<10*	*<3*	*<5.0*	--	*<1*	*<10*

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT 1996								
30...	3	210	<1	50	<.1	2	<1	10
MAY 1997								
15...	2	360	2	130	<.1	2	<1	<10
15...	*3*	*360*	*<2*	*140*	*<.2*	*<2*	*<5*	*7.0*
15...	*<2*	*360*	*<2*	*140*	*<.2*	*<2*	*<5*	*7.0*

01395000 RAHWAY RIVER AT RAHWAY, NJ

LOCATION.--Lat 40°37'05", long 74°17'00", Union County, Hydrologic Unit 02030104, on left bank 100 ft upstream from St. Georges Avenue bridge in Rahway and 0.9 mi upstream from Robinsons Branch.

DRAINAGE AREA.--40.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1908 to April 1915 (gage heights and discharge measurements only), October 1921 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1930-31(M), 1937. WDR NJ-79-1: 1978.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8.77 ft above sea level. Prior to Aug. 25, 1934, nonrecording gage at site 40 ft downstream from Church Street and 1,500 ft downstream from present site at datum 2.77 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Water for municipal supply diverted from river by Rahway and Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., Springfield station of Elizabethtown Water Co., by storage in the Lenape Park flood control reservoir (since 1980) and by gate operations at Hansel's Dam 5.6 mi upstream from gage in Cranford, and Taylor Park Dam 11.6 mi upstream from gage on the West Branch Rahway River in Millburn. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	2030	*4,210	*7.50	Jan. 25	0615	1,040	3.96
Nov. 26	1115	921	3.77	Feb. 5	1115	634	3.25
Dec. 2	0600	1,250	4.29	Mar. 14	2330	868	3.68
Dec. 6	1415	771	3.51	Apr. 1	0300	1,030	3.95
Dec. 7	2200	944	3.81	Apr. 28	1015	660	3.30
Dec. 14	1115	1,200	4.22	July 25	1245	4,100	7.41
Jan. 16	1515	644	3.27				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e13	25	164	30	41	29	790	36	17	9.5	22	32
2	e12	25	905	30	36	37	202	53	218	12	20	17
3	e14	24	273	30	34	31	88	252	110	15	18	13
4	e12	22	71	29	32	74	62	206	30	12	26	12
5	e11	22	50	28	361	59	50	53	23	8.6	54	13
6	e11	21	473	26	102	77	43	69	20	8.7	106	11
7	e11	22	406	15	51	45	43	56	18	9.0	24	12
8	e130	26	621	20	42	38	38	35	19	8.9	6.0	11
9	e354	109	138	23	41	36	35	79	17	10	12	11
10	e124	43	71	40	37	86	31	45	16	52	16	25
11	e34	25	62	33	33	67	29	31	14	11	35	188
12	e20	22	119	25	31	42	100	29	14	8.6	15	48
13	e16	21	92	23	28	29	213	26	32	7.6	8.5	6.1
14	e15	19	759	23	183	189	53	26	18	7.6	10	13
15	e14	19	416	21	167	407	35	25	13	7.3	13	13
16	14	18	99	267	64	75	34	23	14	6.2	16	13
17	14	18	78	105	44	50	33	21	13	6.6	26	13
18	14	18	65	e32	38	43	53	21	18	18	82	12
19	1520	20	77	e24	35	37	52	23	103	81	32	12
20	2890	8.5	69	e22	33	51	33	69	19	8.5	30	11
21	497	10	46	e22	30	39	29	27	15	8.1	230	16
22	86	20	41	23	34	33	28	23	13	150	34	11
23	53	15	39	45	34	30	28	20	16	18	19	12
24	41	17	46	30	28	27	41	19	12	471	17	30
25	32	17	125	687	27	26	29	95	12	2990	15	14
26	30	565	47	130	26	81	25	91	12	880	13	11
27	27	249	39	44	32	41	23	24	11	125	13	9.3
28	29	49	36	314	26	28	358	21	9.7	64	44	12
29	31	33	36	113	---	28	86	18	9.0	34	24	127
30	26	28	41	47	---	56	40	19	9.2	27	16	21
31	27	---	33	39	---	534	---	19	---	24	14	---
TOTAL	6122	1530.5	5537	2340	1670	2425	2704	1554	864.9	5099.2	1010.5	749.4
MEAN	197	51.0	179	75.5	59.6	78.2	90.1	50.1	28.8	164	32.6	25.0
MAX	2890	565	905	687	361	534	790	252	218	2990	230	188
MIN	11	8.5	33	15	26	26	23	18	9.0	6.2	6.0	6.1

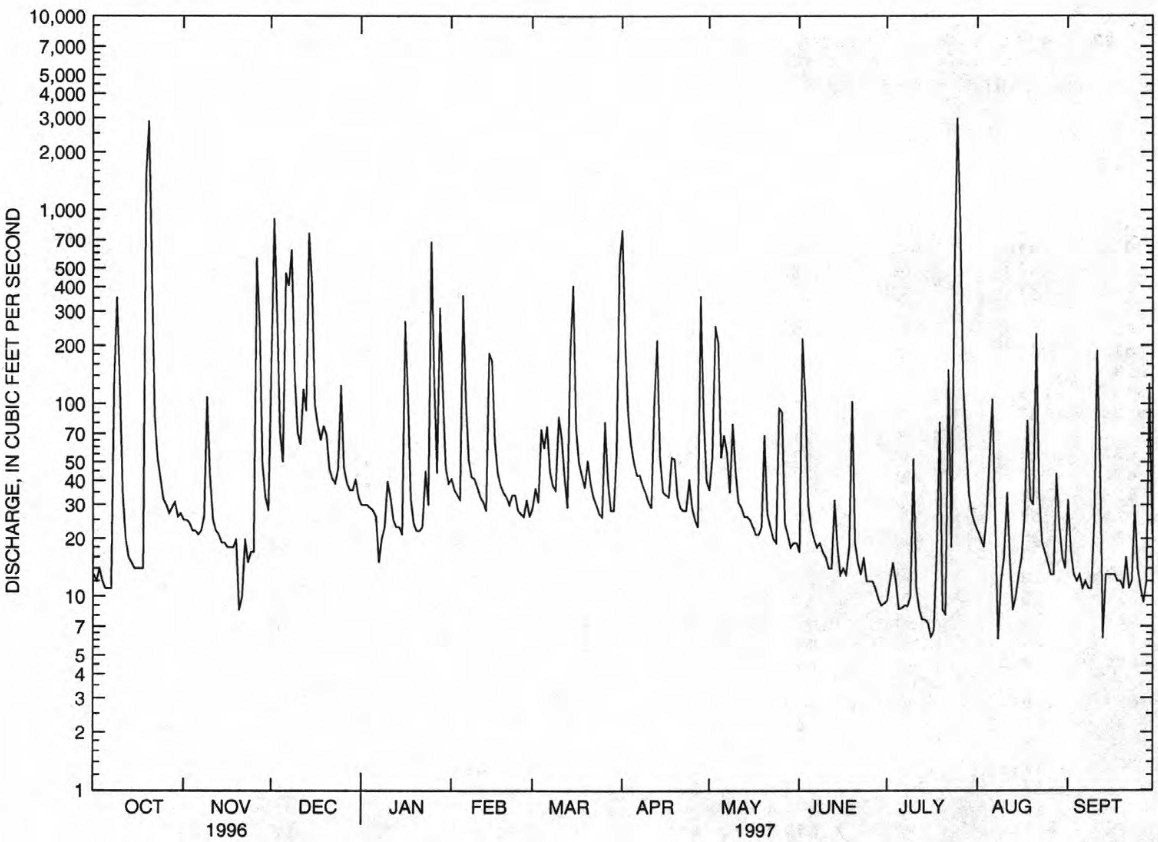
01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

MEAN	29.4	43.8	48.2	51.1	57.6	78.7	69.0	52.3	36.7	42.7	39.3	35.8
MAX	197	221	255	211	156	190	246	199	173	268	242	175
(WY)	1997	1973	1984	1979	1925	1983	1983	1989	1972	1975	1971	1975
MIN	1.48	3.05	3.27	1.41	12.5	12.6	7.80	6.20	3.32	.33	.43	2.26
(WY)	1964	1966	1981	1981	1954	1981	1963	1965	1965	1966	1964	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	31887.8		31606.5			
ANNUAL MEAN	87.1		86.6		48.7	
HIGHEST ANNUAL MEAN					105	1973
LOWEST ANNUAL MEAN					15.0	1965
HIGHEST DAILY MEAN	2890	Oct 20	2990	Jul 25	3450	Aug 28 1971
LOWEST DAILY MEAN	6.5	Sep 1	6.0	Aug 8	.00	Oct 9 1964
ANNUAL SEVEN-DAY MINIMUM	7.2	Aug 30	7.8	Jul 11	.00	Jul 10 1981
INSTANTANEOUS PEAK FLOW			4210a	Oct 19	5420a	Aug 2 1973
INSTANTANEOUS PEAK STAGE			7.50	Oct 19	7.88	Aug 2 1973
INSTANTANEOUS LOW FLOW			4.4	Aug 8	.00	Oct 1 1981
10 PERCENT EXCEEDS	177		143		99	
50 PERCENT EXCEEDS	32		29		19	
90 PERCENT EXCEEDS	12		12		3.4	

a From rating curve extended above 3,000 ft^3/s.
e Estimated.



01395000 RAHWAY RIVER AT RAHWAY, NJ, DAILY MEAN DISCHARGE

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1952, 1962, 1967-70, 1979 to current year.

REMARKS.--For the definitions of split and concurrent replicate samples, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Analyses of the split and concurrent replicate samples were performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 1996									
31...	1115	ENVIRONMENTAL	33	590	7.8	12.0	752	9.4	89
JAN 1997									
16...	1230	ENVIRONMENTAL	416	943	7.7	1.0	747	13.7	99
MAR									
19...	1140	ENVIRONMENTAL	43	678	8.3	5.5	768	12.5	99
MAY									
15...	1035	ENVIRONMENTAL	29	597	8.0	16.0	754	9.4	96
15...	*1035*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
15...	*1036*	*CONCURRENT REPLICATE*	--	*598*	*8.0*	--	--	--	--
JUL									
22...	1220	ENVIRONMENTAL	318	400	7.7	22.0	764	9.0	103
22...	*1220*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
22...	*1221*	*CONCURRENT REPLICATE*	--	*358*	*7.7*	--	--	--	--

DATE	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 1996										
31...	2.3	1100	300	200	60	11	34	2.5	125	40
JAN 1997										
16...	E1.7	2200	2400	150	46	8.2	110	1.8	92	29
MAR										
19...	E1.1	490	30	150	46	9.0	60	1.6	97	33
MAY										
15...	E1.1	1100	300	190	59	11	38	2.0	119	35
15...	--	--	--	*190*	*59*	*11*	*40*	*2.0*	*119*	*34*
15...	--	--	--	*190*	*59*	*11*	*40*	*2.0*	*117*	*34*
JUL										
22...	4.7	>24000	11000	110	35	6.2	20	2.3	73	23
22...	--	--	--	*110*	*36*	*6.0*	*20*	*3.0*	*76*	*21*
22...	--	--	--	*110*	*36*	*6.0*	*20*	*3.0*	*76*	*20*

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 1996										
31...	76	.1	18	340	323	5	.015	1.4	.03	<.03
JAN 1997										
16...	200	<.1	12	504	469	48	.016	1.5	.07	.08
MAR										
19...	120	<.1	12	372	346	14	.009	1.3	<.03	.04
MAY										
15...	86	<.1	14	352	321	3	.040	1.1	.11	.12
15...	*86*	*<.5*	--	*349*	*308*	*3*	*.043*	*1.05*	*.19*	*.19*
15...	*87*	*.15*	--	*276*	*308*	*3*	*.041*	*1.06*	*.18*	*.18*
JUL										
22...	46	<.1	9.1	220	189	40	.040	1.0	.13	.14
22...	*42*	*.14*	--	*255*	*177*	*34*	*.040*	*.83*	*.23*	*.21*
22...	*39*	*.14*	--	*246*	*174*	*38*	*.040*	*.87*	*.23*	*.19*

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996								
31...	.4	.19	1.8	1.6	.06	.02	3.7	1.1
JAN 1997								
16...	.7	.34	2.2	1.8	.14	.01	2.4	2.4
MAR								
19...	.3	.17	1.6	1.5	.04	<.01	2.7	.6
MAY								
15...	.3	.21	1.3	1.3	.05	.01	2.9	.3
15...	*.61*	*.42*	*1.7*	*1.5*	*.09*	*.05*	*2.3*	--
15...	*.5*	*.44*	*1.6*	*1.5*	*.26*	*.07*	*2.1*	--
JUL								
22...	1.0	.59	2.1	1.6	.23	.08	5.3	1.9
22...	*1.2*	*.49*	*2.0*	*1.3*	*.28*	*.12*	*5.0*	--
22...	*.66*	*.52*	*1.5*	*1.4*	*.27*	*.10*	*5.3*	--

DATE	TIME	SAMPLE TYPE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
OCT 1996								
31...	1115	ENVIRONMENTAL	15	1	<10	90	<1	<1.0
MAY 1997								
15...	1035	ENVIRONMENTAL	10	<1	<10	70	<1	50
15...	*1035*	*SPLIT REPLICATE*	*11*	*<3*	*<5.0*	--	*<1*	*<10*
15...	*1036*	*CONCURRENT REPLICATE*	*<10*	*<3*	*<5.0*	--	*<1*	*<10*

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT 1996								
31...	4	550	4	150	<.1	2	<1	10
MAY 1997								
15...	2	700	3	290	<.1	22	<1	<10
15...	*<2*	*590*	*<2*	*300*	*<.2*	*3*	*<5*	*6.0*
15...	*<2*	*540*	*<2*	*290*	*<.2*	*<2*	*<5*	*6.0*

01396280 SOUTH BRANCH RARITAN RIVER AT MIDDLE VALLEY, NJ

LOCATION.--Lat 40°45'40", long 74°49'18", Morris County, Hydrologic Unit 02030105, at bridge on Middle Valley Road in Middle Valley, 6.9 mi downstream from Drakes Brook.

DRAINAGE AREA.--47.6 mi^2.

PERIOD OF RECORD.--Water years 1964-65, 1967, 1976 to September 1997 (discontinued).

REMARKS.--For the definition of a field blank sample, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
23...	1100	140	215	7.8	11.0	745	8.8	82	E1.5	270	100	64
JAN 1997												
30...	1130	88	274	8.1	0.5	757	13.9	97	<1.0	20	30	70
MAR												
31...	1130	500	194	7.8	9.0	735	10.0	90	3.0	490	360	51
MAY												
27...	1100	66	256	8.4	13.5	753	9.9	96	E1.1	1300	20	85
JUL												
15...	1130	25	312	8.3	21.0	748	9.6	110	E1.4	700	100	120

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
23...	15	6.4	14	1.5	45	11	28	<.1	13	110	120	10
JAN 1997												
30...	16	7.3	21	1.3	47	12	39	<.1	12	148	143	3
MAR												
31...	12	5.2	14	1.2	33	10	27	<.1	9.0	110	103	85
MAY												
27...	19	8.9	15	1.3	62	11	29	.1	11	150	138	6
JUL												
15...	26	13	15	1.7	92	11	30	<.1	10	187	170	3

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
23...	.003	.97	.03	<.03	.5	.29	1.5	1.3	.06	.04	3.8	1.0
JAN 1997												
30...	.006	1.5	.07	.05	.2	.14	1.7	1.6	.04	.03	1.6	.4
MAR												
31...	.011	1.0	<.03	<.04	.9	.23	1.9	1.2	.21	.02	3.2	>4
MAY												
27...	.011	1.3	<.03	<.03	.3	.11	1.6	1.5	.04	.04	2.6	.4
JUL												
15...	.016	2.0	<.03	<.03	.2	.27	2.2	2.2	.09	.08	2.2	.7

01396280 SOUTH BRANCH RARITAN RIVER AT MIDDLE VALLEY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
MAY 1997										
27...	1100	ENVIRONMENTAL	<10	<1	<10	20	<1	<1.0	1	--
27...	*1100*	*FIELD BLANK*	--	--	--	--	--	--	--	*<1*

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
MAY 1997											
27...	260	<1	--	20	<.1	--	<1	--	<1	<10	--
27...	--	--	*<1*	--	--	*<.1*	--	*<1*	--	--	*<.5*

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ

LOCATION.--Lat 40°40'40", long 74°52'46", Hunterdon County, Hydrologic Unit 02030105, on left bank 1.0 mi northeast of High Bridge, and 4.4 mi upstream from Spruce Run.

DRAINAGE AREA.--65.3 mi^2.

PERIOD OF RECORD.--October 1918 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 601: 1924. WSP 781: Drainage area. WSP 1552: 1919(M), 1920(M), 1921, 1923, 1924(M), 1927-28(M), 1934(M), 1941(M).

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Sept. 28, 1930. Datum of gage is 282.10 ft above sea level (levels from New Jersey Geological Survey bench mark). Prior to Sept. 30, 1921, reference point at same site and datum.

REMARKS.--Records good. Occasional regulation from unknown source. Several measurements of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods occurred on Feb. 6, 1896, in February 1902, and October 1903. At High Bridge, according to reports of the New Jersey State Geologist, the discharges for these floods respectively were 7,560 ft^3/s, 3,840 ft^3/s, and 2,670 ft^3/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0215	*4,730	*11.13	Dec. 8	0200	1,070	8.52
Dec. 2	1115	2,310	9.69	Jan. 25	1115	1,360	8.86

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	111	481	162	177	118	351	140	88	52	51	50
2	53	106	1750	161	178	130	330	135	138	52	49	53
3	57	101	532	167	168	128	370	248	302	60	48	45
4	50	98	384	164	160	130	342	285	140	58	47	40
5	47	95	322	161	444	135	265	177	110	53	59	37
6	46	94	607	162	254	226	232	169	100	50	53	37
7	45	94	545	143	186	160	217	172	92	48	49	36
8	73	140	696	131	168	133	195	144	88	50	46	36
9	228	577	409	128	158	122	180	169	83	59	44	36
10	109	247	340	134	147	139	167	161	80	111	42	36
11	80	178	318	129	138	165	164	139	77	62	41	145
12	64	151	351	113	132	139	190	127	73	53	44	252
13	58	136	366	114	127	122	352	121	72	50	43	96
14	55	129	816	114	163	264	202	117	76	47	43	67
15	51	122	489	108	241	476	169	113	68	46	41	56
16	49	116	379	198	184	223	159	123	65	44	40	50
17	49	114	354	159	145	184	161	106	65	41	62	47
18	47	114	323	107	134	173	268	103	94	42	77	46
19	1280	116	326	98	144	161	238	112	158	72	61	43
20	2210	111	287	121	156	157	184	210	91	51	54	41
21	420	106	238	127	141	152	163	135	76	43	130	39
22	278	103	221	134	160	144	154	111	69	85	68	38
23	225	98	218	208	141	130	148	101	65	62	54	37
24	198	96	264	138	126	123	142	96	62	199	48	37
25	174	94	385	880	116	120	139	117	63	248	46	36
26	157	544	234	246	113	175	131	165	61	99	44	36
27	146	266	215	170	123	148	125	108	59	70	42	36
28	143	170	203	484	121	129	289	95	56	98	60	36
29	140	146	204	265	---	122	205	91	53	72	54	37
30	126	137	200	180	---	118	167	89	52	59	49	39
31	120	---	180	167	---	429	---	92	---	54	42	---
TOTAL	6835	4710	12637	5773	4645	5275	6399	4271	2676	2190	1631	1620
MEAN	220	157	408	186	166	170	213	138	89.2	70.6	52.6	54.0
MAX	2210	577	1750	880	444	476	370	285	302	248	130	252
MIN	45	94	180	98	113	118	125	89	52	41	40	36
CFSM	3.38	2.40	6.24	2.85	2.54	2.61	3.27	2.11	1.37	1.08	.81	.83
IN.	3.89	2.68	7.20	3.29	2.65	3.01	3.65	2.43	1.52	1.25	.93	.92

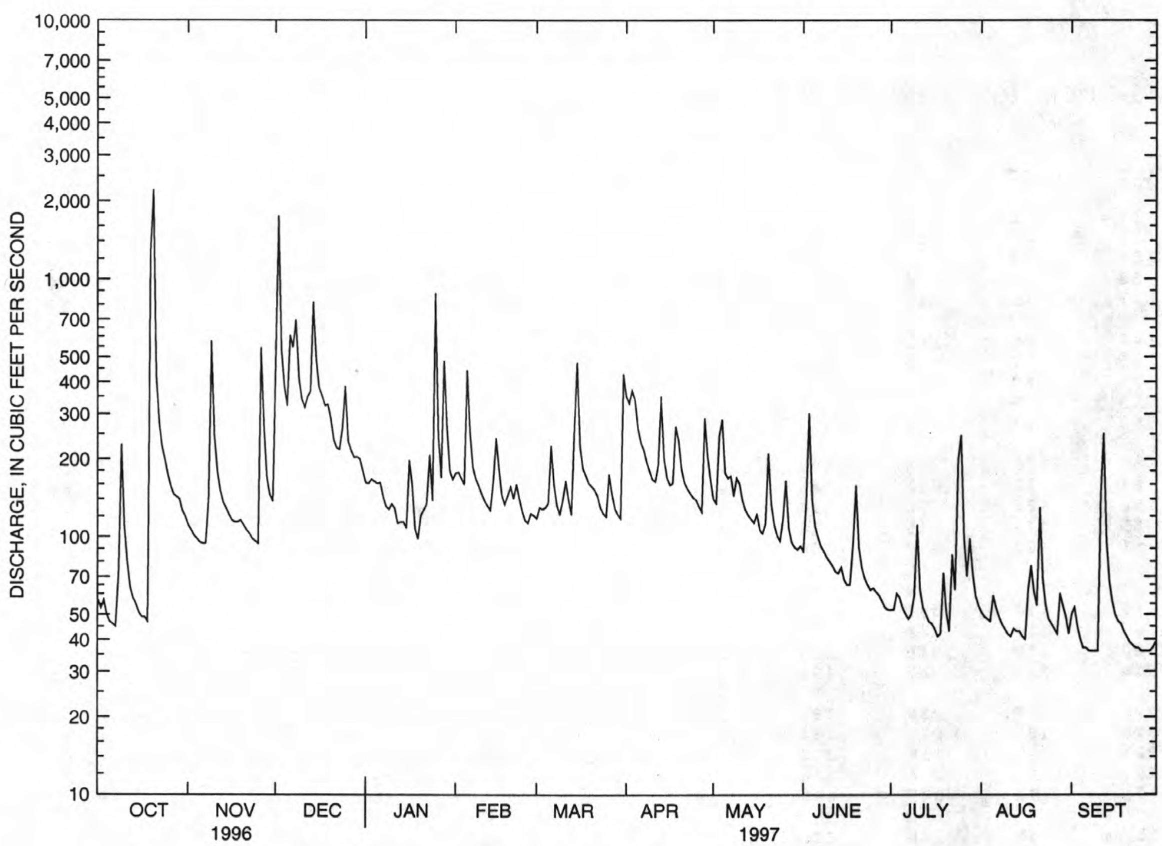
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	75.3	110	135	142	153	203	193	143	96.9	85.1	76.4	71.1
MAX	257	335	408	480	301	466	528	337	401	295	285	195
(WY)	1928	1928	1997	1979	1925	1936	1983	1989	1972	1975	1942	1979
MIN	21.8	26.9	36.5	31.8	54.0	79.5	70.7	50.5	27.6	20.7	20.4	20.8
(WY)	1964	1966	1966	1981	1934	1965	1965	1965	1965	1965	1965	1964

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1919 - 1997	
ANNUAL TOTAL	74129		58662			
ANNUAL MEAN	203		161		124	
HIGHEST ANNUAL MEAN					213	1928
LOWEST ANNUAL MEAN					46.2	1965
HIGHEST DAILY MEAN	2210	Oct 20	2210	Oct 20	3340	Jan 25 1979
LOWEST DAILY MEAN	37	Sep 5	36	Sep 7	13	Aug 11 1966
ANNUAL SEVEN-DAY MINIMUM	40	Aug 31	36	Sep 23	18	Aug 11 1965
INSTANTANEOUS PEAK FLOW			4730	Oct 20	6910	Jan 25 1979
INSTANTANEOUS PEAK STAGE			11.13	Oct 20	14.26a	Jan 28 1994
INSTANTANEOUS LOW FLOW			38	Jul 18	6.6	Oct 11 1930
ANNUAL RUNOFF (CFSM)	3.10		2.46		1.89	
ANNUAL RUNOFF (INCHES)	42.23		33.42		25.71	
10 PERCENT EXCEEDS	387		294		236	
50 PERCENT EXCEEDS	146		123		87	
90 PERCENT EXCEEDS	55		46		36	

a Result of ice jam.



01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ, DAILY MEAN DISCHARGE

01396535 SOUTH BRANCH RARITAN RIVER AT ARCH STREET, AT HIGH BRIDGE, NJ

LOCATION.--Lat 40°39'49", long 74°53'52", Hunterdon County, Hydrologic Unit 02030105, at bridge on Arch Street in High Bridge, 0.9 mi northeast of Mariannes Corner, 1.0 mi downstream from Lake Solitude dam, and 4.3 mi northeast of Norton.

DRAINAGE AREA.--68.8 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites." For the definition of a field blank sample, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
24...	1100	E230	--	8.1	12.0	750	9.9	--	E1.6	130	160	74
JAN 1997												
30...	1130	E180	264	7.6	0.5	764	14.4	100	E1.3	70	40	63
MAR												
31...	1130	E575	216	8.1	10.5	738	10.5	97	E1.7	790	130	71
MAY												
27...	1115	E110	223	8.2	15.0	760	9.5	94	E1.4	270	40	79
JUL												
15...	1145	E40	298	8.2	23.5	751	8.5	102	E1.6	700	200	120

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
24...	17	7.6	12	1.6	53	12	23	<.1	14	130	124	5
JAN 1997												
30...	14	6.7	22	1.5	46	12	38	<.1	12	144	140	1
MAR												
31...	16	7.6	13	1.1	53	12	24	<.1	9.6	121	120	13
MAY												
27...	18	8.3	12	1.3	60	11	24	<.1	11	138	127	9
JUL												
15...	25	13	12	1.6	93	12	23	<.1	9.1	174	157	6

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
24...	.007	1.1	.03	<.03	.3	.24	1.4	1.3	.04	.03	3.3	.7
JAN 1997												
30...	.006	1.3	.05	.04	.2	.12	1.5	1.4	.01	.02	1.7	.3
MAR												
31...	.011	1.2	<.03	.03	.4	.17	1.6	1.4	.05	.03	2.2	1.3
MAY												
27...	.015	1.3	<.03	.06	.4	.15	1.7	1.4	.04	.02	3.0	.4
JUL												
15...	.017	1.4	<.03	<.03	.3	.45	1.6	1.8	.04	.01	2.0	.9

01396535 SOUTH BRANCH RARITAN RIVER AT ARCH STREET, AT HIGH BRIDGE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
MAY 1997										
27...	1115	ENVIRONMENTAL	10	<1	<10	20	<1	<1.0	1	--
27...	*1115*	*FIELD BLANK*	--	--	--	--	--	--	--	*<1*

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
MAY 1997											
27...	330	<1	--	20	<.1	--	<1	--	<1	<10	--
27...	--	--	*<1*	--	--	*<.1*	--	*<1*	--	--	*<.5*

01396580 SPRUCE RUN AT GLEN GARDNER, NJ

LOCATION.--Lat 40°41'35", long 74°56'25", Hunterdon County, Hydrologic Unit 02030105, on right downstream wingwall of bridge on Sanatorium Road in Glen Gardner, 0.8 mi downstream from Alpaugh Brook, and 2.0 mi upstream from Spruce Run Reservoir.

DRAINAGE AREA.--11.3 mi^2.

PERIOD OF RECORD.--March 1978 to September 1988, December 1991 to current year.

REVISED RECORD.--WDR NJ-86-1: 1983-85(P). WDR NJ-93-1: Drainage area, longitude.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 389.10 ft above sea level.

REMARKS.--Records poor. Some regulation from unknown sources uptream. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1415	*1,910	*7.96	Dec. 2	0245	1,100	5.09
Nov. 8	2315	516	3.79	Dec. 14	0400	588	3.97
Nov. 26	0745	600	4.00	Jan. 25	0300	676	4.18
Dec. 1	1530	579	3.95				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	194	25	37	15	62	12	e9.8	e4.6	5.9	3.4
2	13	15	318	26	32	19	77	12	36	e5.0	5.5	3.1
3	13	13	78	29	31	18	63	39	36	e6.6	5.5	3.2
4	11	12	61	27	27	18	46	33	12	e5.1	5.2	3.1
5	10	12	52	28	115	26	35	15	12	e4.4	5.3	3.1
6	10	11	155	26	43	50	32	17	e11	e4.6	5.0	3.2
7	10	12	159	20	32	22	29	14	e11	e5.5	4.7	3.0
8	27	63	112	17	28	17	24	12	e10	e5.4	4.7	2.8
9	28	156	74	17	26	15	23	22	e8.9	e7.9	4.4	2.8
10	19	45	60	19	22	27	21	e20	e8.2	e13	4.4	2.8
11	14	33	66	16	21	28	20	e18	e7.6	e6.8	4.1	14
12	12	27	74	16	19	19	38	e17	e7.2	e5.8	4.0	11
13	12	23	128	17	18	15	59	e16	e8.6	e5.7	3.9	4.3
14	11	22	249	14	32	107	26	e15	e8.6	e5.6	3.7	3.2
15	10	20	99	15	46	74	20	e14	e7.8	e5.5	3.7	2.8
16	9.7	18	79	45	27	36	19	e13	e7.1	e5.4	3.4	2.8
17	9.8	18	76	e23	20	29	22	e13	e7.1	e5.4	8.6	2.8
18	9.2	19	64	e16	19	28	61	e13	e11	e7.2	11	2.8
19	586	20	72	e17	24	25	32	e13	e15	e7.7	5.0	2.4
20	139	17	54	e16	25	23	21	e19	e8.4	e5.4	7.6	2.3
21	64	15	43	e16	21	21	18	e13	e7.1	e5.2	21	2.5
22	46	14	41	e19	28	20	16	e12	e7.8	e16	6.2	2.4
23	38	13	42	46	19	18	15	e11	e6.7	e8.6	4.2	2.3
24	33	13	75	27	15	17	15	e10	e6.8	47	4.0	2.3
25	29	13	65	204	15	17	14	e32	e6.7	34	3.7	2.1
26	25	147	41	39	15	38	14	e25	e6.0	e19	3.4	2.1
27	22	42	39	27	18	25	14	e14	e5.8	e11	3.5	2.0
28	25	28	37	118	16	22	52	e12	e5.1	e12	7.8	2.1
29	22	24	40	42	---	22	21	e10	e4.8	7.2	4.4	3.0
30	20	24	38	28	---	22	13	e10	e7.00	6.5	3.5	2.6
31	18	---	31	27	---	94	---	e10	---	5.9	3.4	---
TOTAL	1308.7	905	2716	1022	791	927	922	506	307.10	295.0	170.7	102.3
MEAN	42.2	30.2	87.6	33.0	28.3	29.9	30.7	16.3	10.2	9.52	5.51	3.41
MAX	586	156	318	204	115	107	77	39	36	47	21	14
MIN	9.2	11	31	14	15	15	13	10	4.8	4.4	3.4	2.0
CFSM	3.74	2.67	7.75	2.92	2.50	2.65	2.72	1.44	.91	.84	.49	.30
IN.	4.31	2.98	8.94	3.36	2.60	3.05	3.04	1.67	1.01	.97	.56	.34

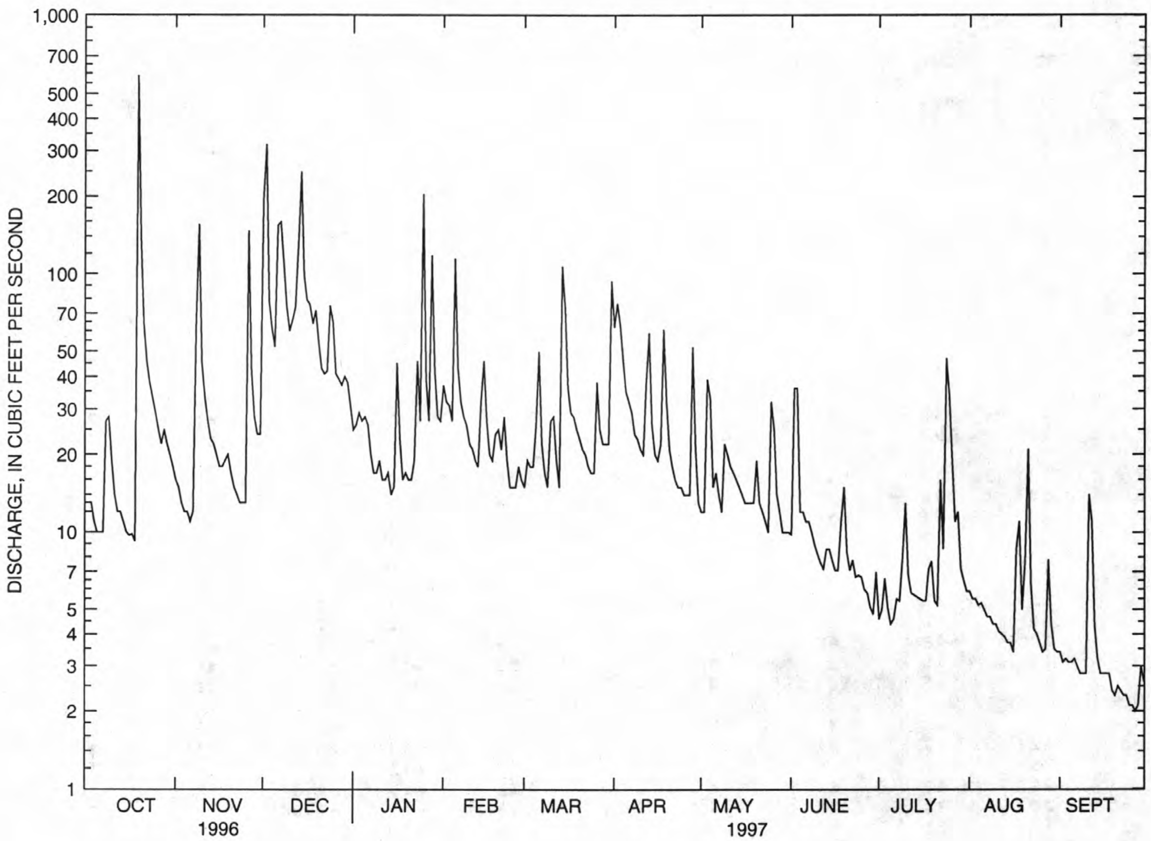
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	14.1	20.2	26.7	27.6	26.3	36.7	36.4	24.4	14.5	12.1	6.62	8.40
MAX	44.4	34.6	87.6	106	44.7	83.5	73.7	61.3	31.4	46.9	11.4	29.5
(WY)	1996	1986	1997	1979	1979	1994	1983	1984	1992	1984	1978	1979
MIN	3.54	5.60	6.96	5.66	9.93	12.8	9.74	8.95	5.76	3.20	2.54	1.88
(WY)	1983	1985	1981	1981	1980	1981	1985	1995	1993	1993	1995	1980

01396580 SPRUCE RUN AT GLEN GARDNER, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1978 - 1997	
ANNUAL TOTAL	12595.1		9972.80			
ANNUAL MEAN	34.4		27.3		21.5	
HIGHEST ANNUAL MEAN					33.3	1984
LOWEST ANNUAL MEAN					11.3	1995
HIGHEST DAILY MEAN	586	Oct 19	586	Oct 19	586	Oct 19 1996
LOWEST DAILY MEAN	2.9	Jan 17	2.0	Sep 27	1.2	Oct 1 1982
ANNUAL SEVEN-DAY MINIMUM	3.5	Jan 6	2.2	Sep 22	1.5	Aug 20 1995
INSTANTANEOUS PEAK FLOW			1910	Oct 19	1910a	Oct 19 1996
INSTANTANEOUS PEAK STAGE			7.96	Oct 19	7.96	Oct 19 1996
INSTANTANEOUS LOW FLOW			2.0	Many days	1.1	Oct 1 1982
ANNUAL RUNOFF (CFSM)	3.05		2.42		1.90	
ANNUAL RUNOFF (INCHES)	41.46		32.83		25.84	
10 PERCENT EXCEEDS	64		59		41	
50 PERCENT EXCEEDS	22		16		12	
90 PERCENT EXCEEDS	7.3		4.0		3.8	

a From rating curve extended above 700 ft^3/s on basis of slope-conveyance computation.
e Estimated.



——— 01396580 SPRUCE RUN AT GLEN GARDNER, NJ, DAILY MEAN DISCHARGE

01396588 SPRUCE RUN NEAR GLEN GARDNER, NJ

LOCATION.--Lat 40°40'41", long 74°55'06", Hunterdon County, Hydrologic Unit 02030105, at site 800 ft downstream from Rocky Run, 0.3 mi above Van Syckel Road bridge, 1.5 mi northwest of High Bridge, and 1.6 mi southeast of Glen Gardner.

DRAINAGE AREA.--15.3 mi^2.

PERIOD OF RECORD.--Water years 1979 to September 1997 (discontinued).

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
22...	1045	66	164	7.3	11.5	753	9.6	89	<1.0	700	60	48
FEB 1997												
06...	1130	59	159	7.3	3.5	757	13.0	99	E1.7	50	30	42
MAR												
20...	1130	32	170	7.7	5.0	748	12.5	100	E1.5	20	10	50
MAY												
21...	1100	E18	169	7.9	13.0	751	10.2	98	<1.0	1100	10	54
JUL												
17...	1130	E7.0	199	7.7	22.0	752	8.9	103	E1.2	230	100	65

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
22...	12	4.4	9.8	1.6	29	15	17	<.1	15	110	97	2
FEB 1997												
06...	10	4.1	11	1.1	22	14	20	<.1	13	94	91	<1
MAR												
20...	12	4.9	11	1.0	27	16	21	.1	15	105	102	5
MAY												
21...	13	5.2	10	1.0	33	15	18	<.1	15	111	101	6
JUL												
17...	16	6.0	11	1.4	44	17	20	.1	14	132	116	3

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
22...	.004	1.1	<.03	<.03	.2	.16	1.3	1.3	<.01	<.01	2.8	.2
FEB 1997												
06...	.005	.98	<.03	<.03	.08	.08	1.1	1.1	<.01	<.01	1.6	.1
MAR												
20...	.004	1.0	.04	<.03	.05	.05	1.0	1.0	<.01	<.01	1.2	--
MAY												
21...	.005	1.0	<.03	<.03	.2	.10	1.2	1.1	.05	.03	2.2	.2
JUL												
17...	.006	.92	.04	<.03	.1	.16	1.1	1.1	<.01	<.01	1.4	.2

01396588 SPRUCE RUN NEAR GLEN GARDNER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
21...	1100	<10	1	<10	20	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
21...	70	<1	<10	<.1	<1	<1	<10

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ

LOCATION.--Lat 40°38'51", long 74°58'09", Hunterdon County, Hydrologic Unit 02030105, on left bank downstream side of bridge on Jutland Road, 0.2 mi south of Van Syckel, 0.8 mi north of Perryville, and 0.3 mi upstream from Spruce Run Reservoir.

DRAINAGE AREA.--11.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1973-77. July 1977 to current year.

REVISED RECORDS.--WDR-NJ 89-1: 1978(P), 1979(P), 1980(P), 1981(P), 1982(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 280.25 ft above sea level.

REMARKS.--Records good. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1500	*2,330	*6.22	Dec. 7	1815	343	2.75
Nov. 9	0030	465	3.15	Dec. 14	0200	790	3.98
Nov. 26	0800	707	3.80	Jan. 25	0245	667	3.71
Dec. 1	1530	414	2.98	Mar. 14	1815	323	2.68
Dec. 2	0330	1,170	4.70	July 24	1030	703	3.79
Dec. 6	0700	376	2.86				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

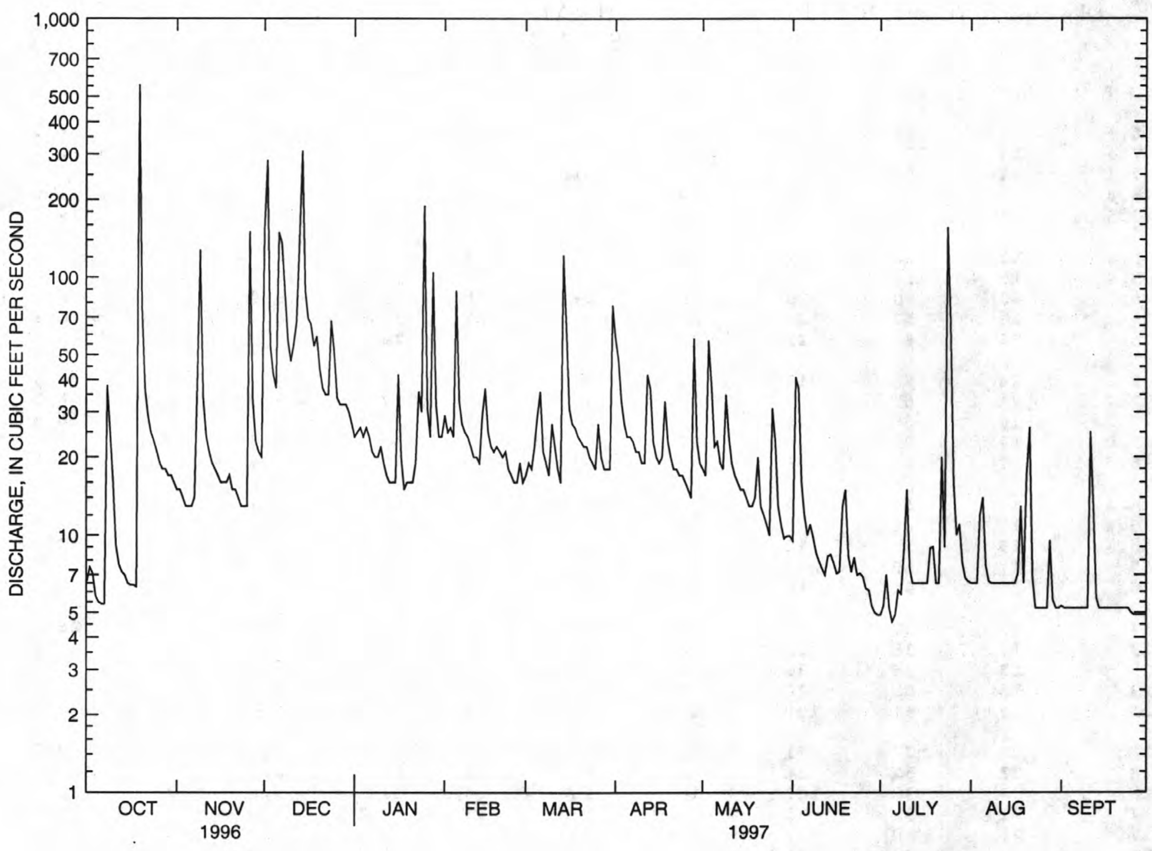
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	15	155	24	29	17	58	18	9.5	4.9	6.5	5.3
2	7.5	15	284	25	25	19	48	17	41	5.3	6.5	5.2
3	7.1	14	54	26	26	18	33	57	37	7.0	6.5	5.2
4	5.8	13	42	24	24	22	27	38	16	5.2	12	5.2
5	5.5	13	37	26	89	29	24	22	12	4.6	14	5.2
6	5.4	13	150	24	33	36	24	23	10	4.9	7.6	5.2
7	5.4	14	136	21	27	21	23	19	11	6.1	6.6	5.2
8	38	40	90	20	25	19	21	18	9.8	5.9	6.5	5.2
9	25	128	57	20	24	17	21	35	8.5	8.8	6.5	5.2
10	16	34	47	22	22	27	19	24	7.9	15	6.5	5.2
11	9.1	24	55	19	20	22	19	19	7.4	7.4	6.5	25
12	7.7	21	67	17	20	18	42	17	7.0	6.5	6.5	13
13	7.2	19	138	16	19	16	37	16	8.3	6.5	6.5	5.7
14	7.0	18	309	16	29	122	23	15	8.4	6.5	6.5	5.2
15	6.5	17	89	16	37	65	20	15	7.8	6.5	6.5	5.2
16	6.4	16	69	42	25	31	19	14	7.1	6.5	6.5	5.2
17	6.4	16	66	20	22	27	20	13	7.2	6.5	7.1	5.2
18	6.3	16	54	15	21	26	33	13	13	8.9	13	5.2
19	557	17	59	16	22	24	23	14	15	9.0	6.5	5.2
20	76	15	44	16	21	23	20	20	8.3	6.5	17	5.2
21	37	15	37	16	20	22	18	13	7.2	6.5	26	5.2
22	29	14	35	19	21	22	18	12	8.2	20	6.8	5.2
23	25	13	35	36	18	20	17	11	7.0	9.0	5.2	5.2
24	23	13	68	30	17	19	17	10	7.1	156	5.2	5.2
25	21	13	51	190	16	18	16	31	6.9	68	5.2	5.0
26	19	151	34	31	16	27	15	23	6.2	16	5.2	4.9
27	18	33	32	24	19	20	14	13	6.1	10	5.2	4.9
28	18	23	32	105	16	18	58	11	5.3	11	9.5	4.9
29	17	21	32	32	---	18	23	9.7	5.0	7.8	5.6	4.9
30	17	20	30	24	---	18	19	9.9	4.9	6.8	5.2	4.9
31	16	---	27	24	---	78	---	9.9	---	6.6	5.2	---
TOTAL	1051.9	794	2415	956	703	879	769	580.5	316.1	456.2	246.1	182.5
MEAN	33.9	26.5	77.9	30.8	25.1	28.4	25.6	18.7	10.5	14.7	7.94	6.08
MAX	557	151	309	190	89	122	58	57	41	156	26	25
MIN	5.4	13	27	15	16	16	14	9.7	4.9	4.6	5.2	4.9
CFSM	2.88	2.24	6.60	2.61	2.13	2.40	2.17	1.59	.89	1.25	.67	.52
IN.	3.32	2.50	7.61	3.01	2.22	2.77	2.42	1.83	1.00	1.44	.78	.58

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

MEAN	13.0	17.9	23.3	25.2	24.3	32.1	35.4	26.2	17.6	13.1	8.83	8.84
MAX	35.6	32.6	77.9	79.2	40.2	76.8	94.1	59.2	61.1	53.2	25.3	22.8
(WY)	1990	1986	1997	1979	1979	1994	1984	1984	1989	1984	1990	1989
MIN	4.55	6.34	5.61	5.01	11.1	10.2	6.88	10.0	6.03	4.83	2.79	2.85
(WY)	1983	1985	1981	1981	1980	1985	1985	1995	1995	1993	1995	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	12125.6		9349.3			
ANNUAL MEAN	33.1		25.6		20.5	
HIGHEST ANNUAL MEAN					35.2	1984
LOWEST ANNUAL MEAN					11.1	1992
HIGHEST DAILY MEAN	557	Oct 19	557	Oct 19	700	Apr 5 1984
LOWEST DAILY MEAN	4.2	Sep 3	4.6	Jul 5	1.4	Aug 25 1995
ANNUAL SEVEN-DAY MINIMUM	4.5	Aug 30	5.0	Sep 24	1.4	Sep 1 1995
INSTANTANEOUS PEAK FLOW			2330	Oct 19	3590	Sep 20 1989
INSTANTANEOUS PEAK STAGE			6.22	Oct 19	7.41	Sep 20 1989
INSTANTANEOUS LOW FLOW			4.1	Jul 5	1.1	Sep 23 1980
ANNUAL RUNOFF (CFSM)	2.81		2.17		1.74	
ANNUAL RUNOFF (INCHES)	38.23		29.47		23.60	
10 PERCENT EXCEEDS	61		43		39	
50 PERCENT EXCEEDS	21		17		12	
90 PERCENT EXCEEDS	6.6		5.2		4.4	



01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ, DAILY MEAN DISCHARGE

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 30 ft downstream from bridge.

REMARKS.--Continuous records of water temperature were collected as part of the LINJ NAWQA study. No water temperature record: July 19 through Sept. 30 because logger was damaged. Additional water-quality data collected as part of the NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
22...	1100	29	177	7.4	11.0	754	9.9	91	<1.0	230	110	65
FEB 1997												
05...	1130	90	218	7.2	3.5	751	12.9	99	<1.0	790	320	42
MAR												
19...	1130	24	211	7.8	5.0	758	12.7	100	E1.1	<20	<10	63
MAY												
22...	1100	12	202	8.1	12.5	753	10.8	103	E1.1	130	170	72
JUL												
17...	1130	6.5	251	7.8	20.5	749	8.6	97	E1.8	700	780	93

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
22...	17	5.4	9.7	1.7	47	14	15	<.1	14	104	109	2
FEB 1997												
05...	11	3.5	21	1.4	24	12	38	<.1	8.3	114	112	13
MAR												
19...	16	5.5	14	1.1	40	15	27	<.1	13	127	119	<1
MAY												
22...	19	6.2	9.7	1.0	49	14	19	<.1	13	112	114	4
JUL												
17...	23	8.2	9.5	1.2	73	13	18	<.1	15	153	136	1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
22...	.005	.86	<.03	<.03	.2	.21	1.0	1.1	.01	<.01	2.6	.2
FEB 1997												
05...	.003	.60	.09	<.03	.4	.28	1.0	.88	.06	<.01	3.4	.8
MAR												
19...	<.003	.81	<.03	<.03	.1	.10	.93	.91	<.01	<.01	1.3	.2
MAY												
22...	.003	.69	<.03	<.03	.04	<.03	.73	--	<.01	<.01	1.3	.2
JUL												
17...	.006	.96	<.03	<.03	.05	.06	1.0	1.0	<.01	<.01	1.0	.2

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
OCT 1996								
22...	1100	<10	<1	<10	10	<1	<1.0	1
MAY 1997								
22...	1100	<10	<1	<10	<10	<1	<1.0	<1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1996							
22...	170	<1	20	<.1	<1	<1	<10
MAY 1997							
22...	90	<1	20	<.1	<1	<1	<10

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	14.5	15.0	20.0	17.5	19.0	---	---	---	---	---	---
2	16.0	14.0	15.0	19.0	18.0	18.5	---	---	---	---	---	---
3	14.0	12.5	13.5	20.5	18.5	19.0	---	---	---	---	---	---
4	15.0	12.5	13.5	20.5	18.0	19.0	---	---	---	---	---	---
5	16.0	12.5	14.0	19.5	17.0	18.5	---	---	---	---	---	---
6	15.0	13.0	14.5	19.5	16.0	18.0	---	---	---	---	---	---
7	15.0	13.0	14.0	20.0	16.5	18.0	---	---	---	---	---	---
8	16.0	13.0	14.5	20.5	17.0	18.5	---	---	---	---	---	---
9	16.5	13.0	14.5	20.5	17.5	19.0	---	---	---	---	---	---
10	17.5	14.0	15.5	20.5	18.5	19.5	---	---	---	---	---	---
11	18.5	15.0	16.5	20.0	17.0	18.5	---	---	---	---	---	---
12	18.5	16.0	17.5	20.5	17.0	18.5	---	---	---	---	---	---
13	18.0	16.5	17.0	21.0	17.5	19.0	---	---	---	---	---	---
14	18.0	16.0	17.0	21.5	18.0	19.5	---	---	---	---	---	---
15	18.0	14.5	16.0	22.0	18.5	20.0	---	---	---	---	---	---
16	17.0	14.0	15.5	22.5	19.5	21.0	---	---	---	---	---	---
17	16.5	14.5	15.5	22.5	19.0	20.5	---	---	---	---	---	---
18	16.5	15.0	15.5	22.0	19.5	20.5	---	---	---	---	---	---
19	19.0	16.0	17.5	---	---	---	---	---	---	---	---	---
20	19.5	16.0	17.5	---	---	---	---	---	---	---	---	---
21	21.5	17.0	19.0	---	---	---	---	---	---	---	---	---
22	21.0	18.0	19.5	---	---	---	---	---	---	---	---	---
23	21.0	17.5	19.0	---	---	---	---	---	---	---	---	---
24	19.0	17.0	17.5	---	---	---	---	---	---	---	---	---
25	21.5	17.0	19.0	---	---	---	---	---	---	---	---	---
26	22.0	18.5	20.0	---	---	---	---	---	---	---	---	---
27	21.0	17.5	19.0	---	---	---	---	---	---	---	---	---
28	21.0	16.5	18.5	---	---	---	---	---	---	---	---	---
29	21.0	16.5	18.5	---	---	---	---	---	---	---	---	---
30	20.5	17.0	19.0	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	22.0	12.5	16.5	---	---	---	---	---	---	---	---	---

01396800 SPRUCE RUN AT CLINTON, NJ

LOCATION.--Lat 40°38'21", long 74°54'58", Hunterdon County, Hydrologic Unit 02030105, 1,800 ft downstream from dam at Spruce Run Reservoir, 0.2 mi north of Clinton, 0.3 mi upstream from mouth, and 2.2 mi southwest of High Bridge.

DRAINAGE AREA.--41.3 mi^2.

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

GAGE.--Water-stage recorder. Concrete control since Mar. 15, 1964. Datum of gage is 193.5 ft above sea level. May to Nov. 24, 1959, nonrecording gage; Nov. 25, 1959 to July 23, 1961, water-stage recorder at site 1,800 ft upstream and at datum 1.41 ft lower; July 24, 1961 to Mar. 14, 1964, water-stage recorder at site 1,500 ft upstream at datum 1.41 ft lower.

REMARKS.--Records good. Flow regulated by Spruce Run Reservoir (see Raritan River basin, reservoirs in). Several measurements of water temperature, other than those published, were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	7.0	273	96	164	51	253	90	34	135	45	97
2	49	7.3	1260	91	168	76	171	89	83	151	48	84
3	160	5.3	400	95	168	67	165	83	161	123	60	94
4	168	5.9	245	93	104	78	148	193	90	111	67	122
5	168	7.9	190	93	20	77	113	105	58	117	36	138
6	168	7.9	445	183	90	184	107	103	41	130	9.5	138
7	170	7.9	419	205	102	85	123	116	35	167	44	143
8	107	7.8	558	189	97	53	110	37	32	173	69	150
9	87	75	304	172	93	36	100	86	30	174	69	160
10	192	129	233	172	85	77	58	123	30	112	96	163
11	192	105	209	173	77	99	30	76	61	107	129	69
12	192	89	263	172	75	86	83	48	76	149	135	9.6
13	192	56	292	170	70	48	196	49	73	162	129	8.5
14	192	55	1050	173	93	163	118	51	73	170	125	39
15	192	56	502	173	128	388	63	61	72	188	128	56
16	192	52	320	173	112	163	69	82	71	219	142	43
17	192	52	273	173	86	116	86	22	63	228	150	35
18	75	54	239	173	75	107	196	24	58	227	108	52
19	24	67	232	173	77	98	108	45	29	209	57	98
20	100	62	212	173	77	101	47	73	10	188	77	110
21	6.4	51	146	171	75	85	60	74	42	190	39	107
22	6.1	64	139	117	119	114	61	66	67	115	9.6	119
23	7.5	25	137	11	64	70	64	48	69	53	29	127
24	7.6	28	165	8.9	71	49	65	56	69	34	67	127
25	8.1	33	262	13	43	51	64	59	69	10	81	134
26	8.5	370	156	8.7	35	126	65	92	89	7.7	92	138
27	9.0	247	134	8.4	76	73	45	45	96	7.2	117	143
28	7.9	108	125	10	51	58	161	18	107	7.4	113	150
29	7.0	89	125	8.6	---	68	129	24	117	7.6	81	150
30	8.5	80	130	8.5	---	69	85	27	124	26	86	127
31	7.6	---	111	100	---	251	---	33	---	42	107	---
TOTAL	2931.2	2004.0	9549	3580.1	2495	3167	3143	2098	2029	3739.9	2545.1	3131.1
MEAN	94.6	66.8	308	115	89.1	102	105	67.7	67.6	121	82.1	104
MAX	192	370	1260	205	168	388	253	193	161	228	150	163
MIN	6.1	5.3	111	8.4	20	36	30	18	10	7.2	9.5	8.5

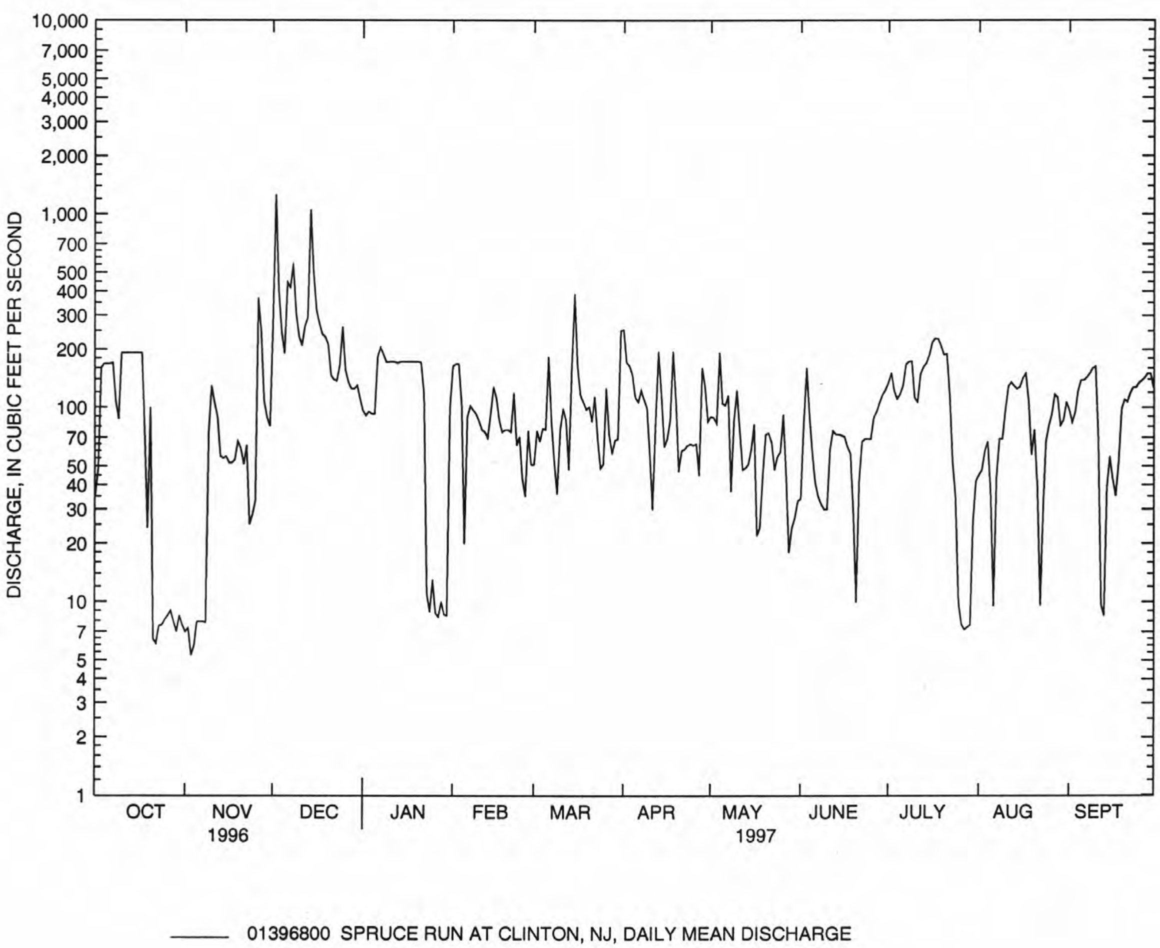
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	57.9	31.9	51.6	63.4	68.4	81.8	102	71.8	60.9	73.8	57.6	75.2
MAX	290	96.2	308	258	162	190	342	225	278	244	171	241
(WY)	1990	1990	1997	1979	1971	1993	1983	1984	1972	1975	1995	1989
MIN	.000	.000	.000	.000	.000	.19	.86	.81	2.60	4.24	4.32	.50
(WY)	1964	1964	1964	1964	1964	1964	1964	1964	1981	1964	1963	1963

01396800 SPRUCE RUN AT CLINTON, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1959 - 1997	
ANNUAL TOTAL	41712.2		40412.4			
ANNUAL MEAN	114		111		66.3	
HIGHEST ANNUAL MEAN					111	1997
LOWEST ANNUAL MEAN					3.81	1964
HIGHEST DAILY MEAN	1260	Dec 2	1260	Dec 2	2060	Jul 7 1984
LOWEST DAILY MEAN	4.4	Sep 21	5.3	Nov 3	.00a	Aug 22 1963
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 18	6.9	Oct 29	.00a	Aug 22 1963
INSTANTANEOUS PEAK FLOW			2250	Dec 2	6410	Apr 2 1970
INSTANTANEOUS PEAK STAGE			3.66	Dec 2	5.17	Apr 2 1970
INSTANTANEOUS LOW FLOW			1.8	Oct 2	.00a	Aug 22 1963
10 PERCENT EXCEEDS	232		192		151	
50 PERCENT EXCEEDS	89		89		42	
90 PERCENT EXCEEDS	8.6		12		7.1	

a Result of reservoir filling.



01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ

LOCATION.--Lat 40°34'21", long 74°52'10", Hunterdon County, Hydrologic Unit 02030105, on right bank at downstream side of bridge on Stanton Road at Stanton Station, 0.4 mi upstream from Prescott Brook, and 1.4 mi west of Stanton.

DRAINAGE AREA.--147 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1903 to December 1906, July 1919 to current year. Monthly discharge only for some periods published in WSP 1302.

REVISED RECORDS.--WSP 561: Drainage area. WSP 1552: 1904, 1922-24(M), 1928-29(M), 1933-35(M). WDR NJ-88-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 125.01 ft above sea level. Prior to Aug. 17, 1925, nonrecording gage on downstream side of highway bridge at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Spruce Run Reservoir since September 1963 (see Raritan River basin, reservoirs in). Occasional regulation at low flows by ponds above station. Water diverted by Hamden Pumping Station, 4.0 mi upstream, into Round Valley Reservoir since February 1966 (see Raritan River basin, diversions). Water can be released (maximum rate 186 ft^3/s) from Round Valley Reservoir at Hamden Pumping Station since July 1990. Several measurements of water temperature were made during the year. National Weather Service telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	174	886	338	439	211	928	271	151	179	112	151
2	103	166	4150	326	450	241	694	307	247	195	115	145
3	246	157	1380	335	420	247	734	378	620	190	118	139
4	259	149	914	332	371	261	690	705	304	167	131	155
5	253	147	732	318	709	262	530	383	214	167	146	170
6	253	145	1490	e340	533	496	463	341	180	169	90	168
7	250	143	1410	e320	397	335	453	433	163	201	96	172
8	297	162	1810	e300	357	231	398	340	154	218	121	184
9	469	1010	1060	e300	333	221	367	407	144	244	119	193
10	395	533	840	e305	302	269	308	372	139	279	134	192
11	342	390	756	e300	278	326	256	288	151	166	167	202
12	308	331	870	e310	267	289	320	281	167	196	179	393
13	294	264	1040	e290	249	230	721	309	164	203	168	145
14	288	243	2970	e280	324	535	440	306	166	210	163	112
15	278	235	1480	e290	503	1250	300	304	158	224	159	127
16	274	220	1050	482	421	573	288	341	152	255	176	108
17	272	215	920	473	307	428	281	254	145	273	207	93
18	193	214	818	e350	271	391	545	250	164	279	217	101
19	2700	228	791	e330	276	355	476	270	254	311	137	140
20	3370	217	712	e290	296	340	299	421	139	245	147	149
21	813	197	535	e300	272	321	278	300	131	228	239	149
22	516	198	494	e290	326	332	264	213	158	267	117	153
23	396	167	480	313	274	273	259	178	151	143	96	167
24	335	157	566	221	235	227	252	182	144	505	120	167
25	290	158	920	1730	215	222	245	232	144	490	134	169
26	258	1300	541	468	190	363	239	332	154	186	136	175
27	238	774	474	286	235	300	210	212	158	122	153	177
28	227	397	444	902	231	241	551	149	167	131	188	184
29	222	328	435	520	---	236	449	147	169	115	158	185
30	203	294	441	302	---	242	321	146	174	103	135	167
31	189	---	384	338	---	830	---	154	---	114	150	---
TOTAL	14658	9313	31793	12279	9481	11078	12559	9206	5526	6775	4528	4932
MEAN	473	310	1026	396	339	357	419	297	184	219	146	164
MAX	3370	1300	4150	1730	709	1250	928	705	620	505	239	393
MIN	103	143	384	221	190	211	210	146	131	103	90	93

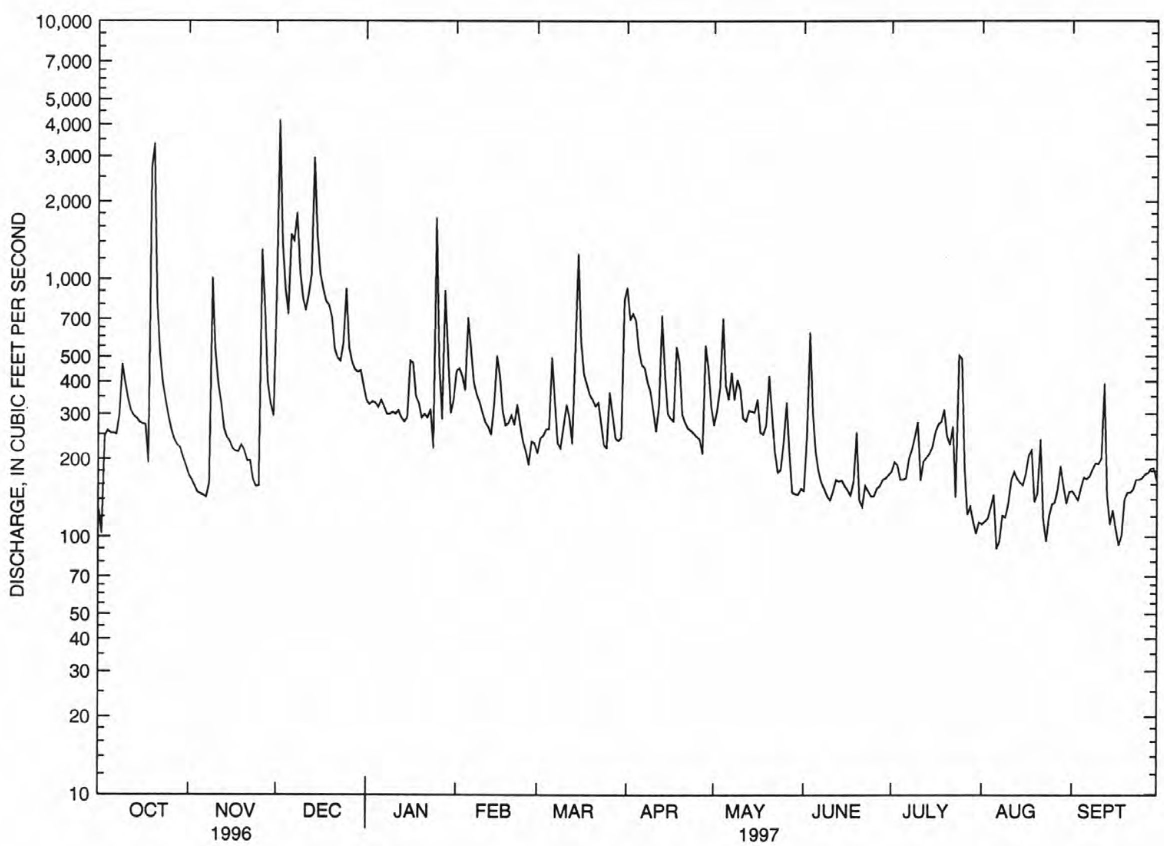
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	165	207	269	290	320	405	378	268	190	180	163	162
MAX	641	659	1026	1099	807	1057	1137	750	967	752	793	554
(WY)	1904	1952	1997	1979	1925	1936	1983	1989	1972	1975	1955	1989
MIN	34.1	46.2	65.1	55.0	61.2	61.3	58.5	80.3	60.1	40.7	30.1	31.0
(WY)	1964	1965	1966	1966	1967	1981	1981	1965	1965	1955	1957	1957

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1904 - 1997	
ANNUAL TOTAL	161445		132128			
ANNUAL MEAN	441		362		249	
HIGHEST ANNUAL MEAN					413	1952
LOWEST ANNUAL MEAN					95.0	1966
HIGHEST DAILY MEAN	4150	Dec 2	4150	Dec 2	8060	Aug 19 1955
LOWEST DAILY MEAN	83	Jul 7	90	Aug 6	12	Oct 18 1963
ANNUAL SEVEN-DAY MINIMUM	95	Sep 21	115	Jul 28	25	Sep 4 1957
INSTANTANEOUS PEAK FLOW			6680	Oct 19	18000	Aug 19 1955
INSTANTANEOUS PEAK STAGE			9.91	Oct 19	15.22a	Aug 19 1955
INSTANTANEOUS LOW FLOW			78	Aug 7	9.0	Nov 7 1931
10 PERCENT EXCEEDS	882		698		490	
50 PERCENT EXCEEDS	305		262		167	
90 PERCENT EXCEEDS	130		144		63	

a From rating curve extended above 6,400 ft^3/s on basis of computation of flow over Clinton Dam, 6.5 mi upstream, at gage height 10.72 ft, contracted-opening measurement 1.7 mi downstream, and slope-area measurement 0.4 mi downstream at gage height 15.22 ft, adjusted to present site.



01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ, DAILY MEAN DISCHARGE

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-81, 1991 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1968 to September 1979.
WATER TEMPERATURE: November 1968 to September 1979
SUSPENDED-SEDIMENT DISCHARGE: December 1959 to September 1963.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
23...	1100	397	214	7.4	12.0	757	10.3	96	E1.4	--	--	75
FEB 1997												
03...	1115	435	245	7.6	3.5	762	13.4	101	E1.2	70	10	67
APR												
01...	1130	823	228	7.7	5.5	752	13.1	105	2.7	340	120	51
MAY												
28...	1115	148	241	8.5	16.5	766	10.7	109	E1.2	22	20	83
JUL												
16...	1130	243	209	7.9	26.0	755	8.6	107	2.0	170	40	69

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
23...	18	7.4	11	1.8	53	14	22	<.1	13	130	125	6
FEB 1997												
03...	16	6.6	18	1.4	46	13	32	<.1	10	134	130	2
APR												
01...	12	5.0	20	1.3	34	12	35	<.1	8.0	126	117	8
MAY												
28...	19	8.6	13	1.4	63	13	24	<.1	8.6	148	131	3
JUL												
16...	17	6.8	12	1.3	49	13	22	<.1	3.3	124	107	10

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
23...	.006	1.4	.04	<.03	.3	.31	1.7	1.7	.05	.04	3.1	.6
FEB 1997												
03...	.003	1.2	<.03	<.03	.2	.14	1.4	1.3	.02	<.01	1.7	.5
APR												
01...	.006	.83	.03	.03	.3	.21	1.1	1.0	<.01	<.01	2.9	.7
MAY												
28...	.018	1.1	--	<.03	.3	.18	1.4	1.3	.02	.02	2.5	.4
JUL												
16...	.011	.36	<.03	<.03	.3	.29	.66	.65	.01	<.01	2.6	.9

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1996								
23...	1100	<10	1	<10	20	<1	<1.0	2
MAY 1997								
28...	1115	<10	<1	<10	30	<1	<1.0	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT 1996							
23...	280	1	30	<.1	<1	<1	<10
MAY 1997							
28...	190	<1	30	<.1	<1	<1	<10

01397400 SOUTH BRANCH RARITAN RIVER AT THREE BRIDGES, NJ

LOCATION.--Lat 40°31'01", long 74°48'12", Hunterdon County, Hydrologic Unit 02030105, at bridge on Main Street in Three Bridges, 0.4 mi northeast of Voorhees Corner, 1.3 mi downstream from Bushkill Brook, and 2.2 mi southeast of Darts Mills.

DRAINAGE AREA.--181 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
24...	1200	390	253	7.6	13.0	755	10.5	101	E1.6	330	110	83
FEB 1997												
03...	1100	517	295	7.9	4.0	759	12.9	99	E1.3	170	30	74
APR												
01...	1200	1110	301	7.8	6.0	757	12.4	100	2.3	700	170	57
MAY												
28...	1100	188	281	8.1	16.0	766	9.7	98	E1.1	170	20	91
JUL												
16...	1130	245	242	7.8	26.0	758	8.0	99	E1.7	330	80	75

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
24...	20	8.0	15	2.2	58	18	25	<.1	14	138	145	5
FEB 1997												
03...	18	7.1	24	1.7	48	17	43	<.1	10	150	155	1
APR												
01...	14	5.3	33	1.4	36	14	58	<.1	8.2	170	160	8
MAY												
28...	22	8.9	18	2.0	61	20	30	<.1	7.2	171	151	2
JUL												
16...	18	7.3	15	1.8	53	17	26	<.1	3.6	142	124	8

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
24...	.005	1.8	<.03	<.03	.3	.29	2.1	2.1	.08	.06	3.0	.4
FEB 1997												
03...	.019	1.3	.06	.06	.3	.28	1.6	1.6	.02	.02	2.0	.4
APR												
01...	.006	1.0	.03	.03	.4	.21	1.4	1.2	.06	.03	4.0	.8
MAY												
28...	.016	1.5	.03	<.03	.3	.20	1.9	1.7	.14	.14	2.8	.5
JUL												
16...	.013	.75	<.03	<.03	.4	.34	1.1	1.1	.12	.08	2.6	.6

01397400 SOUTH BRANCH RARITAN RIVER AT THREE BRIDGES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 1997								
28...	1100	10	<1	<10	40	<1	<1.0	1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
MAY 1997							
28...	190	<1	50	<.1	<1	<1	<10

01398000 NESHANIC RIVER AT REAVILLE, NJ

LOCATION.--Lat 40°28'18", long 74°49'42", Hunterdon County, Hydrologic Unit 02030105, on left bank 50 ft downstream from bridge on Everitts Road, 0.6 mi southwest of Reaville, 1.5 mi downstream from Third Neshanic River, and 2.2 mi upstream from Back Brook.

DRAINAGE AREA.--25.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1930 to current year.

REVISED RECORDS.--WSP 1552: 1933, 1934(M), 1936(M), 1938, 1940(M), 1942(M), 1945-46, 1951, 1952(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 26, 1935. Datum of gage is 109.46 ft above sea level.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 8	2230	2,030	7.74	Dec. 6	0615	1,600	7.15
Oct. 19	1530	*11,100	*12.63	Dec. 14	0445	2,990	8.76
Nov. 26	0930	1,720	7.32	Jan. 25	0330	2,520	8.29
Dec. 2	0515	3,910	9.50	July 25	0300	2,000	7.71

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	15	338	26	41	21	222	31	12	2.7	5.8	4.0
2	11	15	1150	26	33	24	127	29	54	2.8	5.2	3.3
3	10	13	127	28	32	22	82	130	97	4.5	4.5	2.9
4	7.9	12	84	24	29	e57	59	100	36	3.1	4.4	2.4
5	7.1	12	61	24	245	e70	45	49	25	2.4	6.8	2.2
6	6.8	11	524	23	78	e84	40	49	19	2.2	5.3	2.1
7	6.6	11	512	19	52	e50	37	37	16	2.3	3.9	2.0
8	312	19	273	16	43	e39	28	30	14	2.3	3.2	2.0
9	239	169	115	16	39	e33	26	70	12	3.1	2.8	2.2
10	95	48	82	20	32	e95	22	44	11	3.8	2.9	2.0
11	48	35	73	16	29	e79	20	32	9.3	2.1	3.9	38
12	35	28	94	14	27	e45	44	27	8.4	1.8	e3.3	13
13	28	24	403	13	23	e34	70	24	13	1.7	e2.5	5.4
14	23	22	1310	12	103	e137	30	22	12	1.6	2.9	4.0
15	18	19	198	13	152	e248	23	20	7.7	1.4	2.5	3.5
16	16	17	119	164	66	e71	21	17	6.8	1.2	2.1	3.0
17	14	16	106	64	49	e55	21	16	6.4	1.1	8.2	2.8
18	13	16	82	37	42	e49	138	15	6.3	1.0	5.0	2.7
19	e3000	16	100	27	42	e46	58	15	17	1.3	3.4	2.4
20	e193	14	69	24	39	e41	40	15	7.1	.96	12	2.2
21	e89	13	49	18	35	e33	33	12	6.1	.82	31	2.0
22	e83	12	43	26	38	29	29	11	5.7	2.8	8.0	1.9
23	e64	11	42	67	29	23	26	10	5.2	3.7	4.8	2.0
24	e71	11	76	29	25	20	26	9.4	4.5	285	3.8	2.2
25	e43	10	103	636	23	19	21	111	4.9	504	3.3	1.9
26	e30	427	48	65	22	45	18	68	4.1	45	3.0	1.8
27	e22	91	45	41	26	26	16	25	3.8	24	2.8	1.7
28	e21	54	41	401	20	21	135	18	3.3	19	7.7	e1.6
29	e20	43	41	67	---	23	44	15	3.0	12	9.2	e2.3
30	e17	36	37	41	---	25	33	13	2.8	8.4	4.1	e1.6
31	e15	---	32	36	---	255	---	13	---	6.7	3.3	---
TOTAL	4569.4	1240	6377	2033	1414	1819	1534	1077.4	433.4	954.78	171.6	121.1
MEAN	147	41.3	206	65.6	50.5	58.7	51.1	34.8	14.4	30.8	5.54	4.04
MAX	3000	427	1310	636	245	255	222	130	97	504	31	38
MIN	6.6	10	32	12	20	19	16	9.4	2.8	.82	2.1	1.6
CFSM	5.74	1.61	8.00	2.55	1.96	2.28	1.99	1.35	.56	1.20	.22	.16
IN.	6.61	1.79	9.23	2.94	2.05	2.63	2.22	1.56	.63	1.38	.25	.18

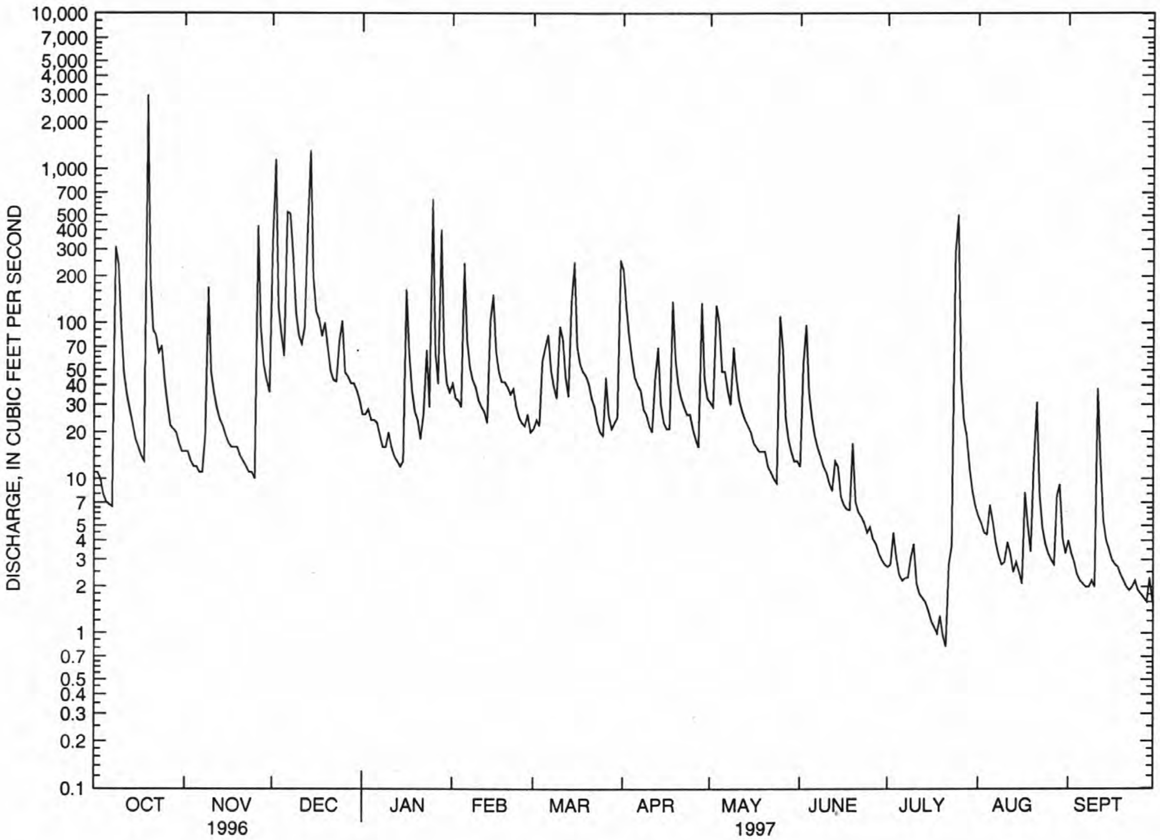
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	15.7	34.7	49.6	57.5	58.3	77.1	55.9	32.6	21.7	19.1	18.5	15.3
MAX	147	139	206	280	147	201	200	135	119	138	216	135
(WY)	1997	1933	1997	1994	1939	1994	1983	1989	1972	1938	1971	1989
MIN	.67	.90	1.59	1.14	3.92	15.2	7.20	3.78	1.11	.37	.44	.47
(WY)	1965	1966	1966	1981	1934	1985	1985	1963	1965	1966	1964	1965

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1931 - 1997	
ANNUAL TOTAL	32216.7		21744.68			
ANNUAL MEAN	88.0		59.6		37.9	
HIGHEST ANNUAL MEAN					70.8	1994
LOWEST ANNUAL MEAN					14.5	1965
HIGHEST DAILY MEAN	3180	Jan 19	3000	Oct 19	4740	Aug 28 1971
LOWEST DAILY MEAN	3.5	Sep 4	.82	Jul 21	.00	Jul 29 1965
ANNUAL SEVEN-DAY MINIMUM	3.9	Aug 31	1.1	Jul 15	.00	Aug 4 1966
INSTANTANEOUS PEAK FLOW			11100	Oct 19	15900a	Aug 28 1971
INSTANTANEOUS PEAK STAGE			12.63	Oct 19	13.84b	Aug 28 1971
INSTANTANEOUS LOW FLOW			.73	Jul 21	.00	Jul 17 1968
ANNUAL RUNOFF (CFSM)	3.43		2.32		1.47	
ANNUAL RUNOFF (INCHES)	46.63		31.47		20.04	
10 PERCENT EXCEEDS	149		101		76	
50 PERCENT EXCEEDS	30		22		13	
90 PERCENT EXCEEDS	7.3		2.5		1.4	

a From rating curve extended above 1,700 ft^3/s on basis of slope-area measurement 0.7 mi downstream (adjusted to present site) at gage height 11.90 ft.
b From high-water mark in gage house.
e Estimated.



01398000 NESHANIC RIVER AT REAVILLE, NJ, DAILY MEAN DISCHARGE

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1962, 1979 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 200 ft downstream from bridge.

REMARKS.--Continuous records of water temperature were collected as part of the LINJ NAWQA study. On Jan. 28 and June 12, water-column synoptic studies were conducted at this site as part of the NAWQA program. For synoptic data from other sites, see section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Some field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Some samples were collected by USGS personnel for the LINJ NAWQA study.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
OCT 1996											
08...	1230	ENVIRONMENTAL	6.7	310	7.7	15.0	12.0	755	10.2	97.3	--
08...	*1231*	*SPLIT REPLICATE*	--	*310*	*7.7*	--	--	--	--	--	--
NOV											
06...	1030	ENVIRONMENTAL	11	--	8.1	--	9.0	764	10.6	--	<1.0
13...	*1150*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
13...	1220	ENVIRONMENTAL	24	230	8.2	5.0	4.5	772	13.9	111	--
DEC											
10...	1300	ENVIRONMENTAL	80	190	7.7	5.0	5.0	759	12.7	104	--
JAN 1997											
06...	*1130*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
06...	1140	ENVIRONMENTAL	22	260	8.2	8.5	6.0	750	14.0	118	--
28...	1650	ENVIRONMENTAL	311	150	7.6	2.5	2.0	--	--	--	--
FEB											
13...	1230	ENVIRONMENTAL	22	272	7.8	--	2.0	776	14.8	105	E1.1
25...	*1230*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
25...	1310	ENVIRONMENTAL	22	260	8.7	3.0	4.5	766	17.0	130	--
APR											
01...	0920	ENVIRONMENTAL	152	490	7.0	3.0	4.5	754	12.6	99	--
01...	1200	ENVIRONMENTAL	158	420	7.6	--	7.5	756	12.6	106	E1.6
24...	0900	ENVIRONMENTAL	28	240	7.8	9.0	9.0	752	11.1	98	--
24...	*0901*	*SPLIT REPLICATE*	--	*240*	*7.8*	--	--	--	--	--	--
MAY											
19...	0900	ENVIRONMENTAL	16	280	7.9	20.5	13.5	752	10.8	105	--
22...	1130	ENVIRONMENTAL	11	272	--	--	12.0	756	11.2	105	E1.8
JUN											
12...	0810	ENVIRONMENTAL	8.6	290	7.6	21.0	20.0	753	--	--	--
JUL											
24...	0950	ENVIRONMENTAL	140	180	7.4	19.0	--	763	--	--	--
29...	1130	ENVIRONMENTAL	13	270	8.1	--	23.0	756	10.2	120	<1.0
AUG											
21...	0920	ENVIRONMENTAL	28	210	7.3	24.0	18.5	751	7.3	79	--
SEP											
22...	0940	ENVIRONMENTAL	1.9	440	7.5	17.0	12.5	767	7.6	71	--

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO- COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT 1996												
08...	--	--	120	30	10	13	1.9	87	--	76	71	40
08...	--	--	--	--	--	--	--	87	--	76	71	--
NOV												
06...	790	1000	87	22	7.9	13	1.6	--	--	62	--	30
13...	--	--	--	<.02	<.01	<.2	<.1	--	--	1.4	--	<.1
13...	--	--	78	19	7.3	12	2.2	62	--	51	51	26
DEC												
10...	--	--	62	15	5.9	11	1.8	43	--	37	35	22
JAN 1997												
06...	--	--	--	<.02	<.01	<.2	<.1	--	--	1.3	--	<.1
06...	--	--	79	20	7.1	15	1.5	54	--	48	44	27
28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
13...	40	50	80	20	7.2	21	1.5	--	--	41	--	27
25...	--	--	--	.07	<.01	<.2	<.1	--	--	--	--	<.1
25...	--	--	76	19	6.9	17	<1.3	56	3.6	45	46	27
APR												
01...	--	--	67	17	6.0	62	1.7	45	--	34	37	17
01...	3500	740	68	17	6.1	51	2.0	--	--	34	--	18
24...	--	--	77	19	7.1	14	1.3	62	--	52	51	26
24...	--	--	79	20	7.3	14	1.3	61	--	53	50	26
MAY												
19...	--	--	91	23	8.2	16	1.5	--	--	62	--	28
22...	1400	40	93	23	8.6	15	1.5	--	--	66	--	29
JUN												
12...	--	--	100	25	9.2	16	1.9	78	--	65	64	36
JUL												
24...	--	--	58	16	4.5	9.8	3.7	48	--	40	39	19
29...	1100	380	93	24	7.8	14	2.6	--	--	54	--	35
AUG												
21...	--	--	65	17	5.5	12	2.6	60	--	52	49	19
SEP												
22...	--	--	190	52	14	13	1.9	120	--	98	96	96

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	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)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)
OCT 1996												
08...	18	<.1	6.8	182	172	--	.02	2.2	.02	.1	.20	2.3
08...	--	--	--	--	--	--	--	--	--	.16	--	--
NOV												
06...	18	<.1	8.6	146	145	<1	--	1.6	--	.2	.13	1.8
13...	<.10	<.1	<.01	<1	--	--	.03	<.050	.08	<.2	<.20	--
13...	18	<.1	12	140	137	--	.03	2.3	.04	.1	.16	2.4
DEC												
10...	14	<.1	12	116	114	--	<.01	2.4	<.015	.1	.18	2.5
JAN 1997												
06...	<.10	<.1	.02	<1	--	--	<.01	.060	.02	<.2	<.20	--
06...	23	<.1	12	146	139	--	<.01	1.5	<.015	.1	.11	1.6
28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
13...	34	<.1	12	148	157	3	--	2.1	--	.1	.06	2.2
25...	<.10	.1	<.01	7	--	--	.02	<.050	.02	<.2	<.20	--
25...	27	<.1	9.8	145	--	--	.02	1.7	<.015	.2	.11	1.9
APR												
01...	110	<.1	8.6	85	253	--	<.01	1.8	<.015	.4	.20	2.2
01...	94	<.1	9.2	235	226	10	--	1.9	--	.4	.27	2.3
24...	23	<.1	6.7	137	132	--	.01	1.1	<.02	.2	.10	1.2
24...	23	<.1	6.7	137	133	--	.01	1.1	<.02	<.2	<.20	--
MAY												
19...	24	<.1	5.2	158	148	--	.01	.98	<.02	.3	.10	1.3
22...	21	<.1	3.5	146	145	3	--	.97	--	.2	.13	1.1
JUN												
12...	21	<.1	11	175	167	--	.04	1.7	.04	.4	.30	2.0
JUL												
24...	12	<.1	4.9	115	97	--	.02	.77	.09	2.1	.40	2.9
29...	18	<.1	11	177	158	2	--	2.8	--	.4	.40	3.3
AUG												
21...	14	<.1	8.2	124	112	--	.01	1.1	<.02	.6	.20	1.7
SEP												
22...	17	<.1	4.2	263	256	--	<.01	.13	<.02	<.2	.20	--

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996											
08...	2.4	<.01	<.01	<.01	58	17	8	1.9	.4	.5	.01
08...	--	*<.01*	--	--	--	--	--	--	--	*.4*	--
NOV											
06...	1.7	.01	<.01	--	--	--	--	2.0	.3	--	--
13...	--	*<.01*	*<.01*	*<.01*	*5.5*	*<3*	*<1*	--	--	--	--
13...	2.5	.04	.02	.02	33	26	15	1.8	.2	.8	.05
DEC											
10...	2.6	.04	.03	.04	26	22	19	2.0	.2	5	1.0
JAN 1997											
06...	--	*<.01*	*<.01*	*<.01*	*<4.0*	*<3*	*<1*	--	--	--	--
06...	1.6	.02	.02	.01	26	22	13	1.6	.2	3	.18
28...	--	--	--	--	--	--	--	--	--	--	--
FEB											
13...	2.2	.01	.01	--	--	--	--	1.4	.2	--	--
25...	--	*.01*	*<.01*	*<.01*	*<4.0*	*<3*	*<1*	--	--	--	--
25...	1.8	<.01	<.01	.01	25	19	18	1.5	.3	3	.17
APR											
01...	2.0	.07	.03	.03	20	36	34	3.3	.5	19	7.8
01...	2.2	.14	.04	--	--	--	--	3.2	.8	--	--
24...	1.1	<.01	<.01	<.01	30	39	34	1.9	.2	2	.17
24...	--	*.02*	*<.01*	*<.01*	*34*	*38*	*33*	*1.9*	*.3*	*3*	--
MAY											
19...	1.1	.02	<.01	<.01	36	44	32	2.1	.5	6	.27
22...	1.1	<.01	<.01	--	--	--	--	2.2	.2	--	--
JUN											
12...	1.9	.06	.03	.04	46	11	22	3.4	.2	7	.16
JUL											
24...	1.2	.56	.21	.16	40	40	8	5.5	2.7	205	75
29...	3.2	.036	.04	--	--	--	--	3.3	.3	--	--
AUG											
21...	1.3	.08	.07	.05	39	33	6	4.5	1.3	19	1.4
SEP											
22...	.36	.01	.01	<.01	130	13	9	2.5	.2	--	--

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
22...	1130	<10	<1	<10	40	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
22...	110	<1	30	<.1	<1	<1	<10

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE NEW JERSEY DEPARTMENT OF HEALTH, PUBLIC HEALTH, AND ENVIRONMENTAL LABORATORIES

DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV 1996				
06...	1030	.007	<.03	<.03
FEB 1997				
13...	1230	.006	<.03	.05
APR				
01...	1200	.006	.03	.03
MAY				
22...	1130	.025	<.03	<.03
JUL				
29...	1130	.014	<.03	<.03

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Samples were analyzed for volatile organic compounds (VOCs) on schedule 2020 (listed with minimum reporting levels in "Explanation of Records" section). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)
NOV 1996									
13...	1220	E.005	<.05	<.05	<.05	<.10	<.05	E.010	E.030
DEC									
10...	1300	<.05	<.05	<.05	<.05	<.10	<.05	<.05	<.05
JAN 1997									
28...	1650	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10

DATE	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)
NOV 1996											
13...	<.20	.10	E.020	<.05	.14	<.05	<.05	.27	<.05	<.05	<5.0
DEC											
10...	<.20	E.020	<.05	<.05	E.030	<.05	<.05	E.070	<.05	<.05	<5.0
JAN 1997											
28...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10

DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	ACRO-LEIN TOTAL (UG/L) (34210)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)
NOV 1996										
13...	E.020	<2.0	<5.0	<5.0	E.050	<.10	<.05	<.05	<.10	<.10
DEC										
10...	<.05	<2.0	<5.0	<5.0	<.05	<.10	<.05	<.05	<.10	<.10
JAN 1997										
28...	<.10	<4.0	<10	E3.00	<.10	<.20	<.10	<.10	<.20	<.20

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
NOV 1996										
13...	E.010	<.05	<.20	<.10	<.10	E.050	<.05	.30	.42	E.004
DEC										
10...	<.20	<.05	<.20	<.10	<.10	E.010	<.05	E.060	1.3	<.05
JAN 1997										
28...	<.40	<.10	<.40	<.22	<.20	<.10	<.10	<.10	.31	<.10

DATE	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	BROMO-FORM TOTAL (UG/L) (32104)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
NOV 1996										
13...	E.010	<.20	<.05	<.10	<.05	<5.0	<.20	E.010	<.10	<.05
DEC										
10...	<.05	<.20	<.05	<.10	<.05	<5.0	<.20	E.020	<.10	<.05
JAN 1997										
28...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	<.10

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	18.0	19.5	28.0	22.5	25.0	26.0	19.5	23.0	25.0	21.0	23.0
2	20.0	14.5	17.0	25.5	23.5	24.5	26.0	21.5	24.0	24.5	21.5	23.0
3	14.5	12.5	13.5	27.5	23.0	25.0	26.5	21.5	24.0	24.0	20.0	22.5
4	17.0	12.5	14.5	27.5	22.5	25.0	25.5	22.0	23.5	20.0	16.0	18.5
5	20.0	12.5	16.0	26.5	21.0	24.0	25.5	19.5	22.5	20.0	15.0	17.5
6	18.5	14.0	16.5	26.5	19.5	23.0	24.5	18.5	22.0	20.5	16.0	18.0
7	17.5	14.0	15.5	27.5	21.0	24.0	25.0	18.5	21.5	22.0	17.0	19.5
8	20.5	13.5	16.5	28.0	21.5	25.0	24.0	18.5	21.5	20.5	18.5	19.5
9	22.5	13.5	17.5	29.0	23.0	25.5	26.5	20.0	23.0	20.5	18.0	19.5
10	24.5	15.5	19.5	27.5	21.5	24.5	26.0	21.0	23.5	19.5	18.0	18.5
11	26.0	18.0	21.5	27.5	20.5	24.0	27.0	21.5	24.0	21.5	18.0	19.5
12	24.5	19.5	22.0	28.0	21.0	24.5	25.5	23.5	24.5	22.5	19.0	20.5
13	22.5	19.5	21.0	29.0	22.0	25.5	24.5	22.5	23.5	21.5	18.0	20.0
14	24.0	19.0	21.0	29.5	23.0	26.5	26.5	22.5	24.5	21.0	18.0	19.5
15	24.5	16.5	20.5	31.0	24.5	27.5	26.0	22.0	24.0	21.5	17.5	19.5
16	24.0	16.0	20.0	31.0	25.5	28.5	30.0	24.0	26.5	21.5	17.5	19.5
17	21.5	16.5	19.0	31.0	25.0	28.0	29.0	23.5	26.0	22.0	18.0	20.0
18	19.5	18.0	18.5	29.5	25.5	27.5	27.0	23.0	24.5	22.0	20.0	21.0
19	25.0	18.0	21.0	28.5	23.5	26.0	24.0	19.0	22.0	21.5	17.0	19.5
20	26.5	19.0	22.5	25.5	20.5	23.0	22.5	18.5	19.5	21.5	18.5	20.0
21	28.5	21.5	25.0	26.0	19.5	23.0	23.0	18.0	20.0	19.5	16.0	17.5
22	29.0	23.5	26.0	25.5	22.5	24.0	24.0	19.5	21.5	17.0	13.0	15.0
23	27.5	21.5	24.5	24.0	21.5	22.5	22.0	18.0	20.0	15.5	14.0	15.0
24	25.0	20.5	22.5	22.0	17.0	18.5	23.0	17.5	20.5	15.0	13.0	14.0
25	28.5	20.5	24.0	21.0	16.5	18.5	24.0	19.0	21.5	14.5	10.5	12.5
26	28.5	24.0	26.5	23.5	17.5	20.5	24.0	19.5	21.5	16.5	13.0	14.5
27	27.5	21.5	24.5	25.5	20.5	23.0	24.0	20.0	22.0	16.5	12.5	14.5
28	27.5	20.5	24.0	27.5	22.0	24.0	22.5	20.0	21.0	16.0	12.5	14.0
29	28.0	21.0	24.5	27.5	21.5	24.0	24.5	19.5	21.5	18.0	15.5	16.5
30	27.5	21.5	24.5	26.0	17.5	21.5	24.0	19.0	21.5	17.5	15.5	16.5
31	---	---	---	27.0	18.0	22.0	23.5	19.5	21.5	---	---	---
MONTH	29.0	12.5	20.5	31.0	16.5	24.0	30.0	17.5	22.5	25.0	10.5	18.5

01398107 HOLLAND BROOK AT READINGTON, NJ

LOCATION.--Lat 40°33'30", long 74°43'50", Somerset County, Hydrologic Unit 02030105, on right bank 15 ft downstream from bridge on Old York Road, 0.9 mi southeast of Readington, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--9.00 mi^2.

PERIOD OF RECORD.--June 1978 to April 10, 1996 (discontinued).

REVISED RECORDS.--WDR NJ-80-1: 1978, 1979(P). WDR NJ-82-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete parking-block control. Datum of gage is 77.65 ft above sea level (levels by Somerset County).

REMARKS.--Records fair except for estimated daily discharges and those below 1.0 cfs, which are poor. Several measurements of water temperature were made during the year. Gage-height and rainfall radio telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 21	1415	700	5.66	Jan. 19	1745	*971	*6.77
Oct. 28	0615	555	5.03	Jan. 27	1745	602	5.24
Nov. 12	0130	586	5.17	Apr. 1	2330	480	4.69

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	12	5.9	4.2	22	16	67	---	---	---	---	---
2	1.0	67	5.5	6.0	20	16	155	---	---	---	---	---
3	.96	34	5.2	6.8	18	15	61	---	---	---	---	---
4	1.0	20	5.2	e6.0	16	13	37	---	---	---	---	---
5	21	13	4.7	e5.5	15	16	24	---	---	---	---	---
6	14	10	5.5	e5.0	14	51	20	---	---	---	---	---
7	5.4	15	4.8	e10	14	94	22	---	---	---	---	---
8	3.7	18	4.4	e8.0	14	73	27	---	---	---	---	---
9	2.9	13	4.8	e7.0	26	46	26	---	---	---	---	---
10	2.4	10	4.2	e6.0	21	30	37	---	---	---	---	---
11	2.1	23	3.5	e5.0	23	27	---	---	---	---	---	---
12	2.0	165	3.2	e4.5	21	34	---	---	---	---	---	---
13	2.0	36	3.2	e5.5	17	38	---	---	---	---	---	---
14	5.1	61	3.5	e5.0	18	35	---	---	---	---	---	---
15	22	91	3.8	e5.0	16	33	---	---	---	---	---	---
16	7.0	33	5.3	e5.5	14	27	---	---	---	---	---	---
17	4.9	20	5.3	5.7	14	22	---	---	---	---	---	---
18	3.9	15	5.5	6.3	13	20	---	---	---	---	---	---
19	3.3	13	5.4	398	12	38	---	---	---	---	---	---
20	3.2	10	6.7	185	15	94	---	---	---	---	---	---
21	162	9.1	5.9	86	76	51	---	---	---	---	---	---
22	36	8.0	5.5	61	64	31	---	---	---	---	---	---
23	15	7.2	5.3	52	58	22	---	---	---	---	---	---
24	9.3	7.6	5.2	160	69	19	---	---	---	---	---	---
25	7.4	7.0	5.2	121	49	17	---	---	---	---	---	---
26	6.3	6.6	4.4	65	32	16	---	---	---	---	---	---
27	6.0	6.6	5.2	261	23	14	---	---	---	---	---	---
28	147	6.1	4.2	116	21	14	---	---	---	---	---	---
29	32	6.0	3.9	63	18	57	---	---	---	---	---	---
30	16	5.8	4.4	48	---	51	---	---	---	---	---	---
31	11	---	4.1	33	---	34	---	---	---	---	---	---
TOTAL	556.96	749.0	148.9	1756.0	753	1064	---	---	---	---	---	---
MEAN	18.0	25.0	4.80	56.6	26.0	34.3	---	---	---	---	---	---
MAX	162	165	6.7	398	76	94	---	---	---	---	---	---
MIN	.96	5.8	3.2	4.2	12	13	---	---	---	---	---	---
CFSM	2.00	2.77	.53	6.29	2.89	3.81	---	---	---	---	---	---
IN.	2.30	3.10	.62	7.26	3.11	4.40	---	---	---	---	---	---

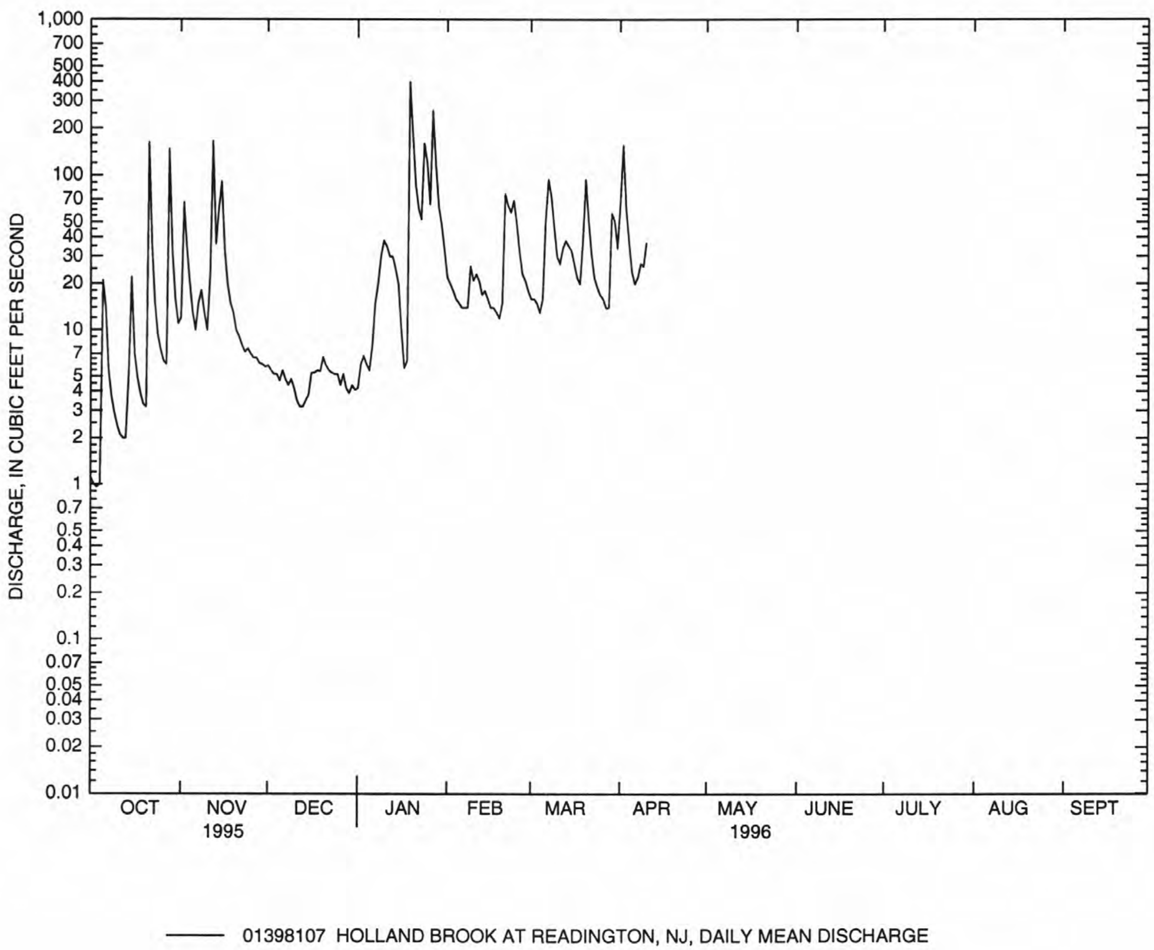
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.43	14.3	17.7	22.8	21.2	27.2	22.6	17.4	8.40	5.99	6.06	5.13
MAX	25.4	34.4	56.1	102	56.4	67.4	59.4	53.3	28.1	26.4	27.5	21.8
(WY)	1990	1986	1984	1979	1979	1994	1983	1989	1989	1984	1990	1989
MIN	1.10	2.85	1.93	1.93	4.69	7.05	3.02	3.65	2.07	1.29	.72	1.13
(WY)	1983	1983	1981	1981	1980	1985	1985	1992	1995	1995	1995	1983

01398107 HOLLAND BROOK AT READINGTON, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		WATER YEARS 1978 - 1996	
ANNUAL TOTAL	3177.13			
ANNUAL MEAN	8.70		14.3	
HIGHEST ANNUAL MEAN			25.7	1979
LOWEST ANNUAL MEAN			6.19	1995
HIGHEST DAILY MEAN	165	Nov 12	504	Jan 21 1979
LOWEST DAILY MEAN	.39	Aug 24	.37	Aug 28 1980
ANNUAL SEVEN-DAY MINIMUM	.48	Aug 19	.48	Aug 19 1995
INSTANTANEOUS PEAK FLOW			1300	Jul 7 1984
INSTANTANEOUS PEAK STAGE			8.08	Jul 7 1984
INSTANTANEOUS LOW FLOW			.22	Aug 28 1980
ANNUAL RUNOFF (CFSM)	.97		1.59	
ANNUAL RUNOFF (INCHES)	13.13		21.59	
10 PERCENT EXCEEDS	15		31	
50 PERCENT EXCEEDS	4.3		6.0	
90 PERCENT EXCEEDS	.68		1.4	

e Estimated.



01398260 NORTH BRANCH RARITAN RIVER NEAR CHESTER, NJ

LOCATION.--Lat 40°46'16", long 74°37'34", Morris County, Hydrologic Unit 02030105, at bridge on State Route 24, 0.8 mi upstream from Burnett Brook, and 3.8 mi east of Chester.

DRAINAGE AREA.--7.57 mi^2.

PERIOD OF RECORD.--Water years 1964-65, 1967, 1976 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
12...	1145	E10	248	7.6	5.5	759	12.5	100	<1.0	20	20	69
FEB 1997												
06...	1130	E15	271	7.9	3.0	757	13.3	100	2.4	330	60	49
MAR												
26...	1130	E15	242	7.8	7.0	743	11.9	101	E1.3	120	120	57
MAY												
29...	1130	E10	262	7.9	14.0	759	10.0	97	<1.0	50	40	76
JUL												
30...	1200	E5.0	322	7.7	18.0	755	9.2	98	--	330	590	90

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
12...	17	6.5	15	1.7	37	13	34	.1	17	128	133	9
FEB 1997												
06...	12	4.6	26	1.3	25	11	47	<.1	12	128	134	<1
MAR												
26...	14	5.4	21	1.2	29	12	46	<.1	14	144	136	1
MAY												
29...	19	7.0	17	1.7	42	13	41	<.1	15	163	148	<1
JUL												
30...	22	8.2	21	2.6	52	15	44	<.1	17	198	177	2

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
12...	.005	1.4	.07	.10	.1	.11	1.5	1.5	<.01	<.01	2.6	.3
FEB 1997												
06...	.006	1.2	.04	<.03	.2	.12	1.4	1.3	.02	<.01	2.1	.3
MAR												
26...	.007	1.1	<.03	<.03	.2	.12	1.3	1.2	.03	<.01	2.0	.4
MAY												
29...	.018	2.1	<.03	<.03	.2	.10	2.3	2.2	.04	.02	1.8	.3
JUL												
30...	.051	3.8	.04	.03	.3	.22	4.2	4.0	--	.03	2.2	.3

01398260 NORTH BRANCH RARITAN RIVER NEAR CHESTER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
29...	1130	10	<1	<10	30	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
29...	100	<1	10	<.1	<1	<1	<10

01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ

LOCATION.--Lat 40°42'30", long 74°38'11", Somerset County, Hydrologic Unit 02030105, on left bank 75 ft upstream from Ravine Lake Dam, 1.6 mi north of Far Hills, and 2.3 mi upstream from Peapack Brook.

DRAINAGE AREA.--26.2 mi^2.

PERIOD OF RECORD.--October 1921 to September 1975, October 1977 to current year. Operated as crest-stage gage, water years 1976-77. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23, 1924-25(M), 1935(M). WSP 1902: 1954.

GAGE.--Water-stage recorder and crest-stage gage above masonry dam. Datum of gage is 224.49 ft above sea level (New Jersey Geological Survey bench mark). Prior to June 18, 1925, nonrecording gage in stilling box at left end of dam at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Records given herein include diversion by small turbine at dam (average discharge, 3.0 ft^3/s) and returned to river 1,000 ft downstream from Ravine Lake Dam. Turbine was not operating. Flow regulated occasionally by operation of waste gate in dam. Recording rain gage, with telemeter, 500 ft downstream from station. Several measurements of water temperature were made during the year. Gage-height and rain-gage radio telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Stage of 7.6 ft, from floodmark, occurred July 23, 1919, discharge about 7,000 ft^3/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1730	*5,090	*6.65	Jan. 25	0415	1,430	4.17
Dec. 2	0500	1,380	4.12	Sept. 11	2000	1,710	4.42

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	67	219	54	55	40	136	57	37	14	16	14
2	18	63	425	55	51	46	130	56	67	15	16	12
3	20	53	71	56	49	44	122	155	98	19	15	10
4	17	51	54	52	47	47	102	114	47	18	15	9.0
5	14	51	31	52	160	48	86	72	41	14	21	8.2
6	13	51	89	49	70	68	81	74	38	13	20	8.3
7	13	52	81	43	52	43	76	68	36	12	16	8.7
8	57	67	e98	40	49	40	69	60	34	12	13	8.7
9	121	120	e98	41	47	38	66	72	32	15	12	8.5
10	49	60	e123	49	44	50	62	65	30	44	11	8.2
11	e23	51	119	46	42	54	63	58	27	21	11	357
12	e14	47	121	39	41	45	81	55	26	14	10	189
13	e12	45	123	42	40	39	133	53	27	12	11	e38
14	e11	44	399	43	59	163	72	52	31	11	12	e33
15	e9.4	e45	171	41	70	149	64	50	25	10	13	e31
16	e10	e45	141	108	50	63	61	47	22	10	12	e26
17	e9.2	e45	133	60	43	56	62	45	21	13	28	e20
18	e9.0	e45	120	39	41	53	76	44	24	16	30	e17
19	1770	e42	118	39	42	50	77	47	49	28	23	e15
20	559	e39	102	43	43	50	62	70	28	14	14	e14
21	165	e37	87	44	42	47	58	47	22	10	61	e13
22	130	37	82	44	44	45	56	43	20	99	31	e13
23	103	39	81	77	40	41	56	41	18	26	20	e12
24	91	38	97	51	40	40	56	39	16	109	16	e12
25	81	36	119	454	38	40	54	51	17	121	14	e11
26	67	194	69	80	39	55	52	60	18	41	13	e11
27	62	34	65	62	43	43	50	42	17	30	13	e12
28	60	30	63	259	41	39	125	38	16	40	25	12
29	e64	36	63	85	---	39	73	37	15	27	25	e14
30	e67	36	60	54	---	39	58	39	15	20	17	e14
31	e73	---	59	51	---	267	---	40	---	17	14	---
TOTAL	3732.6	1600	3681	2252	1422	1881	2319	1791	914	865	568	959.6
MEAN	120	53.3	119	72.6	50.8	60.7	77.3	57.8	30.5	27.9	18.3	32.0
MAX	1770	194	425	454	160	267	136	155	98	121	61	357
MIN	9.0	30	31	39	38	38	50	37	15	10	10	8.2
CFSM	4.60	2.04	4.53	2.77	1.94	2.32	2.95	2.21	1.16	1.07	.70	1.22
IN.	5.30	2.27	5.23	3.20	2.02	2.67	3.29	2.54	1.30	1.23	.81	1.36

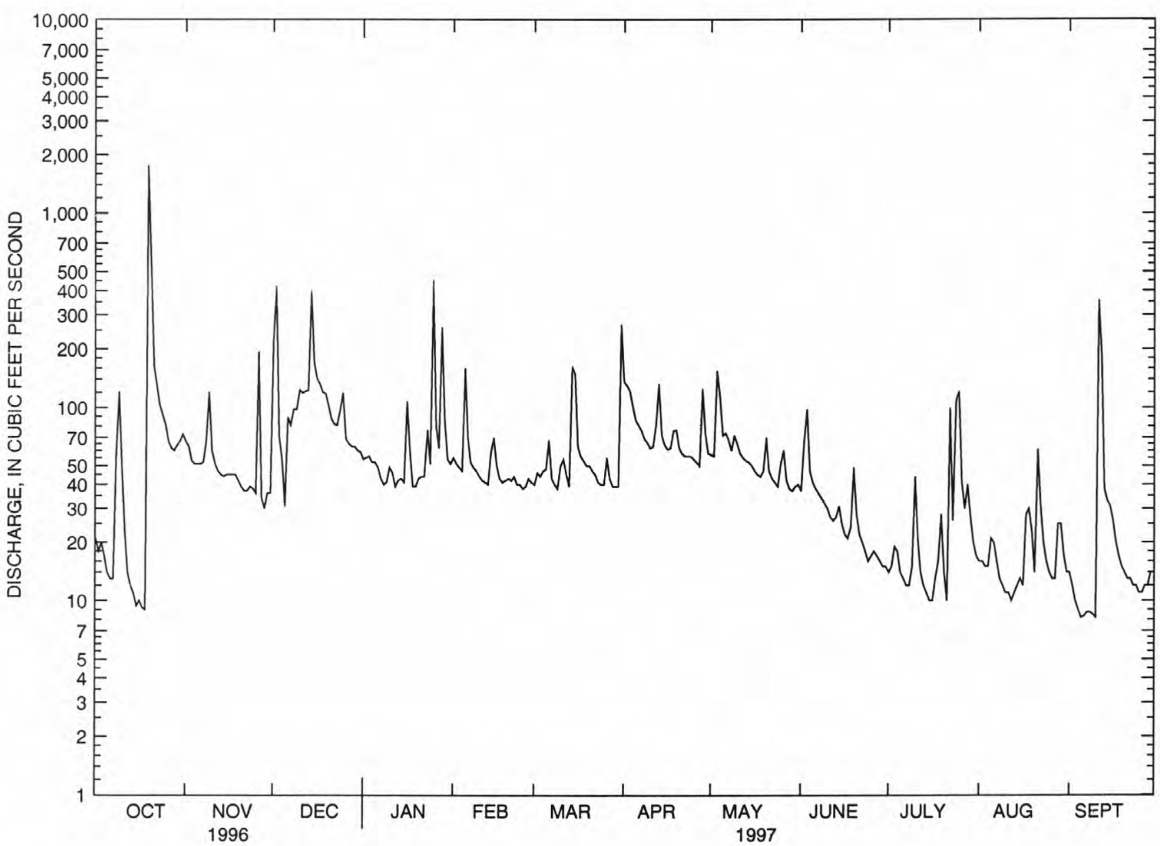
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	26.9	43.4	50.4	54.9	59.5	82.1	82.7	59.4	38.7	30.9	28.0	27.0
MAX	120	170	124	182	128	207	226	178	190	132	153	135
(WY)	1997	1928	1974	1979	1973	1936	1983	1989	1972	1984	1942	1971
MIN	6.29	9.22	8.43	6.76	22.1	22.8	26.8	20.0	10.5	4.41	4.55	3.61
(WY)	1954	1965	1981	1981	1934	1981	1985	1965	1965	1966	1965	1964

01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	27350.6		21985.2			
ANNUAL MEAN	74.7		60.2		48.6	
HIGHEST ANNUAL MEAN					89.7	1928
LOWEST ANNUAL MEAN					17.7	1965
HIGHEST DAILY MEAN	1770	Oct 19	1770	Oct 19	1770	Oct 19 1996
LOWEST DAILY MEAN	9.0	Oct 18	8.2	Sep 5	.20	Oct 22 1953
ANNUAL SEVEN-DAY MINIMUM	11	Oct 12	8.5	Sep 4	.20	Oct 22 1953
INSTANTANEOUS PEAK FLOW			5090	Oct 19	6390a	Aug 28 1971
INSTANTANEOUS PEAK STAGE			6.65	Oct 19	7.28	Aug 28 1971
INSTANTANEOUS LOW FLOW			8.2	Sep 4	.00b	Jan 1 1900
ANNUAL RUNOFF (CFSM)	2.85		2.30		1.85	
ANNUAL RUNOFF (INCHES)	38.83		31.22		25.19	
10 PERCENT EXCEEDS	123		111		96	
50 PERCENT EXCEEDS	49		44		33	
90 PERCENT EXCEEDS	17		13		10	

a From rating curve extended above 2,000 ft^3/s on basis of computation of peak flow over dam.
b Several times when lake was filling.
e Estimated.



01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ, DAILY MEAN DISCHARGE

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'09", long 74°40'56", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road in Burnt Mills, 0.1 mi upstream from Lamington River, and 4.0 mi southwest of Far Hills.

DRAINAGE AREA.--63.8 mi^2.

PERIOD OF RECORD.--Water years 1964, 1977 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
12...	1200	82	246	8.3	6.0	765	12.2	98	<1.0	170	40	83
FEB 1997												
04...	1200	90	278	8.0	3.0	774	13.8	101	E1.1	80	10	69
MAR												
26...	1130	150	286	7.9	8.0	751	11.9	102	E1.5	150	80	80
MAY												
29...	1130	50	263	8.0	15.0	766	10.5	104	<1.0	330	40	84
JUL												
29...	1100	39	258	8.1	22.0	758	8.2	94	<1.0	490	180	78

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
12...	21	7.5	13	1.8	53	16	29	.1	15	132	138	10
FEB 1997												
04...	17	6.5	22	1.3	41	15	41	<.1	14	158	146	<1
MAR												
26...	21	6.8	18	1.4	48	17	44	.1	12	164	154	6
MAY												
29...	21	7.6	16	1.6	54	17	34	<.1	13	157	146	<1
JUL												
29...	20	6.9	15	1.8	56	16	29	<.1	13	165	139	1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
12...	.006	.74	<.03	<.03	.1	.13	.85	.87	<.01	<.01	2.6	.3
FEB 1997												
04...	.004	1.1	.04	<.03	<.03	<.03	--	--	.03	<.01	1.4	.3
MAR												
26...	.010	1.0	<.03	<.03	.2	.14	1.2	1.1	.02	<.01	2.1	.4
MAY												
29...	.009	.95	<.03	<.03	.2	.07	1.1	1.0	.01	<.01	2.0	.2
JUL												
29...	.007	.73	<.03	<.03	.3	.42	1.0	1.1	<.01	<.01	3.1	.3

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
29...	1130	20	<1	<10	40	<1	<1.0	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
29...	140	<1	30	<.1	<1	<1	<10

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°43'39", long 74°43'50", Morris County, Hydrologic Unit 02030105, on right bank 1.1 mi upstream from bridge on State Highway 512, 1.2 mi northwest of Pottersville, and 5.5 mi upstream from Cold Brook. Water-quality samples collected at bridge 1.1 mi downstream from gage at high flows.

DRAINAGE AREA.--32.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October and November 1921, published in WSP 1302. Prior to October 1952, published as "Black River near Pottersville".

REVISED RECORDS.--WSP 741: 1932. WSP 781: Drainage area. WSP 1552: 1922, 1924-29(M), 1931(M), 1933-34(M), 1938(P), 1939(M), 1940, 1941(M), 1942-46(P), 1947(M), 1948-49(P), 1951-52(P), 1953(M). WDR-NJ-80-1: Correction 1979(P).

GAGE.--Water-stage recorder. Concrete control since July 1, 1937. Datum of gage is 284.14 ft above sea level (levels from New Jersey Geological Survey bench mark). Prior to July 1, 1922, nonrecording gage on downstream side of highway bridge at Pottersville, 1.1 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated occasionally by pond above station. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 380 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1900	*1,470	*4.43	Dec. 7	2100	453	3.06
Nov. 26	0730	481	3.11	Dec. 14	0430	425	3.01
Dec. 2	0315	1,060	3.99	Jan. 25	0230	865	3.72
Dec. 6	0645	388	2.94	Jan. 28	1015	383	2.93

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	68	199	91	103	60	139	79	42	19	29	17
2	24	64	504	87	95	63	178	73	60	19	25	16
3	23	61	336	86	92	63	179	119	79	20	22	15
4	21	58	293	85	89	64	147	116	68	19	20	14
5	19	56	222	85	171	67	126	98	72	19	21	14
6	17	54	281	84	120	84	116	104	64	18	18	13
7	16	53	293	79	112	71	105	90	53	17	17	13
8	37	68	325	73	110	69	94	76	45	17	17	13
9	54	150	263	68	94	66	89	80	42	32	16	13
10	40	102	222	e60	83	71	84	75	40	35	15	12
11	35	88	193	e57	77	71	79	69	36	23	14	83
12	41	83	183	e52	72	66	95	67	33	22	14	73
13	44	75	182	e53	68	63	132	65	31	21	14	65
14	42	68	304	e51	83	125	101	60	31	20	14	93
15	39	61	245	e47	95	151	101	58	29	18	13	89
16	36	57	233	e64	81	119	92	55	28	16	13	69
17	33	54	212	e72	79	122	88	53	27	15	23	51
18	29	53	189	e54	79	104	105	51	35	16	24	39
19	534	53	179	e51	80	89	102	51	49	19	19	33
20	497	53	160	e54	81	81	90	64	37	16	20	27
21	429	52	138	e48	78	76	87	54	37	16	43	22
22	348	50	126	e44	80	72	82	54	36	30	27	20
23	255	49	120	59	74	68	78	54	32	19	23	18
24	192	47	139	44	70	65	74	50	29	71	22	18
25	148	46	156	292	65	63	71	58	27	81	21	17
26	119	184	130	121	62	77	68	62	26	49	19	16
27	100	101	130	126	64	70	65	51	25	48	18	16
28	90	88	124	221	60	68	127	50	23	59	22	15
29	83	95	118	140	---	68	90	48	22	44	19	16
30	77	87	111	119	---	65	84	46	21	35	17	15
31	74	---	101	112	---	146	---	45	---	31	16	---
TOTAL	3521	2178	6411	2679	2417	2507	3068	2075	1179	884	615	935
MEAN	114	72.6	207	86.4	86.3	80.9	102	66.9	39.3	28.5	19.8	31.2
MAX	534	184	504	292	171	151	179	119	79	81	43	93
MIN	16	46	101	44	60	60	65	45	21	15	13	12
CFSM	3.46	2.21	6.31	2.63	2.63	2.47	3.12	2.04	1.20	.87	.60	.95
IN.	3.99	2.47	7.27	3.04	2.74	2.84	3.48	2.35	1.34	1.00	.70	1.06

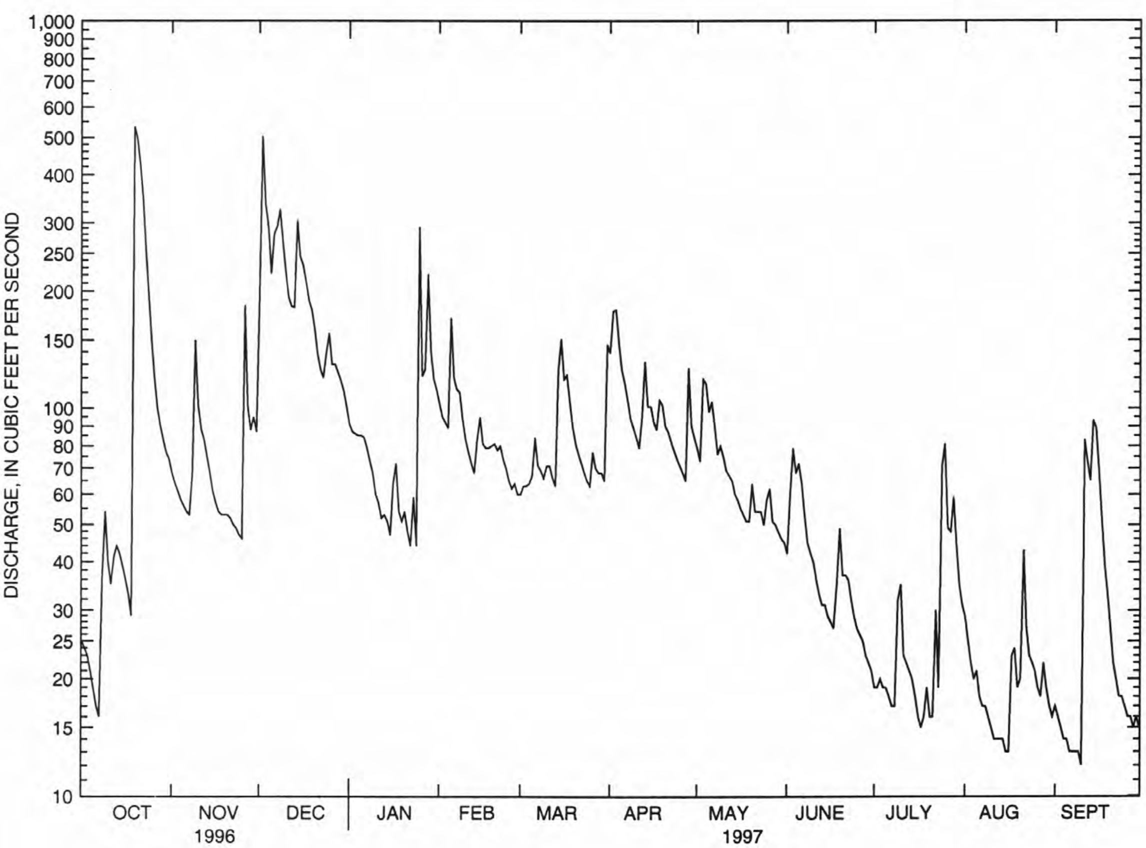
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

MEAN	34.9	50.5	60.9	65.3	70.7	90.4	88.8	66.7	45.7	37.1	32.9	32.7
MAX	116	163	207	225	144	230	239	169	191	165	126	123
(WY)	1956	1928	1997	1979	1973	1936	1984	1989	1972	1984	1928	1971
MIN	5.69	11.2	15.4	11.7	28.0	32.0	25.9	19.0	10.1	5.48	5.61	3.76
(WY)	1931	1965	1981	1981	1934	1981	1985	1965	1965	1965	1966	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	33947		28469			
ANNUAL MEAN	92.8		78.0		56.3	
HIGHEST ANNUAL MEAN					104	1928
LOWEST ANNUAL MEAN					20.5	1965
HIGHEST DAILY MEAN	534	Oct 19	534	Oct 19	905	Jan 25 1979
LOWEST DAILY MEAN	11	Sep 4	12	Sep 10	1.5	Oct 4 1930
ANNUAL SEVEN-DAY MINIMUM	12	Aug 31	13	Sep 4	2.4	Sep 22 1964
INSTANTANEOUS PEAK FLOW			1470	Oct 19	3460a	Jul 7 1984
INSTANTANEOUS PEAK STAGE			4.43	Oct 19	5.94b	Jul 7 1984
INSTANTANEOUS LOW FLOW			12	Aug 16	1.3	Oct 4 1930
ANNUAL RUNOFF (CFSM)	2.83		2.38		1.72	
ANNUAL RUNOFF (INCHES)	38.50		32.29		23.32	
10 PERCENT EXCEEDS	190		147		113	
50 PERCENT EXCEEDS	71		64		43	
90 PERCENT EXCEEDS	24		17		14	

a From rating curve extended above 380 ft^3/s on basis of slope-area measurement at gage height 4.71 ft.
b From floodmark.
e Estimated.



——— 01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ, DAILY MEAN DISCHARGE

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to September 1997 (discontinued).

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
31...	1100	75	233	7.6	9.5	751	10.8	96	<1.0	140	30	70
FEB 1997												
10...	1145	84	263	7.6	1.0	756	13.8	98	E1.4	<20	<10	56
APR												
02...	1130	163	198	7.7	5.0	755	12.5	99	<1.0	<20	10	46
JUN												
03...	1130	82	189	7.8	13.0	754	9.9	95	E1.6	1300	1400	54
JUL												
24...	1145	120	169	7.6	17.0	756	9.3	97	E1.9	>24000	5000	48

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
31...	17	6.8	19	2.2	43	11	38	<.1	14	124	136	3
FEB 1997												
10...	13	5.6	24	1.3	34	13	44	<.1	9.9	136	136	1
APR												
02...	11	4.6	18	1.2	30	10	33	.1	7.2	118	106	1
JUN												
03...	13	5.2	13	.95	38	8.4	25	<.1	11	115	101	8
JUL												
24...	12	4.4	11	1.8	30	11	21	<.1	9.5	111	92	106

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
31...	.004	.47	.06	<.03	.3	.30	.77	.77	.02	.02	5.7	.4
FEB 1997												
10...	.018	1.0	<.03	<.03	.1	.10	1.1	1.1	<.01	.02	2.2	.4
APR												
02...	.003	.60	.03	.03	.3	.17	.90	.77	<.01	.01	4.0	.3
JUN												
03...	.008	.45	<.03	<.03	.4	.28	.89	.73	.06	.01	4.7	.9
JUL												
24...	.007	.52	<.03	<.03	.8	.26	1.3	.78	.21	.01	5.7	>4

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
JUN 1997								
03...	1130	20	<1	<10	30	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUN 1997							
03...	1100	1	80	<.1	<1	<1	<10

01399510 UPPER COLD BROOK NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°43'16", long 74°45'09", Hunterdon County, Hydrologic Unit 02030105, on right bank along a private dirt road, 400 ft downstream from the former Pottersville Reservoir, and 1.5 mi west of Pottersville.

DRAINAGE AREA.--2.18 mi^2.

PERIOD OF RECORD.--October 1972 to September 1996 (discontinued).

REVISED RECORDS.--WDR-NJ-84-1: 1975(P), 1980-83(P). WDR NJ-88-1: 1979.

GAGE.--Water-stage recorder and rock outcrop control. Datum of gage is 451.57 ft above sea level.

REMARKS.--Records poor. Flow regulated by Pottersville Reservoir, 400 ft above station, until August 1982 when dam was demolished. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR WATER YEAR 1996.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 21	1330	115	1.52	Apr. 1	2300	110	1.50
Nov. 11	2345	140	1.61	Apr. 16	0430	107	1.49
Jan. 19	----	*312	*2.05	July 13	1130	112	1.51

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	3.5	e3.2	e2.5	e9.1	e6.0	e14	11	3.4	3.5	e3.6	1.1
2	.94	11	e3.2	e2.6	e8.0	e6.0	20	7.7	3.2	2.3	e2.8	1.1
3	.94	5.5	e2.9	e2.6	e7.2	e5.7	8.6	8.4	3.6	2.2	e2.7	1.1
4	.94	4.5	e3.0	e2.4	e6.4	e5.1	7.4	7.3	3.6	2.1	e2.7	1.1
5	15	4.2	e2.9	e2.3	e6.2	e5.9	7.0	6.4	5.1	1.9	e2.5	1.1
6	16	3.9	e3.4	e2.4	e5.7	e11	6.5	8.3	3.2	1.7	e2.3	1.3
7	2.8	5.5	e3.1	e4.5	e5.5	e9.9	8.2	6.4	3.0	1.6	e2.3	1.3
8	2.0	5.3	e2.7	e10	e5.2	e7.1	8.2	6.8	2.8	2.7	e2.2	1.7
9	1.4	3.9	e2.5	e9.4	e6.1	e5.8	7.1	6.3	2.8	3.7	e2.3	1.4
10	1.2	3.8	e2.4	e7.6	e5.5	e6.0	7.3	6.0	3.4	1.9	e2.3	1.2
11	1.1	11	e3.0	e5.8	e6.3	e5.5	6.3	13	3.6	1.6	e2.1	1.1
12	1.1	25	e2.4	e5.2	e5.9	e5.8	6.0	16	3.6	1.6	e2.0	1.1
13	1.1	6.9	e2.0	e6.1	e4.5	e6.7	6.0	7.5	3.2	30	e2.3	1.6
14	4.0	13	e1.9	e5.0	e4.2	e7.0	5.7	6.6	3.1	4.6	e2.1	1.4
15	5.3	13	e3.1	e4.2	e3.6	e7.1	5.5	6.3	2.8	3.9	e2.0	1.1
16	2.2	7.2	e3.3	e3.7	e3.8	e7.2	38	10	2.4	4.6	e2.0	1.1
17	1.7	6.4	e3.2	e3.8	e3.7	e5.7	11	7.3	2.3	2.6	e1.6	5.2
18	1.5	5.9	e2.8	e3.5	e3.9	e5.4	8.4	6.4	2.5	2.3	1.5	3.2
19	1.3	5.8	e2.3	e70	e3.4	e5.6	7.6	6.0	3.6	e4.2	1.5	1.5
20	1.4	5.5	e2.1	e19	e6.1	e13	7.1	5.5	3.1	e4.4	1.5	1.3
21	25	5.2	e2.5	e7.8	e21	e7.0	6.7	5.1	2.7	e3.3	1.5	1.1
22	5.6	4.9	e2.8	e7.2	e9.8	e7.2	6.3	5.0	2.7	e3.4	1.5	1.8
23	3.7	4.6	e2.9	e5.7	e9.1	e5.6	6.3	4.8	2.6	e3.7	1.4	1.7
24	3.0	e4.3	e2.8	e19	e9.7	e5.4	6.2	4.6	2.2	e3.2	1.4	1.3
25	2.7	e3.9	e2.7	e16	e8.3	e5.1	5.8	4.3	2.2	e2.9	1.3	1.3
26	2.5	e3.8	e2.5	e10	e7.8	e5.1	5.9	4.2	1.9	e6.3	1.3	1.1
27	2.5	e3.7	e2.1	e46	e7.1	e5.0	5.6	4.5	1.8	e3.2	1.2	1.1
28	13	e3.4	e2.3	e25	e7.3	e4.9	5.4	4.3	1.8	e2.9	1.2	1.3
29	4.6	e3.5	e2.3	e15	e6.4	e8.3	14	4.2	1.7	e2.8	1.2	2.2
30	3.7	e3.2	e2.2	e11	---	e7.1	21	3.9	6.3	e2.9	1.2	1.3
31	3.3	---	e2.3	e9.3	---	e6.1	---	3.5	---	e3.7	1.2	---
TOTAL	132.46	191.3	82.8	344.6	196.8	204.3	279.1	207.6	90.2	121.7	58.7	45.2
MEAN	4.27	6.38	2.67	11.1	6.79	6.59	9.30	6.70	3.01	3.93	1.89	1.51
MAX	25	25	3.4	70	21	13	38	16	6.3	30	3.6	5.2
MIN	.94	3.2	1.9	2.3	3.4	4.9	5.4	3.5	1.7	1.6	1.2	1.1
CFSM	1.96	2.93	1.23	5.10	3.11	3.02	4.27	3.07	1.38	1.80	.87	.69
IN.	2.26	3.26	1.41	5.88	3.36	3.49	4.76	3.54	1.54	2.08	1.00	.77

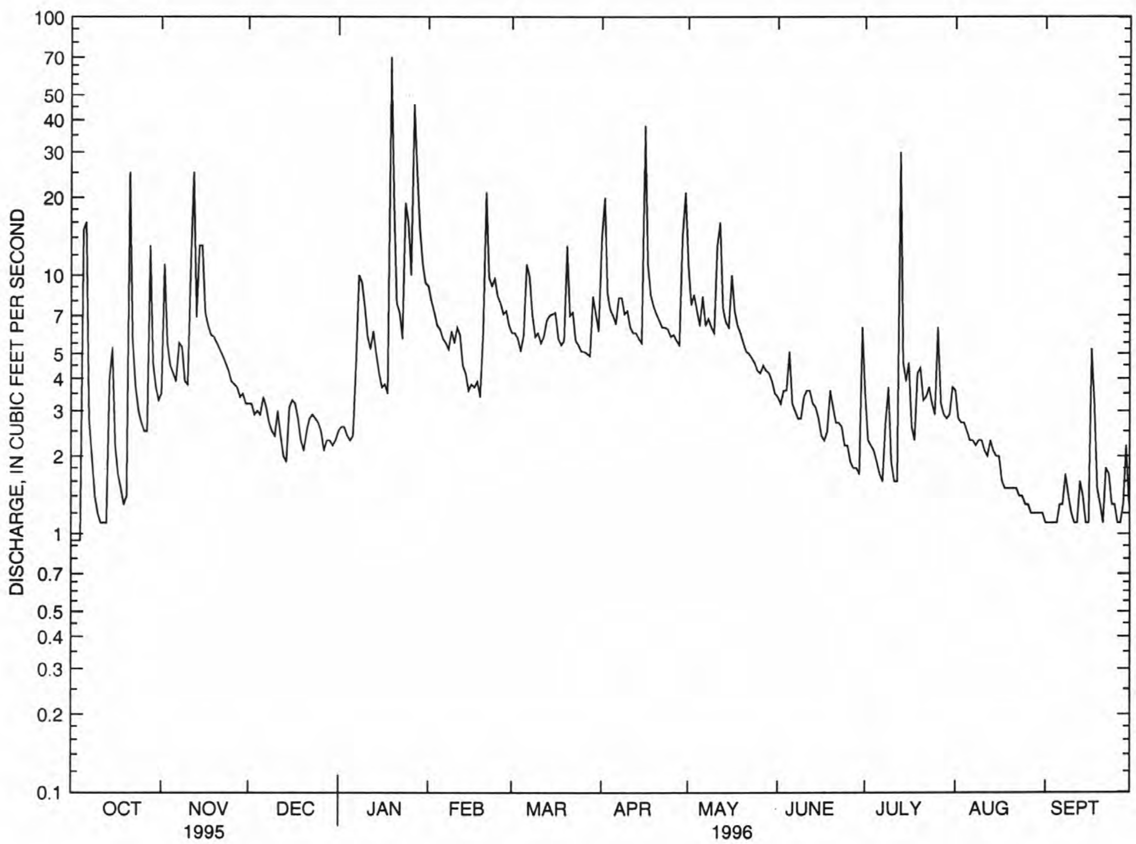
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.07	3.29	4.47	5.00	4.88	6.28	6.56	5.14	3.29	2.60	1.65	1.76
MAX	5.55	8.37	10.6	12.4	8.46	16.2	15.0	10.8	6.45	12.1	3.70	4.58
(WY)	1990	1973	1984	1979	1984	1994	1983	1989	1975	1984	1990	1975
MIN	.62	.93	.43	.083	2.03	2.09	1.72	2.30	1.49	.76	.38	.16
(WY)	1981	1981	1981	1981	1980	1985	1985	1985	1985	1993	1980	1980

01399510 UPPER COLD BROOK NEAR POTTERSVILLE, NJ

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1973 - 1996	
ANNUAL TOTAL	1078.43		1954.76			
ANNUAL MEAN	2.95		5.34		3.91	
HIGHEST ANNUAL MEAN					7.07	1984
LOWEST ANNUAL MEAN					1.75	1985
HIGHEST DAILY MEAN	25	Oct 21	70	Jan 19	125	Jul 7 1984
LOWEST DAILY MEAN	.64	Sep 7	.94	Oct 1	.03b	Aug 28 1980
ANNUAL SEVEN-DAY MINIMUM	.67	Sep 2	1.1	Aug 30	.06	Aug 28 1980
INSTANTANEOUS PEAK FLOW			312	Jan 19	2000a	Jul 7 1984
INSTANTANEOUS PEAK STAGE			2.05	Jan 19	3.91	Jul 7 1984
INSTANTANEOUS LOW FLOW			.94	Oct 1	---	
ANNUAL RUNOFF (CFSM)	1.36		2.45		1.79	
ANNUAL RUNOFF (INCHES)	18.40		33.36		24.37	
10 PERCENT EXCEEDS	5.0		9.5		7.4	
50 PERCENT EXCEEDS	2.4		3.8		2.6	
90 PERCENT EXCEEDS	.88		1.4		.91	

a From rating curve extended above 125 ft^3/s on basis of slope-area measurement at gage height 3.91 ft.
b Also occurred Aug. 28-29, Sept. 3, 8, 1990.
e Estimated.



01399510 UPPER COLD BROOK NEAR POTTERSVILLE, NJ, DAILY MEAN DISCHARGE

01399670 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE STATION, NJ

LOCATION.--Lat 40°37'10", long 74°46'30", Hunterdon County, Hydrologic Unit 02030105, on right bank 1,700 ft upstream from bridge on U.S. Route 22, 0.4 mi northeast of Whitehouse Station, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--12.3 mi^2.

PERIOD OF RECORD.--October 1986 to current year. March 1977 to September 1986, water-stage recorder 1,700 ft downstream, at datum 8.07 ft lower (sta. 01399690), drainage area 13.2 mi^2.

REVISED RECORDS.--WDR NJ-88-1: 1987. WDR NJ-90-1: 1988.

GAGE.--Water-stage recorder. Datum of gage is 121.5 ft above sea level.

REMARKS.--Records good except for daily discharges below 5.0 ft^3/s, which are fair. Releases from Round Valley Reservoir enter stream directly upstream from station (see Raritan River basin, reservoirs in). Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	12	117	20	28	15	76	22	9.5	5.6	6.7	5.1
2	3.9	12	331	20	24	16	49	23	46	6.1	6.3	4.8
3	4.1	11	55	22	23	15	37	72	41	7.0	5.8	4.6
4	2.8	10	42	19	21	21	30	51	18	6.5	5.8	3.8
5	2.7	9.9	34	20	96	27	25	27	13	5.7	12	3.7
6	2.8	12	140	19	36	37	24	27	11	5.5	7.8	3.7
7	2.8	9.2	137	16	26	22	22	22	11	5.9	5.2	3.9
8	55	12	110	15	23	19	19	19	9.7	5.8	4.7	3.9
9	54	63	52	15	22	17	18	37	9.0	13	4.4	4.0
10	20	24	42	17	19	31	16	26	8.5	23	4.1	4.0
11	12	16	41	15	17	27	16	19	7.9	6.8	4.1	59
12	8.5	13	52	13	17	19	30	17	7.5	5.7	3.9	24
13	7.4	12	80	12	15	16	42	16	8.5	5.2	4.3	8.0
14	6.5	11	272	12	36	123	20	15	7.7	4.8	4.4	6.8
15	4.9	11	72	12	49	77	17	14	6.7	4.4	3.7	6.0
16	4.9	9.8	54	56	27	35	16	13	6.3	4.1	4.7	5.5
17	4.7	9.7	50	22	22	29	17	13	6.4	3.8	6.1	5.3
18	4.4	10	43	14	20	26	41	12	8.0	14	15	5.1
19	737	10	48	12	22	23	29	13	17	22	6.6	4.6
20	121	9.3	38	12	22	22	21	16	7.5	4.6	13	5.3
21	50	8.7	30	12	20	20	19	11	6.6	4.1	48	5.8
22	36	8.6	28	14	21	20	17	11	6.9	29	9.9	3.9
23	28	8.3	28	31	17	16	16	10	6.3	8.3	6.8	4.4
24	24	8.2	42	18	16	15	16	9.6	6.0	208	6.0	4.3
25	20	8.1	51	309	14	15	15	27	6.5	134	5.6	4.1
26	17	154	29	34	14	27	14	25	5.8	24	5.2	4.1
27	16	36	28	24	17	17	13	12	5.7	14	4.9	3.6
28	16	24	26	132	14	15	74	10	5.5	15	12	3.9
29	15	20	26	35	---	16	27	9.4	5.6	9.9	8.0	5.2
30	14	18	25	24	---	15	20	9.8	5.5	8.0	5.2	4.0
31	13	---	23	23	---	110	---	10	---	7.5	4.7	---
TOTAL	1312.1	580.8	2146	1019	698	903	796	618.8	320.6	621.3	244.9	214.4
MEAN	42.3	19.4	69.2	32.9	24.9	29.1	26.5	20.0	10.7	20.0	7.90	7.15
MAX	737	154	331	309	96	123	76	72	46	208	48	59
MIN	2.7	8.1	23	12	14	15	13	9.4	5.5	3.8	3.7	3.6

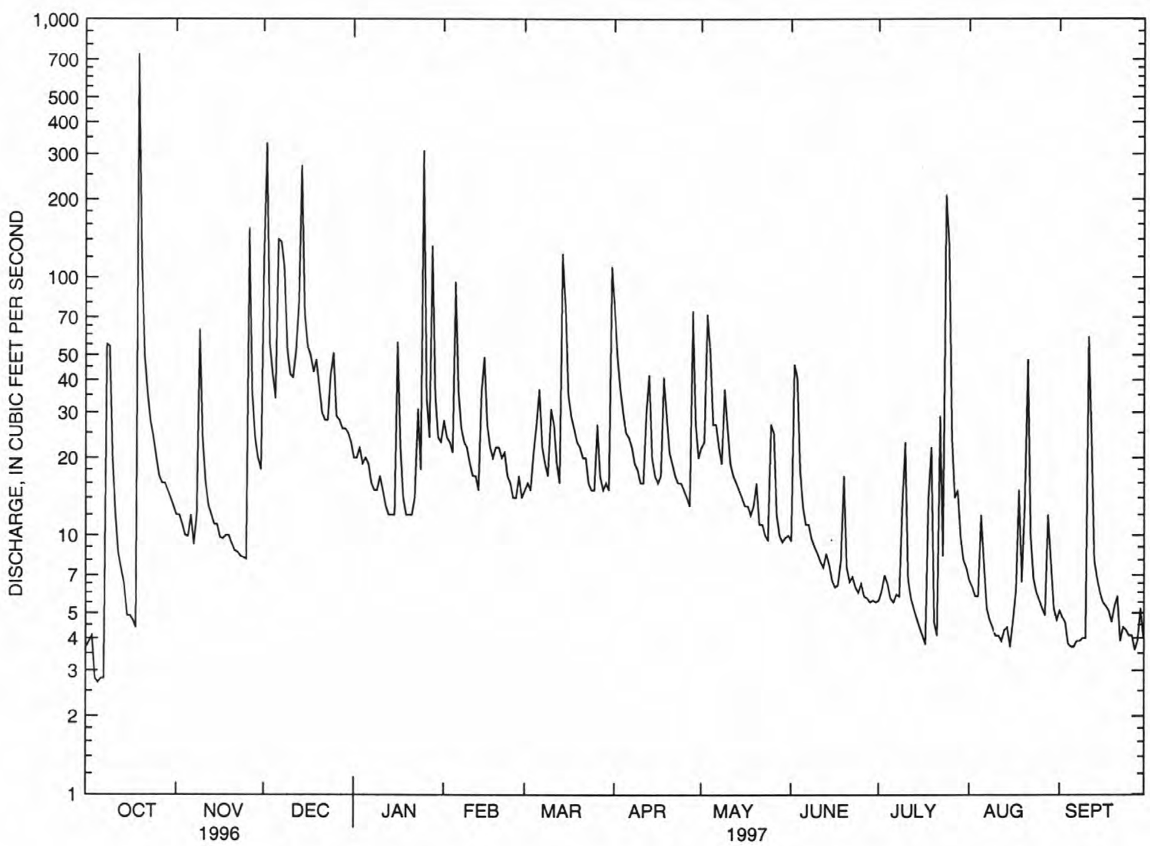
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	27.6	26.1	33.2	34.2	26.5	33.1	32.3	24.8	18.9	21.0	26.7	29.7
MAX	116	64.0	91.6	93.3	51.1	74.5	85.0	60.5	38.7	80.5	128	146
(WY)	1981	1981	1981	1981	1979	1994	1983	1989	1989	1984	1980	1980
MIN	4.55	6.58	9.85	8.31	9.90	10.2	3.80	8.18	8.50	4.78	5.49	4.19
(WY)	1995	1982	1996	1985	1992	1985	1985	1995	1993	1993	1983	1983

01399670 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE STATION, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	11399.5		9474.9			
ANNUAL MEAN	31.1		26.0		28.1	
HIGHEST ANNUAL MEAN					55.2	1981
LOWEST ANNUAL MEAN					11.1	1992
HIGHEST DAILY MEAN	737	Oct 19	737	Oct 19	737	Oct 19 1996
LOWEST DAILY MEAN	1.8	Sep 3	2.7	Oct 5	.07	Nov 12 1994
ANNUAL SEVEN-DAY MINIMUM	1.9	Aug 30	3.3	Oct 1	.09	Aug 5 1995
INSTANTANEOUS PEAK FLOW			2050	Oct 19	2190	Jul 7 1984
INSTANTANEOUS PEAK STAGE			9.50	Oct 19	15.89a	Jul 7 1984
INSTANTANEOUS LOW FLOW			2.7	Oct 3	.00	Feb 2 1993
10 PERCENT EXCEEDS	54		49		62	
50 PERCENT EXCEEDS	17		15		14	
90 PERCENT EXCEEDS	4.6		4.6		4.9	

a Site and datum then in use.



01399670 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE STATION, NJ, DAILY MEAN DISCHARGE

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'49", long 74°44'11", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on Lamington Road, 1.4 mi northeast of Whitehouse, and 1.8 mi upstream from mouth.

DRAINAGE AREA.--37.1 mi^2.

PERIOD OF RECORD.--Water years 1977 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1977 to September 1978.
WATER TEMPERATURE: April 1977 to September 1978.
SEDIMENT ANALYSES: October 1976 to September 1978.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
24...	1100	78	211	7.5	13.0	753	9.6	92	E1.3	700	80	72
FEB 1997												
04...	1100	67	212	8.3	3.0	766	13.4	99	<1.0	<20	10	66
APR												
08...	1100	74	203	8.6	10.0	755	12.9	115	2.3	20	<10	65
MAY												
21...	1100	48	219	9.1	14.0	755	12.1	119	2.4	220	40	79
JUL												
28...	1100	47	223	8.0	22.0	755	7.5	87	E1.2	1100	1310	74

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
24...	18	6.6	11	2.0	52	19	16	<.1	17	118	126	2
FEB 1997												
04...	16	6.3	12	1.3	45	16	21	<.1	15	118	120	<1
APR												
08...	16	6.1	11	1.3	50	17	20	<.1	13	123	118	<1
MAY												
21...	19	7.3	10	1.3	57	16	16	<.1	12	136	120	7
JUL												
28...	19	6.4	13	2.1	59	16	17	<.1	14	155	129	7

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
24...	.007	1.2	<.03	.04	.3	.25	1.5	1.5	.07	.05	2.7	.3
FEB 1997												
04...	.019	1.2	.22	.05	.3	.13	1.5	1.3	.03	<.01	1.5	.4
APR												
08...	.009	.86	<.03	<.03	.2	.13	1.0	.99	.03	.04	1.7	.3
MAY												
21...	.018	.73	<.03	<.03	.1	.05	.78	.78	<.01	<.01	1.6	.2
JUL												
28...	.012	1.2	<.03	.06	.2	.08	1.3	1.3	.09	.06	3.4	.5

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
21...	1100	<10	<1	<10	30	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
21...	140	<1	30	<.1	<1	<1	<10

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'04", long 74°41'13", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road in Burnt Mills, 1,400 ft upstream from mouth, and 2.4 mi southwest of Greater Cross Roads.

DRAINAGE AREA.--100 mi^2.

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

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
28...	1230	E175	231	7.7	13.5	753	9.3	90	<1.0	80	50	70
FEB 1997												
10...	1100	E175	244	7.8	0.0	761	14.0	96	E1.2	70	10	65
APR												
02...	1145	E470	209	7.7	6.0	763	13.0	104	<1.0	1300	70	56
JUN												
02...	1100	E120	242	7.8	17.0	757	8.2	85	E1.6	3500	2200	81
JUL												
24...	1130	E1080	157	7.7	18.0	760	7.7	82	4.2	>24000	30000	43

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
28...	17	6.8	14	2.1	51	14	27	<.1	16	124	130	4
FEB 1997												
10...	16	6.2	20	1.3	42	15	34	<.1	12	132	135	3
APR												
02...	14	5.1	16	1.3	36	13	30	<.1	9.5	122	114	4
JUN												
02...	20	7.7	14	1.5	59	14	25	.1	10	146	132	8
JUL												
24...	11	3.7	11	4.0	33	13	15	<.1	6.0	104	88	103

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
28...	.005	.62	<.03	<.03	.3	.30	.92	.92	.04	.04	4.7	.3
FEB 1997												
10...	.011	1.1	<.03	<.03	.2	.14	1.3	1.2	<.01	<.01	2.0	.4
APR												
02...	.005	.73	.03	.03	.3	.15	1.0	.88	.04	.02	3.3	.6
JUN												
02...	.027	1.1	<.03	<.03	.4	.26	1.5	1.4	.07	.04	3.1	.8
JUL												
24...	.016	.99	<.03	<.03	1.1	.60	2.1	1.6	.39	.22	6.9	3.6

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
JUN 1997								
02...	1100	<10	<1	<10	30	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUN 1997							
02...	270	<1	50	<.1	<1	<1	<10

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ

LOCATION.--Lat 40°34'10", long 74°40'45", Somerset County, Hydrologic Unit 02030105, on right bank, 400 ft upstream from U.S. Highway 202, 1.4 mi upstream from confluence with South Branch, and 2.7 mi west of Raritan.

DRAINAGE AREA.--190 mi^2.

PERIOD OF RECORD.--June 1923 to current year. Monthly discharge only for June 1923, published in WSP 1302. Prior to October 1943, published as "at Milltown".

REVISED RECORDS.--WSP 1552: 1924-26, 1928-35. WDR NJ-79-1: 1971-78(P).

GAGE.--Water-stage recorder. Concrete control since Sept. 1, 1936. Datum of gage is 50.43 ft above sea level. Prior to Oct. 17, 1936, nonrecording gage at site 30 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharge, which are poor. Releases from Round Valley Reservoir enter basin upstream from gage. Several measurements of water temperature were made during the year. National Weather Service gage-height telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	2330	*29,100	*15.57	Dec. 14	1200	5,750	8.38
Dec. 2	1130	8,770	9.64	Jan. 25	1100	6,890	8.91

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	235	1290	324	422	233	1330	326	166	74	101	73
2	97	225	4810	315	401	260	901	356	330	75	95	79
3	101	212	1110	330	374	255	764	998	575	84	88	71
4	88	201	859	317	352	306	601	940	268	82	85	63
5	84	193	688	310	1360	354	491	474	223	69	130	60
6	81	191	2120	317	636	559	445	452	201	65	121	58
7	79	188	1690	281	451	345	415	406	181	62	85	59
8	371	220	2260	254	406	291	357	336	165	60	76	56
9	1280	780	999	244	367	272	335	472	154	59	73	57
10	331	381	805	268	327	374	309	408	143	221	69	57
11	209	292	722	247	302	417	295	319	132	93	66	958
12	162	257	886	219	284	317	369	288	124	73	64	957
13	150	235	849	228	266	269	783	270	124	66	64	212
14	143	221	3560	202	510	1230	387	257	125	62	70	186
15	127	205	1230	184	754	1510	334	242	115	59	62	179
16	120	192	933	930	440	598	313	228	106	57	60	148
17	115	189	860	480	342	499	302	216	106	52	90	121
18	105	188	763	249	313	446	519	210	108	58	140	103
19	8590	194	783	214	326	385	505	216	242	134	118	95
20	9470	184	660	239	346	362	344	285	139	77	98	88
21	1160	178	519	264	312	338	312	221	119	64	352	85
22	877	173	474	257	342	317	295	199	114	287	146	73
23	675	166	462	487	296	281	278	193	107	114	103	71
24	556	162	531	314	266	264	272	183	97	1440	90	71
25	442	158	906	3360	245	258	261	292	98	1850	84	70
26	376	1980	491	651	236	389	244	418	93	318	79	69
27	336	647	460	468	268	305	230	213	90	194	74	73
28	313	374	439	1700	246	262	985	185	83	220	110	70
29	292	337	426	694	---	263	473	178	80	158	112	80
30	265	308	429	462	---	266	339	175	76	123	83	76
31	255	---	371	401	---	1700	---	178	---	108	72	---
TOTAL	27354	9466	33385	15210	11190	13925	13788	10134	4684	6458	3060	4418
MEAN	882	316	1077	491	400	449	460	327	156	208	98.7	147
MAX	9470	1980	4810	3360	1360	1700	1330	998	575	1850	352	958
MIN	79	158	371	184	236	233	230	175	76	52	60	56

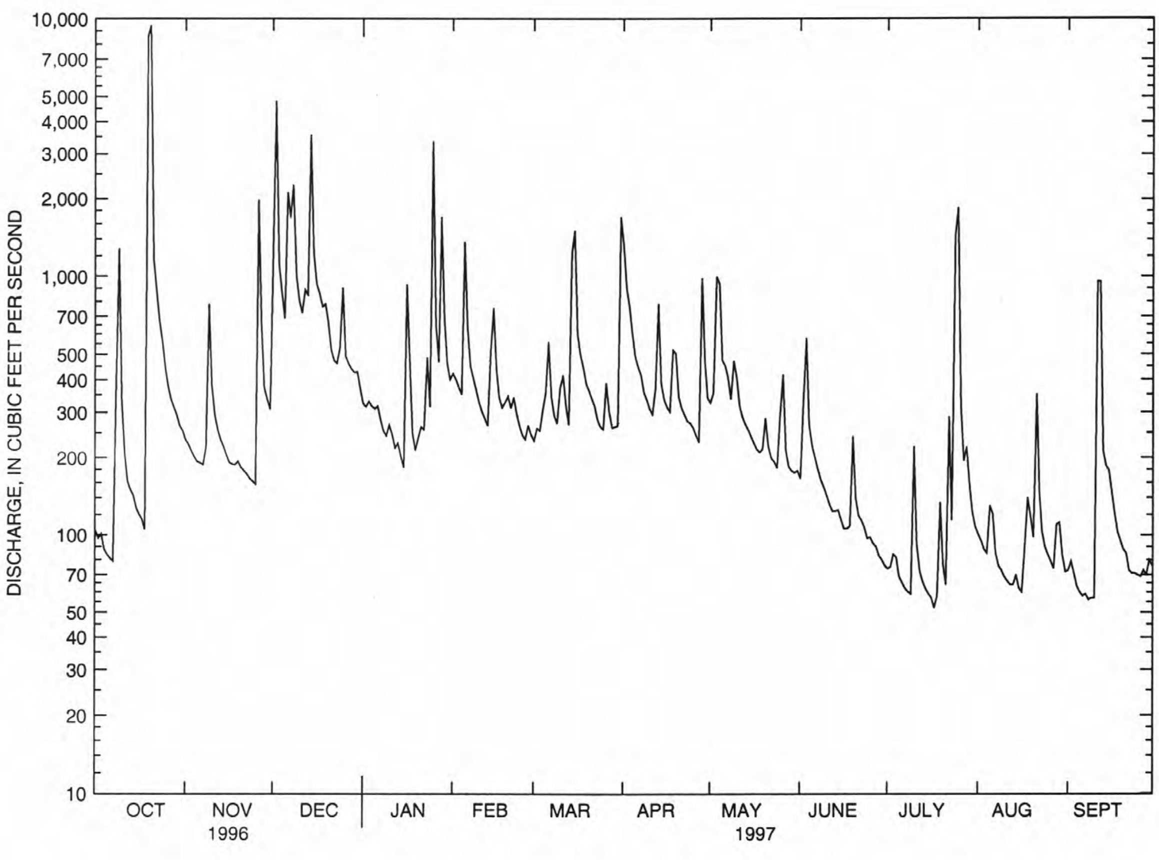
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	180	286	358	396	433	523	476	341	224	185	186	168
MAX	882	824	1077	1416	948	1272	1368	1027	1270	1291	1068	672
(WY)	1997	1973	1997	1979	1925	1936	1983	1989	1972	1984	1942	1975
MIN	26.6	46.1	73.1	79.4	109	163	117	84.1	46.4	25.5	22.3	14.8
(WY)	1931	1965	1966	1940	1934	1981	1985	1926	1965	1966	1932	1964

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1924 - 1997	
ANNUAL TOTAL	202610		153072			
ANNUAL MEAN	554		419		312	
HIGHEST ANNUAL MEAN					605	1984
LOWEST ANNUAL MEAN					120	1965
HIGHEST DAILY MEAN	10200	Jan 20	9470	Oct 20	15300	Jul 7 1984
LOWEST DAILY MEAN	54	Sep 5	52	Jul 17	7.5	Sep 26 1964
ANNUAL SEVEN-DAY MINIMUM	57	Aug 31	59	Sep 4	8.9	Sep 22 1964
INSTANTANEOUS PEAK FLOW			29100	Oct 19	29100	Oct 19 1996
INSTANTANEOUS PEAK STAGE			15.57	Oct 19	15.57	Oct 19 1996
INSTANTANEOUS LOW FLOW			48	Jul 18	3.0a	Nov 28 1930
10 PERCENT EXCEEDS	935		853		627	
50 PERCENT EXCEEDS	299		257		185	
90 PERCENT EXCEEDS	101		73		56	

a About, result of freezeup.



01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ, DAILY MEAN DISCHARGE

01400300 PETERS BROOK NEAR RARITAN, NJ

LOCATION.--Lat 40°35'37", long 74°37'51", Somerset County, Hydrologic Unit 02030105, on left bank 12 ft upstream from bridge on Garretson Road, 1.5 mi north of Borough of Raritan, and 2.5 mi from mouth.

DRAINAGE AREA.--4.19 mi^2.

PERIOD OF RECORD.--May 1978 to April 10, 1996 (discontinued).

REVISED RECORD.--WDR NJ-79-1: 1978(P). WRD NJ-95-1: 1993(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 68.71 ft above sea level (levels by Somerset County).

REMARKS.--Records fair except for estimated daily discharges and those above 60 ft^3/s, which are poor. Several measurements of water temperature were made during the year. Gage-height and rain-gage radio telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 28	0530	1,150	7.84	Jan. 19	1515	*1,510	*8.68
Nov. 12	0115	997	7.42				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	4.8	1.2	1.3	1.8	.80	47	---	---	---	---	---
2	.17	32	1.1	5.1	1.7	1.1	39	---	---	---	---	---
3	.19	4.5	.97	3.5	1.5	1.3	5.8	---	---	---	---	---
4	.27	2.2	.97	1.8	1.5	.95	4.2	---	---	---	---	---
5	27	1.5	.90	1.2	1.6	6.7	3.6	---	---	---	---	---
6	8.2	1.4	1.4	.92	1.5	32	3.2	---	---	---	---	---
7	1.1	12	.94	.80	1.3	30	6.2	---	---	---	---	---
8	.49	6.7	.81	1.2	1.7	7.5	11	---	---	---	---	---
9	.29	2.0	1.3	1.1	12	4.0	7.6	---	---	---	---	---
10	.22	1.5	1.5	1.0	7.8	2.3	18	---	---	---	---	---
11	.18	21	.85	.92	6.0	4.5	---	---	---	---	---	---
12	.18	148	.73	e.90	2.3	7.4	---	---	---	---	---	---
13	.18	5.0	.69	e1.0	1.1	5.2	---	---	---	---	---	---
14	19	37	1.0	e1.1	1.1	3.3	---	---	---	---	---	---
15	15	27	1.7	e1.2	.91	4.0	---	---	---	---	---	---
16	1.3	3.6	4.8	e1.6	.74	2.6	---	---	---	---	---	---
17	.50	2.4	3.7	e2.4	.79	1.3	---	---	---	---	---	---
18	.30	1.9	2.1	2.8	.72	1.1	---	---	---	---	---	---
19	.24	2.6	1.8	416	.63	34	---	---	---	---	---	---
20	.21	1.8	1.8	17	13	18	---	---	---	---	---	---
21	41	1.6	1.6	4.2	47	3.2	---	---	---	---	---	---
22	3.9	1.4	1.4	2.2	9.2	2.0	---	---	---	---	---	---
23	1.2	1.3	1.4	2.0	5.2	1.4	---	---	---	---	---	---
24	.64	2.4	1.6	65	14	1.1	---	---	---	---	---	---
25	.44	1.4	1.4	12	2.4	1.0	---	---	---	---	---	---
26	.34	1.3	1.2	2.8	1.5	.94	---	---	---	---	---	---
27	.63	1.3	1.0	126	1.2	.83	---	---	---	---	---	---
28	156	1.2	.93	9.8	1.3	1.1	---	---	---	---	---	---
29	4.5	1.5	.89	3.8	.92	29	---	---	---	---	---	---
30	2.1	1.3	.87	3.0	---	3.9	---	---	---	---	---	---
31	1.6	---	.92	2.6	---	1.8	---	---	---	---	---	---
TOTAL	287.54	333.6	43.47	696.24	142.41	214.32	---	---	---	---	---	---
MEAN	9.28	11.1	1.40	22.5	4.91	6.91	---	---	---	---	---	---
MAX	156	148	4.8	416	47	34	---	---	---	---	---	---
MIN	.17	1.2	.69	.80	.63	.80	---	---	---	---	---	---
CFSM	2.21	2.65	.33	5.36	1.17	1.65	---	---	---	---	---	---
IN.	2.55	2.96	.39	6.18	1.26	1.90	---	---	---	---	---	---

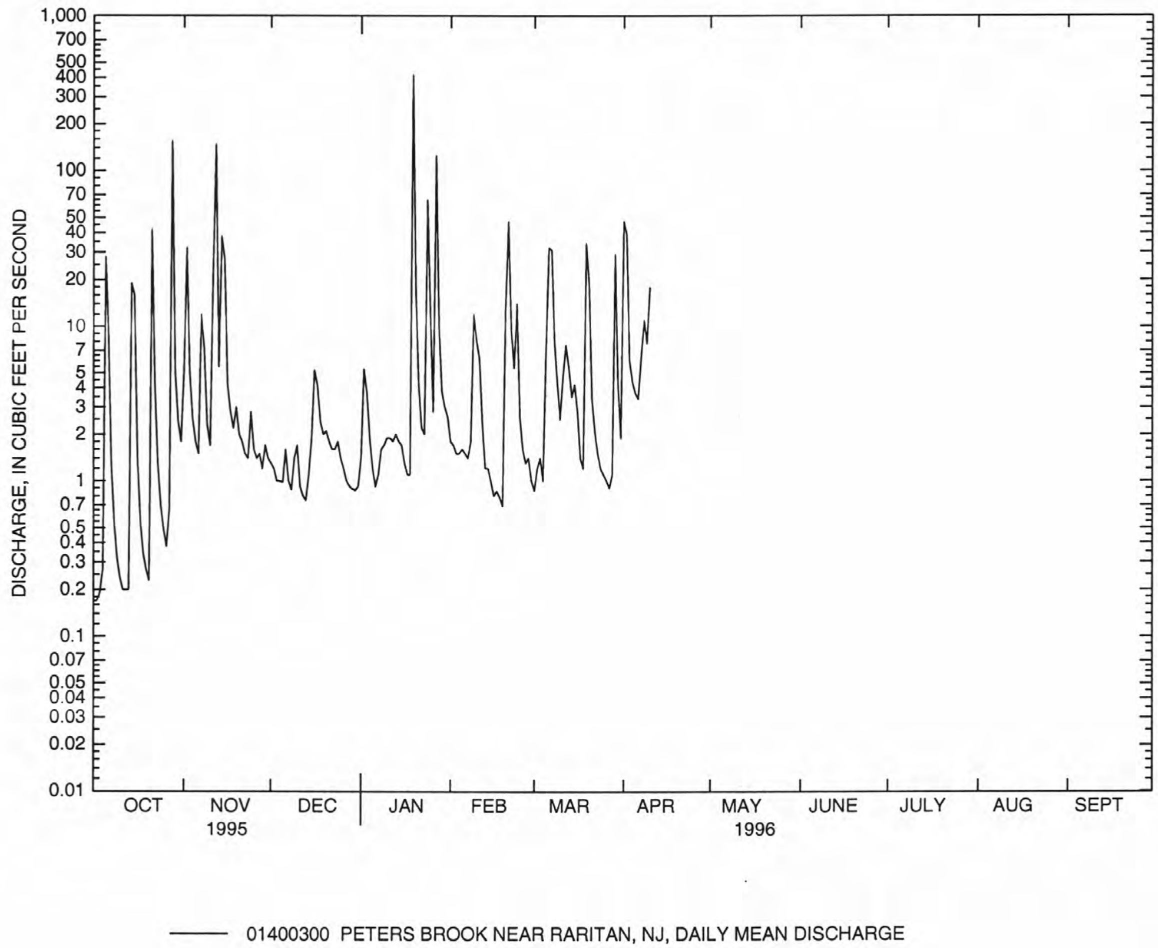
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.65	5.92	7.24	9.98	7.83	8.76	8.61	7.04	3.57	3.60	3.40	3.17
MAX	14.2	15.8	23.7	41.2	17.7	21.7	25.3	26.0	11.2	11.8	15.5	9.88
(WY)	1990	1987	1984	1979	1982	1994	1983	1989	1989	1984	1990	1989
MIN	.45	.56	.49	.24	1.39	1.37	.57	.66	.82	.28	.038	.24
(WY)	1995	1979	1981	1981	1980	1985	1985	1995	1988	1983	1980	1984

01400300 PETERS BROOK NEAR RARITAN, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		WATER YEARS 1978 - 1996	
ANNUAL TOTAL	1230.92			
ANNUAL MEAN	3.37		5.98	
HIGHEST ANNUAL MEAN			9.37	1984
LOWEST ANNUAL MEAN			2.04	1995
HIGHEST DAILY MEAN	156	Oct 28	416	Jan 19 1996
LOWEST DAILY MEAN	.00	Sep 4	.00	Jul 12 1978
ANNUAL SEVEN-DAY MINIMUM	.03	Aug 29	.00	Nov 1 1978
INSTANTANEOUS PEAK FLOW			1510	Jan 19 1996
INSTANTANEOUS PEAK STAGE			8.68	Jan 19 1996
INSTANTANEOUS LOW FLOW			.00	Jul 12 1978
ANNUAL RUNOFF (CFSM)	.80		1.43	
ANNUAL RUNOFF (INCHES)	10.93		19.39	
10 PERCENT EXCEEDS	4.5		11	
50 PERCENT EXCEEDS	.83		1.4	
90 PERCENT EXCEEDS	.21		.22	

e Estimated.



01400500 RARITAN RIVER AT MANVILLE, NJ

LOCATION.--Lat 40°33'18", long 74°35'02", Somerset County, Hydrologic Unit 02030105, on left bank at downstream side of bridge on North Main Street (Finderne Avenue) at Manville, and 1.4 mi upstream from Millstone River.

DRAINAGE AREA.--490 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1903 to March 1907 (published as "at Finderne"), August 1908 to April 1915 (gage heights only, published in WSP 521), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1552: 1904, 1906, 1922, 1923(M), 1924-25, 1926-29(M), 1930, 1932-33(M), 1924-54. WDR NJ-75-1: 1964(M), 1969(M), 1970(P), 1971(P), 1972(P), 1973(P).

GAGE.--Water-stage recorder. Datum of gage is 20.61 ft above sea level. Prior to Aug. 15, 1923, nonrecording gage on downstream side of highway bridge at same site and datum. From Oct. 1, 1952 to Sept. 30, 1966, water-stage recorder at station at Bound Brook, above Calco Dam (station 01403000) used as auxiliary gage when stage is above 5.0 ft. In Oct. 1, 1966, water-stage recorder at station at Bound Brook, used as auxiliary gage, was moved downstream to present site (station 01403060). Between June 9, 1978 and June 7, 1979, gage temporarily relocated at site 1.4 mi downstream, just upstream from Millstone River, because of reconstruction of highway bridge.

REMARKS.--Records good except for estimated daily discharges, which are fair. Records given herein represent flow at gage only. Slight diurnal fluctuation at low flow. Flow regulated by Spruce Run and Round Valley Reservoirs (see Raritan River basin, reservoirs in). Diversion to Round Valley Reservoir since March 1966 (see Raritan River basin, diversions). Prior to Sept. 1, 1986, water diverted 1,500 ft upstream from station by Johns-Manville Corporation and returned to river, 600 ft downstream from Millstone River. Several measurements of water temperature were made during the year. National Weather Service gage-height telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0315	*32,000	*22.41	Dec. 14	1830	13,200	14.80
Dec. 2	1745	15,300	15.67	Jan. 25	1400	11,200	12.70

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

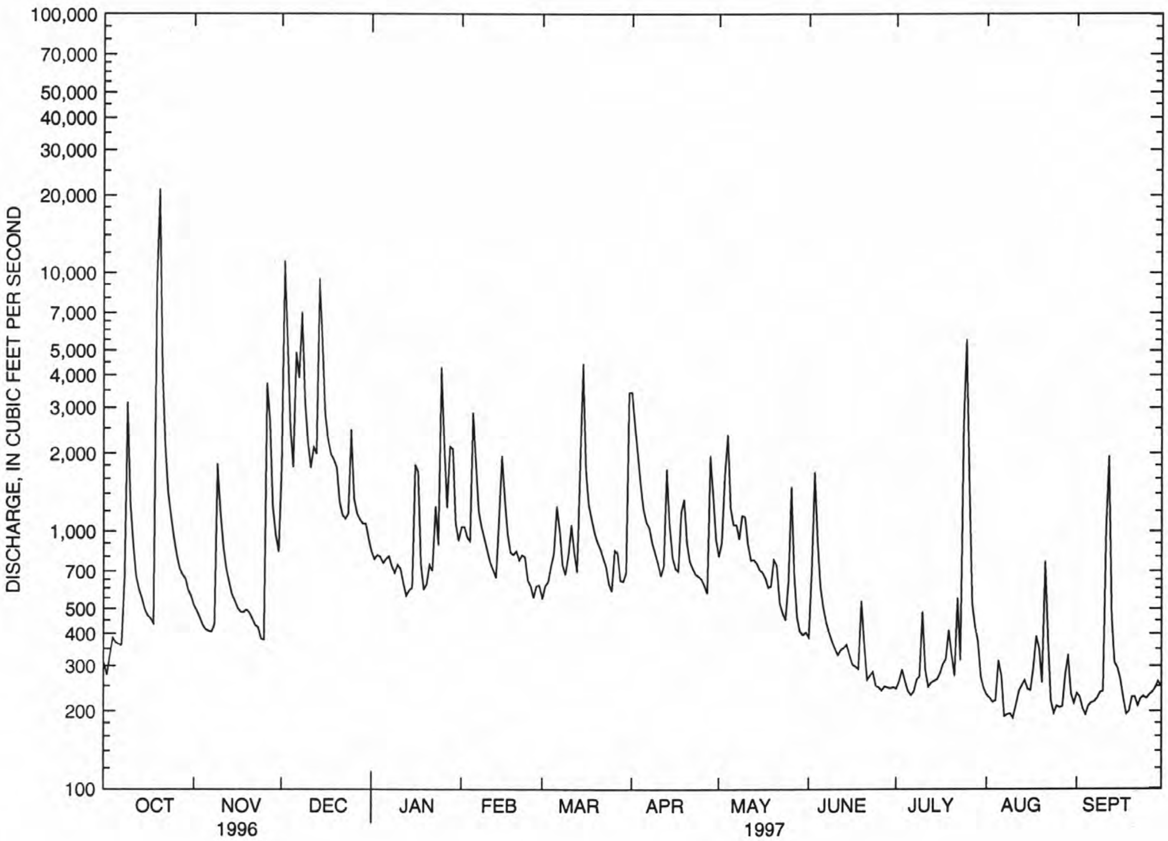
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	307	514	1790	837	1040	548	3440	799	388	245	232	235
2	276	489	11100	781	1040	614	2560	904	705	262	225	228
3	329	460	5330	810	947	636	1980	1660	1690	291	217	205
4	385	431	2490	799	916	733	1520	2360	915	262	220	194
5	370	416	1770	753	2870	824	1220	1230	610	240	315	210
6	364	410	4900	784	1840	1250	1080	1060	505	231	276	216
7	362	407	3910	801	1200	1010	1030	1060	444	239	191	218
8	660	434	7030	731	1040	741	901	935	404	266	194	225
9	3140	1820	3140	689	939	679	824	1150	373	273	196	237
10	1280	1200	2200	741	838	813	751	1140	350	486	188	239
11	888	870	1760	716	756	1060	671	892	331	290	212	1010
12	671	716	2110	e629	708	828	731	771	347	249	239	1950
13	595	635	1990	e562	662	696	1740	777	353	258	252	461
14	550	567	9540	e591	1110	1790	1060	751	363	262	264	309
15	496	536	5470	e604	1960	4430	793	709	331	266	244	296
16	470	502	2860	e1810	1340	1730	717	693	304	281	241	267
17	457	486	2270	e1710	982	1270	699	659	299	305	296	225
18	438	485	1980	e746	829	1120	1190	605	292	319	391	195
19	8940	497	1890	e597	813	987	1330	611	537	413	351	200
20	21100	483	1760	e620	840	910	900	775	368	331	258	228
21	4120	457	1300	e741	774	857	764	737	265	274	763	228
22	2130	432	1160	e703	811	790	718	527	275	551	383	210
23	1410	424	1120	e1250	796	730	681	481	285	316	220	224
24	1140	383	1170	e889	645	624	667	452	251	2550	196	229
25	948	379	2460	e4300	614	586	651	634	248	5520	210	224
26	808	3730	1340	e2140	552	844	613	1480	241	1500	207	232
27	718	2670	1170	e1240	614	824	574	680	250	523	209	237
28	678	1250	1110	e2130	617	643	1950	462	247	425	279	246
29	656	972	1070	2080	---	638	1380	407	246	373	332	261
30	591	833	1070	1070	---	691	932	396	248	272	233	251
31	559	---	939	921	---	3430	---	405	---	245	215	---
TOTAL	55836	23888	89199	33775	28093	33326	34067	26202	12465	18318	8249	9690
MEAN	1801	796	2877	1090	1003	1075	1136	845	416	591	266	323
MAX	21100	3730	11100	4300	2870	4430	3440	2360	1690	5520	763	1950
MIN	276	379	939	562	552	548	574	396	241	231	188	194

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997, BY WATER YEAR (WY)

MEAN	467	685	900	995	1071	1365	1164	796	526	476	463	458
MAX	2434	2460	2877	3856	2406	3260	3507	2707	2581	2542	2552	2069
(WY)	1904	1933	1997	1979	1925	1936	1983	1989	1972	1975	1955	1971
MIN	64.8	87.5	148	188	265	354	259	212	88.8	65.1	50.5	51.2
(WY)	1942	1932	1966	1966	1934	1981	1985	1926	1965	1955	1932	1941

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1904 - 1997	
ANNUAL TOTAL	489270		373108			
ANNUAL MEAN	1337		1022		779	
HIGHEST ANNUAL MEAN					1365	1984
LOWEST ANNUAL MEAN					309	1965
HIGHEST DAILY MEAN	21100	Oct 20	21100	Oct 20	21600	Sep 22 1938
LOWEST DAILY MEAN	220	Sep 16	188	Aug 10	17a	Sep 19 1964
ANNUAL SEVEN-DAY MINIMUM	253	Aug 26	210	Aug 7	29	Aug 27 1944
INSTANTANEOUS PEAK FLOW			32000	Oct 20	36300b	Aug 28 1971
INSTANTANEOUS PEAK STAGE			22.41	Oct 20	23.80c	Aug 28 1971
10 PERCENT EXCEEDS	2700		1970		1600	
50 PERCENT EXCEEDS	832		660		441	
90 PERCENT EXCEEDS	305		237		139	

a Does not include water diverted to Johns-Manville plant.
b From rating curve extended above 14,000 ft^3/s on basis of slope-area measurements at gage heights 14.9 and 20.42 ft.
c From floodmark (backwater from Millstone River).
e Estimated.



——— 01400500 RARITAN RIVER AT MANVILLE, NJ, DAILY MEAN DISCHARGE

01400500 RARITAN RIVER AT MANVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1959, 1962-73, 1976 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
13...	1200	599	242	7.6	5.5	773	12.6	99	<1.0	270	50	78
FEB 1997												
13...	1100	654	279	7.7	2.0	774	14.2	101	E1.4	20	<10	77
APR												
03...	1200	2570	239	7.6	8.5	760	11.3	97	E1.7	170	50	64
JUN												
04...	1130	895	216	7.6	15.5	759	8.9	90	E1.7	9200	110	68
JUL												
31...	1130	268	280	7.8	24.0	764	8.7	103	<1.0	130	300	94

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
13...	19	7.3	12	1.8	54	17	23	.1	12	142	129	3
FEB 1997												
13...	19	7.2	20	1.5	50	19	34	<.1	11	142	148	4
APR												
03...	16	5.8	19	1.5	39	15	35	<.1	9.2	129	130	5
JUN												
04...	17	6.2	13	1.7	47	14	23	<.1	9.7	123	119	11
JUL												
31...	23	8.7	16	2.1	63	22	28	<.1	10	169	153	9

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
13...	.008	1.0	.07	<.03	.2	.14	1.2	1.1	.04	.04	3.3	.2
FEB 1997												
13...	.009	1.5	<.03	<.03	.2	.07	1.7	1.6	.02	<.01	1.6	.2
APR												
03...	.007	1.2	<.03	<.03	.2	.15	1.4	1.3	.03	.01	2.8	.4
JUN												
04...	.025	1.2	.07	.06	.6	.37	1.8	1.5	.06	.05	3.9	.9
JUL												
31...	.009	1.2	.09	<.03	.5	.25	1.7	1.5	--	<.01	3.4	.2

01400500 RARITAN RIVER AT MANVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
JUN 1997								
04...	1130	<10	<1	<10	30	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUN 1997							
04...	490	1	70	<.1	1	<1	<10

01400540 MILLSTONE RIVER NEAR MANALAPAN, NJ

LOCATION.--Lat 40°15'44", long 74°25'13", Monmouth County, Hydrologic Unit 02030105, at bridge on State Route 33, 1.3 mi west of Manalapan, 5.5 mi east of Hightstown, and 8.4 mi above Rocky Brook.

DRAINAGE AREA.--7.37 mi^2.

PERIOD OF RECORD.--Water years 1960-64, 1981 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
07...	1300	10	111	6.6	12.5	764	9.8	92	E1.2	90	<10	30
FEB 1997												
05...	1100	34	106	6.0	4.5	757	11.4	89	<1.0	260	1300	23
MAR												
20...	1100	9.8	122	6.5	5.0	755	11.7	92	<1.0	<20	<10	30
JUN												
02...	1100	12	120	6.6	15.5	757	8.7	88	E1.5	2400	2100	28
JUL												
24...	1100	18	120	6.4	18.5	762	7.9	84	3.2	>24000	15000	--

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
07...	6.3	3.4	7.0	2.7	11	12	14	.1	11	76	69	11
FEB 1997												
05...	5.1	2.4	6.7	2.5	2.7	16	12	.1	6.2	66	58	132
MAR												
20...	6.1	3.5	7.8	2.4	5.1	16	16	.1	8.1	78	71	7
JUN												
02...	6.0	3.3	8.6	2.3	8.7	13	16	.2	8.3	82	68	26
JUL												
24...	--	3.8	--	2.9	8.5	16	15	.1	6.5	79	--	45

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
07...	E.006	1.3	.03	<.03	.3	.28	1.6	1.6	.07	.01	2.7	1.5
FEB 1997												
05...	.005	1.1	.20	.05	.7	.28	1.8	1.4	.46	.01	2.0	3.4
MAR												
20...	.012	1.8	<.03	<.03	.2	.22	2.0	2.0	.03	<.01	1.2	.3
JUN												
02...	.021	1.3	.12	.10	.6	.40	2.0	1.7	.22	.05	2.8	3.0
JUL												
24...	.009	.75	<.03	<.03	.7	.45	1.5	1.2	.36	.02	4.4	3.1

01400540 MILLSTONE RIVER NEAR MANALAPAN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
JUN 1997								
02...	1100	20	1	<10	20	<1	1.9	<1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1997							
02...	5100	2	80	<.1	7	<1	30

01400650 MILLSTONE RIVER AT GROVERS MILL, NJ

LOCATION.--Lat 40°19'19", long 74°36'31", Mercer County, Hydrologic Unit 02030105, at bridge on Millstone Road in Grovers Mill, 0.3 mi upstream from Cranbury Brook, and 2.7 mi north of Dutch Neck.

DRAINAGE AREA.--43.4 mi^2.

PERIOD OF RECORD.--Water years 1976-95, October 1996 to September 1997.

REMARKS.--Discharge is measured at 01400640.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
12...	1100	E90	192	6.8	7.0	770	10.5	86	<1.0	20	20	45
FEB 1997												
10...	1100	E120	366	6.8	2.0	766	12.6	91	2.6	20	10	46
MAR												
26...	1100	E80	224	7.0	9.0	754	10.5	92	<1.3	<20	10	49
JUN												
03...	1100	E130	180	6.8	15.5	761	8.0	80	2.2	1300	4000	42
JUL												
28...	1100	E70	189	6.5	23.0	756	6.4	75	E1.8	330	470	42

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
12...	10	4.9	14	4.1	19	20	24	.2	10	128	110	11
FEB 1997												
10...	11	4.4	49	3.1	15	23	78	.2	7.9	196	200	11
MAR												
26...	11	5.2	19	3.4	18	24	30	.2	6.5	138	129	1
JUN												
03...	9.7	4.3	16	2.6	21	17	21	.2	6.5	107	102	26
JUL												
28...	10	4.0	15	3.5	16	25	18	.1	8.8	127	105	15

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
12...	.005	2.5	.14	.07	.3	.28	2.8	2.8	.06	<.01	4.1	.7
FEB 1997												
10...	.010	3.3	.06	.04	.4	.30	3.7	3.6	.07	<.01	2.2	.9
MAR												
26...	.011	4.2	<.03	<.03	.2	.28	4.4	4.5	.05	<.01	2.2	.3
JUN												
03...	.031	2.7	.08	.07	.8	.49	3.6	3.2	.15	.03	4.2	1.7
JUL												
28...	.009	2.5	<.03	<.03	.5	.28	3.0	2.7	.12	.02	4.8	.8

01400650 MILLSTONE RIVER AT GROVERS MILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
12...	1100	--	1	<10	30	<1	<1.0	1
JUN 1997								
03...	1100	20	2	<10	30	<1	1.2	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
12...	1400	1	40	<.1	3	<1	20
JUN 1997							
03...	2000	4	140	<.1	4	<1	20

01401000 STONY BROOK AT PRINCETON, NJ

LOCATION.--Lat 40°19'59", long 74°40'56", Mercer County, Hydrologic Unit 02030105, on right bank 10 ft downstream from bridge on U.S. Highway 206, 1.6 mi southwest of Princeton, and 4.0 mi upstream from Carnegie Lake.

DRAINAGE AREA.--44.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 62.23 ft above sea level (levels from New Jersey Geological Survey bench mark).

REMARKS.--Records fair except for estimated discharges, which are poor. Since July 1959 some regulation by several small reservoirs, combined capacity, 49,800,000 gal. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 9	0145	2,030	5.76	Dec. 8	0130	2,710	6.71
Oct. 19	1945	*6,290	*11.19	Dec. 14	0845	3,940	8.35
Nov. 26	1245	2,430	6.33	Jan. 25	0630	2,500	6.43
Dec. 2	0830	4,280	8.77	May 25	2300	1,870	5.53
Dec. 6	1245	2,770	6.79	July 25	0200	4,550	9.13

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	24	265	43	79	34	496	52	19	5.1	8.0	4.6
2	18	23	1900	41	77	58	367	58	224	5.0	7.4	4.2
3	19	21	255	46	66	53	200	109	402	6.0	7.1	4.2
4	14	18	145	41	63	98	130	178	116	9.4	7.0	4.1
5	12	17	107	37	583	144	94	74	63	6.4	28	3.7
6	12	17	1070	37	201	181	79	62	41	5.1	12	3.4
7	12	16	665	30	121	89	78	65	31	4.8	8.0	3.4
8	188	19	901	24	98	64	56	41	26	4.6	6.6	3.3
9	577	116	207	22	86	51	46	126	21	21	5.6	3.3
10	146	59	154	35	70	134	38	112	18	13	4.8	3.4
11	84	37	129	30	61	135	33	58	15	6.4	4.6	13
12	48	26	173	22	56	76	82	42	14	5.3	4.4	17
13	37	22	416	21	49	56	252	34	17	4.8	4.5	7.1
14	31	20	2590	19	245	248	87	29	54	4.2	4.5	5.4
15	24	19	395	18	320	483	53	25	17	4.0	4.5	4.3
16	21	17	197	333	151	132	45	22	12	3.8	4.1	3.8
17	20	16	171	231	103	94	42	18	11	3.6	4.0	3.6
18	17	16	154	73	79	79	212	17	11	3.4	4.7	3.6
19	3080	18	171	e42	74	65	163	16	34	3.5	4.4	3.1
20	445	17	152	e31	65	60	83	17	13	3.1	21	3.1
21	195	16	87	e30	55	55	62	14	10	3.0	55	3.1
22	127	15	70	49	59	48	52	12	15	8.9	13	2.8
23	93	14	70	100	56	37	45	11	13	7.1	7.5	3.1
24	75	13	88	69	41	30	47	10	9.1	905	5.9	3.5
25	59	13	259	900	34	28	43	351	8.5	1290	4.8	3.6
26	48	856	105	161	31	79	32	396	8.0	88	4.4	3.7
27	39	186	84	85	42	66	27	70	7.0	32	4.0	3.7
28	38	92	75	551	35	39	295	36	6.2	20	5.2	3.6
29	38	66	71	166	---	39	123	26	5.5	15	7.2	5.0
30	31	54	67	88	---	84	66	25	5.3	11	7.7	3.6
31	27	---	55	74	---	586	---	22	---	9.2	5.5	---
TOTAL	5596	1863	11248	3449	3000	3425	3428	2128	1246.6	2511.7	275.4	137.3
MEAN	181	62.1	363	111	107	110	114	68.6	41.6	81.0	8.88	4.58
MAX	3080	856	2590	900	583	586	496	396	402	1290	55	17
MIN	12	13	55	18	31	28	27	10	5.3	3.0	4.0	2.8
CFSM	4.06	1.40	8.15	2.50	2.41	2.48	2.57	1.54	.93	1.82	.20	.10
IN.	4.68	1.56	9.40	2.88	2.51	2.86	2.87	1.78	1.04	2.10	.23	.11

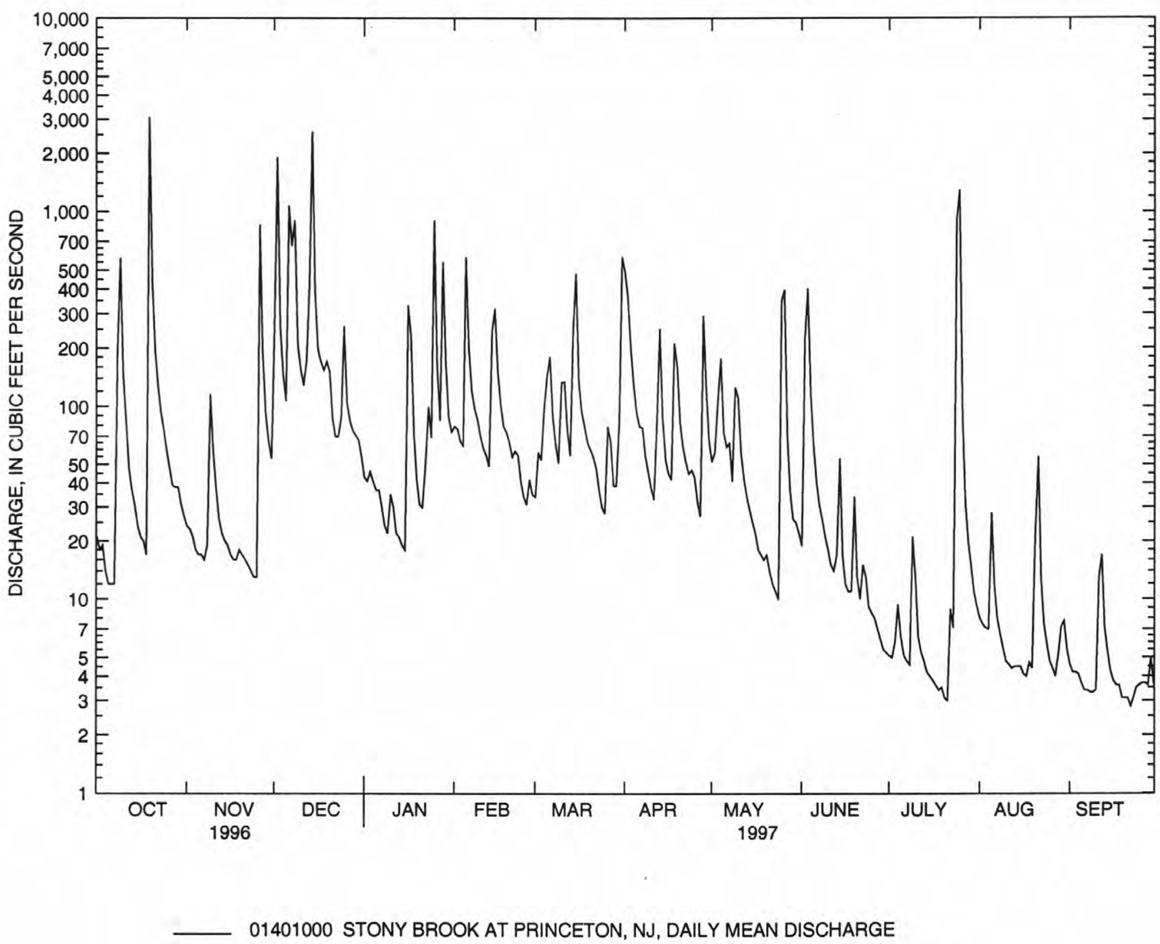
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	29.7	54.2	92.7	97.5	104	132	104	61.3	33.5	33.7	30.9	27.4
MAX	181	212	363	319	203	337	295	216	165	216	240	158
(WY)	1997	1973	1997	1996	1971	1994	1983	1989	1989	1975	1955	1975
MIN	1.00	1.50	4.56	3.22	19.7	31.3	20.9	8.95	2.67	.56	.14	1.31
(WY)	1958	1966	1966	1981	1978	1985	1985	1963	1957	1957	1966	1970

01401000 STONY BROOK AT PRINCETON, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997		
ANNUAL TOTAL	54195.9		38308.0				
ANNUAL MEAN	148		105		66.7		
HIGHEST ANNUAL MEAN					118		1996
LOWEST ANNUAL MEAN					28.5		1966
HIGHEST DAILY MEAN	3080	Oct 19	3080	Oct 19	3410	Aug 27	1971
LOWEST DAILY MEAN	5.8	Sep 5	2.8	Sep 22	.00	Aug 5	1966
ANNUAL SEVEN-DAY MINIMUM	6.5	Sep 1	3.2	Sep 18	.00	Aug 5	1966
INSTANTANEOUS PEAK FLOW			6290	Oct 19	8960a	Aug 28	1971
INSTANTANEOUS PEAK STAGE			11.19	Oct 19	14.26	Aug 28	1971
INSTANTANEOUS LOW FLOW			2.8	Sep 22	.00	Many days	1966
ANNUAL RUNOFF (CFSM)	3.33		2.36		1.50		
ANNUAL RUNOFF (INCHES)	45.31		32.02		20.36		
10 PERCENT EXCEEDS	300		203		142		
50 PERCENT EXCEEDS	54		35		23		
90 PERCENT EXCEEDS	12		4.4		2.1		

a From rating extended above 4,000 ft^3/s on basis of contracted-opening measurement of peak flow.
e Estimated.



01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-75, 1978 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1956 to September 1962, October 1963 to September 1964, October 1965 to June 1970, April to September 1997.
SUSPENDED-SEDIMENT DISCHARGE: January 1956 to June 1970.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 30 ft downstream from bridge.

REMARKS.--Continuous records of water temperature were collected as part of the LINJ NAWQA study. On Jan. 27 and June 9, water-column synoptic studies were conducted at this site as part of the NAWQA program. For synoptic data from other sites, see section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Some field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Some samples were collected by USGS personnel for the LINJ NAWQA study.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
OCT 1996											
08...	0910	ENVIRONMENTAL	11	260	7.9	15.0	12.0	757	9.4	90	--
08...	*0911*	*SPLIT REPLICATE*	--	*260*	*7.9*	--	--	--	--	--	--
19...	1200	ENVIRONMENTAL	4000	96	6.7	16.0	--	745	--	--	--
NOV											
07...	1330	ENVIRONMENTAL	16	227	8.8	--	14.0	760	13.2	128	E2.0
13...	0900	ENVIRONMENTAL	<22	210	7.5	0.5	2.5	774	12.6	94	--
DEC											
10...	0900	ENVIRONMENTAL	160	160	7.8	2.0	3.0	752	11.3	88.6	--
JAN 1997											
06...	0840	ENVIRONMENTAL	38	220	7.1	7.0	6.0	751	11.6	97.5	--
27...	1540	ENVIRONMENTAL	70	220	7.8	1.0	3.0	--	--	--	--
FEB											
05...	1100	ENVIRONMENTAL	920	178	7.6	--	3.0	754	13.1	98	2.0
25...	0930	ENVIRONMENTAL	34	250	8.3	-2.0	2.0	769	16.5	118	--
MAR											
31...	1100	ENVIRONMENTAL	1100	155	7.4	--	10.5	746	10.3	94	4.3
APR											
01...	1350	ENVIRONMENTAL	360	250	7.0	9.0	7.5	756	13.0	110	--
22...	1400	ENVIRONMENTAL	51	230	9.4	18.0	13.5	751	17.2	168	--
22...	*1401*	*SPLIT REPLICATE*	--	--	--	--	--	--	--	--	--
MAY											
19...	*1205*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
19...	1230	ENVIRONMENTAL	16	240	9.1	27.0	18.0	754	15.0	161	--
JUN											
03...	1100	ENVIRONMENTAL	450	131	7.4	--	14.0	757	8.6	84	3.9
09...	1340	ENVIRONMENTAL	21	220	7.2	26.0	19.0	765	10.9	117	--
JUL											
24...	1320	ENVIRONMENTAL	100	230	7.2	--	--	--	--	--	--
30...	1100	ENVIRONMENTAL	11	224	7.8	--	20.0	763	7.3	80	E1.9
AUG											
21...	1300	ENVIRONMENTAL	50	180	7.3	24.0	21.0	753	9.1	103	--
SEP											
22...	1220	ENVIRONMENTAL	3.1	340	8.4	20.0	14.5	773	10.1	98	--

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO- COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT 1996												
08...	--	--	82	19	8.3	18	2.7	72	--	60	59	22
08...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*72*	*--*	*60*	*59*	*--*
19...	--	--	30	7.1	3.0	5.4	3.8	24	--	22	20	8.6
NOV												
07...	<20	10	67	16	6.6	14	2.3	--	--	51	--	21
13...	--	--	65	15	6.7	13	2.3	52	--	48	43	20
DEC												
10...	--	--	47	11	4.8	10	1.8	33	--	29	27	16
JAN 1997												
06...	--	--	64	15	6.5	13	1.8	47	--	41	39	21
27...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
05...	220	1200	36	8.3	3.6	12	1.6	--	--	21	--	13
25...	--	--	64	15	6.5	22	<1.5	44	--	40	36	21
MAR												
31...	1700	2100	43	10	4.4	12	1.9	--	--	28	--	14
APR												
01...	--	--	44	10	4.6	29	1.5	27	--	25	22	14
22...	--	--	64	15	6.5	16	1.6	47	9	42	39	20
22...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
MAY												
19...	*--*	*--*	*--*	*.11*	*<.01*	*<.2*	*<.1*	*--*	*--*	*1.4*	*--*	*<.1*
19...	--	--	76	18	7.6	16	1.7	64	5.3	55	52	22
JUN												
03...	>24000	20000	40	9.4	4.0	7.9	2.0	--	--	26	--	12
09...	--	--	68	16	6.9	14	1.8	53	--	47	43	20
JUL												
24...	--	--	58	14	5.7	18	2.6	52	--	45	43	15
30...	330	170	67	16	6.4	15	2.8	--	--	45	--	22
AUG												
21...	--	--	58	14	5.7	15	3.0	56	--	47	46	14
SEP												
22...	--	--	110	26	10	21	3.2	80	--	70	66	34

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	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)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)
OCT 1996												
08...	27	.1	7.8	149	144	--	<.01	.81	.02	.2	.20	.99
08...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*.2*	*--*	*--*
19...	7.5	.1	5.5	62	56	--	.02	.49	.06	1.9	.40	2.4
NOV												
07...	22	<.1	9.3	132	124	13	--	.54	--	.3	.15	.84
13...	20	<.1	13	132	119	--	.03	.62	.04	.2	.20	.82
DEC												
10...	15	<.1	13	98	92	--	<.01	.97	<.015	.2	.20	1.2
JAN 1997												
06...	19	<.1	14	122	118	--	<.01	.92	<.015	.1	.14	1.0
27...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
05...	20	<.1	8.2	84	82	98	--	.61	--	1.0	.37	1.6
25...	36	<.1	9.7	143	--	--	.02	.59	<.015	.3	.14	.89
MAR												
31...	19	.1	8.0	100	89	152	--	.58	--	1.3	.45	1.9
APR												
01...	49	<.1	8.8	143	132	--	<.01	.42	<.015	.5	.14	.92
22...	29	<.1	6.5	125	128	--	<.01	.22	.03	.4	.30	.62
22...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
MAY												
19...	*<.1*	*<.1*	*.06*	*<1*	*--*	*--*	*<.01*	*<.05*	*<.02*	*<.2*	*<.20*	*--*
19...	24	<.1	2.0	137	129	--	<.01	.23	<.02	.4	.20	.60
JUN												
03...	10	<.1	8.1	90	74	39	--	1.1	--	1.1	.89	2.2
09...	21	.1	11	127	125	--	.02	1.6	.02	.2	.10	1.7
JUL												
24...	26	.1	4.8	142	117	--	.02	1.3	.06	.8	.20	2.0
30...	21	<.1	17	143	133	1	--	1.4	--	.3	.15	1.7
AUG												
21...	19	<.1	6.0	119	110	--	.01	1.2	<.02	.7	.20	1.9
SEP												
22...	37	.1	2.5	183	174	--	<.01	.26	.03	.3	.30	.56

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996											
08...	1.0	.02	.05	.05	54	25	13	2.8	.2	.3	.01
08...	--	*.03*	--	--	--	--	--	--	--	*.2*	--
19...	.89	.60	.14	.14	31	96	35	9.9	6.9	510	5510
NOV											
07...	.69	.04	.05	--	--	--	--	3.1	.5	--	--
13...	.82	.04	.04	.03	43	71	7	4.1	.3	.7	--
DEC											
10...	1.2	.05	.03	.04	32	100	13	3.6	.5	8	3.4
JAN 1997											
06...	1.1	.03	.03	.03	29	67	7	2.0	.2	2	.16
27...	--	--	--	--	--	--	--	--	--	--	--
FEB											
05...	.98	.18	.02	--	--	--	--	4.7	2.4	--	--
25...	.73	.01	.01	.02	26	53	15	2.5	.3	303	28
MAR											
31...	1.0	.24	.03	--	--	--	--	5.7	3.6	--	--
APR											
01...	.56	.08	<.01	<.01	22	81	30	4.7	.8	26	25
22...	.48	.03	<.01	.01	25	77	11	3.3	.6	6	.81
22...	--	--	--	--	--	--	--	*3.1*	*.2*	--	--
MAY											
19...	--	*.01*	*<.01*	*<.01*	*5.7*	*<3*	*<1*	--	--	--	--
19...	.43	.03	<.01	.01	42	75	12	3.2	.6	3	.11
JUN											
03...	2.0	.15	.07	--	--	--	--	8.8	1.5	--	--
09...	1.6	.04	.03	.04	39	73	9	3	.5	3	.15
JUL											
24...	1.5	.24	.12	.12	64	36	4	5	1.8	41.1	11
30...	1.6	.12	.05	--	--	--	--	3.7	.3	--	--
AUG											
21...	1.5	.20	.14	.14	67	33	6	4.3	1.1	13	1.7
SEP											
22...	.57	.06	.05	.01	65	24	7	3.2	.2	2	.02

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
JUN 1997								
03...	1100	40	<1	<10	40	<1	2.1	6

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUN 1997							
03...	1400	3	100	<.1	2	<1	10

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE NEW JERSEY DEPARTMENT OF HEALTH, PUBLIC HEALTH, AND ENVIRONMENTAL LABORATORIES

DATE	TIME	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
NOV 1996				
07...	1330	E.005	<.03	<.03
FEB 1997				
05...	1100	.017	.07	.03
MAR				
31...	1100	.008	<.03	<.03
JUN				
03...	1100	.031	.26	.24
JUL				
30...	1100	.006	<.03	<.03

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels in "Explanation of Records" section). Only pesticides measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
JUN 1997								
09...	1340	ENVIRONMENTAL	.149	.016	1.44	E.0672	<.002	E.0151
09...	*1342*	*SPLIT SPIKE*	*.205*	*.129*	*1.81*	*E.0963*	*.098*	*E.1760*
09...	*1343*	*SPLIT SPIKE*	*.311*	*.185*	*1.48*	*E.1970*	*.132*	*E.3040*

DATE	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DIAZINON, DISSOLVED (UG/L) (39572)	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METOLACHLOR WATER DISSOLV (UG/L) (39415)
JUN 1997								
09...	<.003	<.004	.358	E.00080	.007	<.004	.005	.571
09...	*E.1450*	*.138*	*.551*	*.129*	*.112*	*.120*	*.122*	*.676*
09...	*E.2540*	*.169*	*.591*	*.175*	*.152*	*.149*	*.151*	*.704*

DATE	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PROMETON, WATER, DISS, REC (UG/L) (04037)	PROPANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	TEBUTHIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TRIFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 1997								
09...	<.004	<.003	<.004	.019	<.004	.510	<.010	<.002
09...	*.088*	*.127*	*.111*	*.124*	*.137*	*.732*	*.129*	*.102*
09...	*.134*	*.130*	*.104*	*.143*	*.188*	*.639*	*.161*	*.157*

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Samples were analyzed for volatile organic compounds (VOCs) on schedule 2020 (listed with minimum reporting levels in "Explanation of Records" section). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)
OCT 1996										
19...	1200	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
NOV										
13...	*0835*	*CANNISTER BLANK*	*<.05*	*<.05*	*<.05*	*<.05*	*E.004*	*<.05*	*<.05*	*<.05*
13...	*0845*	*FIELD BLANK*	*<.05*	*<.05*	*<.05*	*<.05*	*E.004*	*<.05*	*<.05*	*<.05*
13...	0900	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
DEC										
10...	0900	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
JAN 1997										
27...	1540	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10

DATE	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)
OCT 1996											
19...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	E.030	<.10	E.010	<10
NOV											
13...	*<.20*	*<.05*	*<.05*	*<.05*	*E.010*	*<.05*	*E.007*	*E.020*	*<.05*	*<.05*	*6.2*
13...	*<.20*	*<.05*	*<.05*	*<.05*	*E.010*	*<.05*	*E.007*	*E.020*	*<.05*	*<.05*	*6.4*
13...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
DEC											
10...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
JAN 1997											
27...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10

DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	ACRO-LEIN TOTAL (UG/L) (34210)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)
OCT 1996										
19...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
NOV										
13...	*<.05*	*<2.0*	*<5.0*	*10*	*<.05*	*<.10*	*<.05*	*E.020*	*<.10*	*<.10*
13...	*<.05*	*<2.0*	*<5.0*	*10*	*<.05*	*E.006*	*<.05*	*E.020*	*<.10*	*<.10*
13...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
DEC										
10...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
JAN 1997										
27...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20

DATE	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
OCT 1996										
19...	E.030	<.10	<.40	<.20	<.20	<.10	<.10	<.10	E.100	<.10
NOV										
13...	*<.20*	*<.05*	*<.20*	*E.100*	*<.10*	*E.020*	*<.05*	*E.040*	*<.10*	*<.05*
13...	*<.20*	*<.05*	*<.20*	*E.100*	*<.10*	*E.020*	*<.05*	*E.030*	*<.10*	*<.05*
13...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	<.10	E.070	<.10
DEC										
10...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	E.050	.40	<.10
JAN 1997										
27...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	E.020	E.100	<.10

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	BROMO-FORM TOTAL (UG/L) (32104)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
OCT 1996										
19...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	E.010
NOV										
13...	*<.05*	*<.20*	*E.004*	*<.10*	*E.010*	*13*	*<.20*	*<.05*	*<.10*	*E.020*
13...	*<.05*	*<.20*	*E.004*	*<.10*	*E.010*	*13*	*<.20*	*<.05*	*<.10*	*E.020*
13...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	E.020
DEC										
10...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	<.10
JAN 1997										
27...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	<.10

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	18.5	14.5	16.5
2	---	---	---	---	---	---	---	---	---	18.5	12.5	15.5
3	---	---	---	---	---	---	---	---	---	16.0	13.5	14.5
4	---	---	---	---	---	---	---	---	---	15.5	13.5	14.5
5	---	---	---	---	---	---	---	---	---	18.0	11.5	15.0
6	---	---	---	---	---	---	---	---	---	17.0	14.0	15.5
7	---	---	---	---	---	---	---	---	---	15.5	12.0	13.5
8	---	---	---	---	---	---	---	---	---	14.5	10.0	12.5
9	---	---	---	---	---	---	13.0	8.5	10.5	13.5	12.0	13.0
10	---	---	---	---	---	---	12.0	5.5	8.5	15.0	12.0	13.0
11	---	---	---	---	---	---	10.5	6.5	8.5	17.0	12.0	14.5
12	---	---	---	---	---	---	9.0	7.0	8.0	20.0	13.5	16.5
13	---	---	---	---	---	---	13.0	9.0	10.5	18.0	14.5	16.0
14	---	---	---	---	---	---	14.5	8.5	11.5	17.0	12.5	15.0
15	---	---	---	---	---	---	15.0	8.5	11.5	19.5	15.0	17.0
16	---	---	---	---	---	---	16.0	9.0	12.5	18.5	15.0	16.5
17	---	---	---	---	---	---	13.5	11.5	12.5	15.5	13.5	14.5
18	---	---	---	---	---	---	11.5	7.0	8.5	15.0	13.5	14.0
19	---	---	---	---	---	---	10.5	6.5	8.0	19.5	14.5	16.0
20	---	---	---	---	---	---	12.5	8.0	10.0	20.0	18.5	19.0
21	---	---	---	---	---	---	13.0	8.5	10.5	19.5	15.5	17.0
22	---	---	---	---	---	---	14.0	9.0	11.5	16.0	13.5	15.0
23	---	---	---	---	---	---	12.5	10.0	11.5	17.5	13.5	15.0
24	---	---	---	---	---	---	14.0	10.0	11.5	19.0	15.0	17.0
25	---	---	---	---	---	---	16.5	10.0	13.0	19.0	16.5	17.5
26	---	---	---	---	---	---	19.0	11.0	14.5	17.0	15.5	16.0
27	---	---	---	---	---	---	18.5	11.5	15.0	17.5	15.5	16.5
28	---	---	---	---	---	---	15.5	12.5	13.5	18.5	14.5	16.5
29	---	---	---	---	---	---	17.5	11.5	14.5	18.0	15.5	16.5
30	---	---	---	---	---	---	19.5	13.0	16.0	18.0	16.0	17.0
31	---	---	---	---	---	---	---	---	---	19.0	16.5	17.5
MONTH	---	---	---	---	---	---	---	---	---	20.0	10.0	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.5	18.5	18.5	25.0	23.0	24.0	25.5	21.0	23.0	24.5	21.5	22.5
2	19.0	16.0	17.5	25.0	23.0	23.5	25.5	22.5	24.0	24.5	22.0	23.0
3	16.0	14.5	14.5	25.0	23.0	24.0	26.0	22.0	24.0	24.0	20.5	22.5
4	16.0	14.0	15.0	26.0	23.0	25.0	25.0	22.5	23.5	20.5	17.0	18.5
5	17.5	14.5	15.5	25.5	22.0	23.5	24.5	20.5	22.5	19.0	15.5	17.5
6	17.5	16.0	16.5	24.0	21.0	22.5	23.5	20.0	22.0	19.0	16.5	17.5
7	17.0	15.5	16.0	24.5	22.0	23.0	24.0	19.0	21.5	20.5	17.0	18.5
8	17.5	15.5	16.5	25.0	22.0	23.5	23.0	19.0	21.0	20.5	19.0	19.5
9	21.5	15.5	18.5	25.5	22.5	24.0	25.5	20.0	22.5	20.5	19.5	20.0
10	23.5	16.5	20.0	25.0	21.5	23.0	25.5	21.5	23.0	20.0	18.5	19.0
11	24.0	19.5	21.5	25.5	20.5	23.0	26.0	21.5	24.0	21.5	19.0	20.0
12	23.5	21.0	22.5	25.5	21.5	23.5	25.0	23.0	24.0	22.5	20.0	21.0
13	22.5	20.5	21.5	27.0	22.5	24.5	24.5	22.5	23.5	22.0	19.5	21.0
14	23.5	20.0	21.5	28.0	23.0	25.5	25.5	23.0	24.5	21.0	19.5	20.5
15	22.5	18.0	20.5	29.0	24.5	26.5	25.5	22.0	24.0	21.0	19.0	20.0
16	23.0	17.0	20.0	29.0	25.5	27.5	28.5	24.0	26.0	21.0	18.5	19.5
17	21.0	18.0	19.5	30.0	26.0	28.0	29.0	25.0	26.5	21.0	19.0	20.0
18	20.5	19.0	19.5	29.0	26.0	27.5	27.5	23.5	24.5	21.5	20.0	20.5
19	24.5	19.0	21.5	27.5	24.5	26.0	23.5	20.0	22.0	20.5	18.5	19.5
20	25.5	20.0	23.0	25.5	22.0	23.5	22.0	19.0	20.0	21.0	19.0	20.0
21	27.5	22.5	25.0	25.0	21.0	23.0	22.5	19.0	20.5	20.0	16.5	18.0
22	28.0	24.0	26.0	25.0	21.0	22.5	23.0	20.0	21.5	16.5	14.0	15.0
23	26.5	22.5	24.5	23.0	21.5	22.0	22.0	19.0	20.5	15.5	14.0	15.0
24	25.5	21.5	23.0	22.0	16.5	19.0	22.0	18.5	20.0	15.5	14.0	14.5
25	27.0	21.5	24.0	19.5	16.5	18.0	23.0	19.0	21.0	14.0	12.0	13.0
26	28.0	24.5	26.0	24.0	18.5	21.0	22.5	19.5	21.0	15.5	13.0	14.0
27	26.5	23.0	25.0	26.0	21.5	23.5	23.0	20.0	21.5	15.0	13.5	14.5
28	26.0	21.0	23.5	27.0	23.0	25.0	22.5	20.5	21.0	15.5	13.5	14.0
29	25.5	21.5	23.5	26.5	23.5	25.0	23.0	20.0	21.5	17.5	15.5	16.5
30	25.5	22.5	24.0	25.0	20.0	22.5	23.0	20.0	21.5	17.0	16.0	16.5
31	---	---	---	25.0	20.0	22.5	23.0	20.0	21.5	---	---	---
MONTH	28.0	14.0	21.0	30.0	16.5	23.5	29.0	18.5	22.5	24.5	12.0	18.5

01401600 BEDEN BROOK NEAR ROCKY HILL, NJ

LOCATION.--Lat 40°24'52", long 74°39'02", Somerset County, Hydrologic Unit 02030105, at bridge on U.S. Route 206 at State Route 533, 0.7 mi upstream from Pike Run, 1.2 mi northwest of Rocky Hill, and 4.6 mi north of Princeton.

DRAINAGE AREA.--27.6 mi^2.

PERIOD OF RECORD.--Water years 1959-63, 1976 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 100 ft downstream from bridge.

REMARKS.--Continuous records of water temperature were collected as part of the LINJ NAWQA study. Additional water-quality data collected as part of the NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Analyses of the split and concurrent replicate samples were performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
NOV 1996									
07...	1015	ENVIRONMENTAL	34	247	8.2	12.5	763	12.9	121
FEB 1997									
06...	1100	ENVIRONMENTAL	125	174	7.5	4.0	759	12.4	95
MAR									
25...	1100	ENVIRONMENTAL	55	226	8.0	5.0	772	13.3	103
25...	*1100*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
25...	*1101*	*CONCURRENT REPLICATE*	--	--	--	--	--	--	--
MAY									
15...	1100	ENVIRONMENTAL	48	223	7.7	14.5	753	10.4	103
15...	*1100*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
15...	*1101*	*CONCURRENT REPLICATE*	--	--	--	--	--	--	--
JUL									
22...	1100	ENVIRONMENTAL	1.6	337	7.4	21.0	761	6.8	76
22...	*1100*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
22...	*1101*	*CONCURRENT REPLICATE*	--	--	--	--	--	--	--

DATE	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV 1996										
07...	E1.9	70	120	72	17	7.1	16	2.1	50	25
FEB 1997										
06...	E1.2	70	150	46	11	4.6	13	1.5	24	15
MAR										
25...	<1.0	330	120	61	14	6.4	15	1.6	37	25
25...	--	--	--	*69*	*16*	*7.0*	*E17*	*2.0*	*37*	*26*
25...	--	--	--	*69*	*16*	*7.0*	*E17*	*2.0*	*37*	*25*
MAY										
15...	E1.3	940	180	68	16	6.8	15	1.6	45	21
15...	--	--	--	*65*	*16*	*6.0*	*15*	*2.0*	*45*	*21*
15...	--	--	--	*65*	*16*	*6.0*	*15*	*2.0*	*45*	*21*
JUL										
22...	2.1	>24000	13000	84	21	7.9	25	4.2	36	46
22...	--	--	--	*78*	*18*	*8.0*	*25*	*5.0*	*38*	*42*
22...	--	--	--	*85*	*21*	*8.0*	*26*	*5.0*	*39*	*42*

01401600 BEDEN BROOK NEAR ROCKY HILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 1996									
07...	24	<.1	9.7	138	137	12	E.008	1.4	.03
FEB 1997									
06...	19	<.1	10	100	95	2	.006	1.4	<.03
MAR									
25...	25	<.1	12	133	128	<1	.011	1.5	<.03
25...	*25*	*E.11*	--	*131*	--	*<2*	*<.025*	*1.42*	*<.05*
25...	*24*	*<.1*	--	*132*	--	*<2*	*<.025*	*1.38*	*<.05*
MAY									
15...	21	<.1	5.6	124	119	2	.016	.91	<.03
15...	*21*	*.12*	--	*115*	*112*	*<3*	*<.025*	*.86*	*<.05*
15...	*21*	*.12*	--	*38*	*112*	*<3*	*<.025*	*.87*	*<.05*
JUL									
22...	36	.1	7.0	206	187	21	.046	4.1	<.03
22...	*32*	*.17*	--	*219*	*169*	*<10*	*.050*	*3.53*	*.08*
22...	*32*	*.17*	--	*219*	*174*	*<10*	*.040*	*3.59*	*.08*

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN DISSOLVED (MG/L AS N) (00602)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
NOV 1996									
07...	<.03	.2	.13	1.6	1.5	.04	.04	2.7	.5
FEB 1997									
06...	<.03	.5	.33	1.9	1.7	.09	.04	3.0	.5
MAR									
25...	<.03	.2	.19	1.7	1.7	.08	.07	1.8	.3
25...	*<.05*	*.37*	*.20*	*1.8*	*1.6*	*.09*	*.07*	*2.1*	--
25...	*<.05*	*.38*	*.33*	*1.8*	*1.7*	*.09*	*.08*	*2.1*	--
MAY									
15...	<.03	<.03	<.03	--	--	.05	.03	2.4	.3
15...	*<.05*	*.28*	*.28*	*1.1*	*1.1*	*.08*	*.07*	*2.3*	--
15...	*<.05*	*.29*	*.26*	*1.2*	*1.1*	*.08*	*.07*	*2.0*	--
JUL									
22...	<.03	.7	.48	4.8	4.6	.32	.26	4.5	.9
22...	*.08*	*.54*	*.38*	*4.1*	*3.9*	*.32*	*.28*	*3.7*	--
22...	*.08*	*.68*	*.29*	*4.3*	*3.9*	*.34*	*.27*	*3.7*	--

DATE	TIME	SAMPLE TYPE	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)
MAY 1997								
15...	1100	ENVIRONMENTAL	<10	<1	<10	40	<1	<1.0
15...	*1100*	*SPLIT REPLICATE*	*<10*	*<3*	*<5.0*	--	*<1*	*<10*
15...	*1101*	*CONCURRENT REPLICATE*	*<10*	*<3*	*<5.0*	--	*<1*	*<10*

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
MAY 1997								
15...	1	210	<1	20	<.1	<1	<1	<10
15...	*<2*	*240*	*<2*	*17*	*<.2*	*<2*	*<5*	*9.0*
15...	*3*	*240*	*<2*	*17*	*<.2*	*<2*	*<5*	*20*

01401600 BEDEN BROOK NEAR ROCKY HILL, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	18.0	19.0	24.0	22.0	23.0	23.0	20.0	21.5	22.5	20.0	21.5
2	19.5	14.5	16.5	23.5	22.0	22.5	23.5	21.5	22.5	23.0	21.5	22.0
3	14.5	13.0	13.5	25.0	22.0	23.5	24.0	21.5	23.0	22.5	19.5	21.5
4	16.5	13.0	14.5	25.0	22.5	24.0	23.5	21.0	22.5	19.5	16.5	17.5
5	18.5	13.5	16.0	24.0	21.0	22.5	23.0	20.5	21.5	17.5	15.0	16.0
6	18.0	15.0	16.5	23.0	19.5	21.5	22.5	19.0	20.5	18.0	15.5	17.0
7	17.5	15.0	16.0	23.5	20.5	22.0	22.0	18.5	20.5	19.5	16.5	18.0
8	20.0	14.0	16.5	24.0	20.5	22.5	21.0	18.5	20.0	19.5	18.0	18.5
9	23.0	14.5	17.5	25.0	22.0	23.5	23.0	19.5	21.0	19.5	18.5	19.0
10	23.0	16.0	19.5	24.0	21.5	22.5	23.5	20.5	22.0	19.0	18.0	18.0
11	24.0	18.5	21.5	23.5	20.0	22.0	24.0	21.0	22.5	21.5	18.0	20.0
12	23.0	20.0	21.5	23.5	20.5	22.0	23.5	22.0	23.0	22.5	20.0	21.0
13	22.5	20.0	21.0	25.0	21.0	22.5	23.0	21.5	22.5	21.0	19.0	20.0
14	23.0	19.5	21.0	25.5	22.0	23.5	24.0	22.0	23.0	21.0	19.0	20.0
15	22.0	17.0	20.0	26.5	23.0	24.5	24.0	21.5	23.0	20.0	18.5	19.5
16	21.0	16.5	19.0	27.0	23.5	25.0	26.5	23.0	24.5	20.0	18.0	19.0
17	20.5	17.0	18.5	27.0	23.5	25.5	26.5	23.5	24.5	20.5	18.0	19.0
18	19.5	18.5	18.5	26.5	24.5	25.5	25.5	21.5	23.0	21.0	19.5	20.0
19	24.0	18.5	21.0	24.5	22.5	23.5	22.0	19.0	20.5	20.0	17.0	18.5
20	24.0	19.5	22.0	23.0	20.5	21.5	20.5	18.5	19.0	20.5	19.0	19.5
21	26.0	22.0	24.0	22.5	19.5	21.0	22.0	18.5	20.5	19.5	15.5	17.0
22	27.0	24.0	25.0	22.5	21.0	22.0	22.0	19.5	21.0	15.5	13.0	14.0
23	25.5	22.0	24.0	22.0	20.5	21.5	21.5	18.5	20.0	15.0	13.5	14.5
24	23.5	21.0	22.0	21.0	17.0	19.0	20.5	18.0	19.5	15.0	13.0	14.0
25	25.5	21.0	23.0	20.0	17.0	18.0	21.0	18.5	19.5	13.0	11.0	12.0
26	27.0	24.0	25.0	22.5	18.5	20.5	21.5	19.0	20.0	15.0	13.0	13.5
27	25.0	22.0	23.5	24.0	20.5	22.5	21.5	19.0	20.0	14.5	12.5	13.5
28	24.5	20.5	22.0	25.5	22.0	23.5	21.0	19.5	20.5	14.5	12.5	13.0
29	25.0	20.5	22.5	25.0	22.0	23.5	22.0	19.5	20.5	17.0	14.5	16.0
30	24.5	21.0	22.5	22.5	18.5	21.0	21.5	19.0	20.5	17.0	15.5	16.0
31	---	---	---	23.0	18.5	21.0	21.5	19.0	20.5	---	---	---
MONTH	27.0	13.0	20.0	27.0	17.0	22.5	26.5	18.0	21.5	23.0	11.0	17.5

01401650 PIKE RUN AT BELLE MEAD, NJ

LOCATION.--Lat 40°28'05", long 74°38'57", Somerset County, Hydrologic Unit 02030105, on right bank 20 ft upstream from bridge on Township Line Road, 0.7 mi east of Belle Mead, 0.8 mi upstream from Cruser Brook, and 1.0 mi downstream from bridge on U.S. Route 206.

DRAINAGE AREA.--5.36 mi^2.

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete parking-block control. Datum of gage is 58.85 ft above sea level.

REMARKS.--Records fair. Several measurements of water temperature were made during the year. Some regulation during summer months, possibly from irrigation. Rain-gage and gage-height radio telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1810, 13.5 ft, Aug. 28, 1971, from floodmark, present datum.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1445	*4,690	*12.17	Dec. 14	0845	520	6.28
Nov. 26	1145	360	5.60	Jan. 25	0345	366	5.63
Dec. 2	0645	844	7.42	Mar. 31	1000	343	5..52
Dec. 6	1015	384	5.71	July 24	2045	537	6.35
Dec. 7	2300	420	5.87	July 25	0415	701	6.96

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.4	39	3.7	6.9	3.7	72	4.8	2.2	.32	1.1	1.0
2	1.4	2.5	230	3.8	6.1	4.9	27	4.7	55	.38	.90	.56
3	1.5	2.3	18	4.5	6.1	4.4	13	23	23	1.5	.78	.43
4	1.1	2.2	11	3.8	5.6	11	9.2	21	8.6	.54	.67	.31
5	.94	2.2	7.9	3.8	63	15	6.9	6.9	5.3	.34	1.2	.24
6	.87	2.1	111	3.7	16	17	6.2	6.3	3.9	.25	.64	.24
7	.83	2.1	101	3.2	9.3	8.2	5.9	5.3	3.3	.20	.57	.24
8	50	2.6	83	2.8	7.2	6.1	4.5	4.2	3.0	.14	.57	.18
9	33	15	18	2.8	6.6	5.0	4.2	14	2.6	1.1	.52	.16
10	12	5.0	12	3.8	6.0	19	3.8	9.0	2.3	2.1	.49	.16
11	5.0	3.5	11	4.3	5.0	11	3.5	5.5	2.0	.48	.44	11
12	3.0	2.8	18	4.2	4.8	7.2	15	4.4	1.8	.28	.41	4.7
13	2.3	2.4	29	2.5	4.2	5.6	23	4.0	1.6	.15	.67	1.0
14	2.0	2.2	222	2.1	34	59	7.0	3.7	1.7	.07	.55	.59
15	1.8	2.0	30	1.9	33	41	4.9	3.4	1.3	.00	.43	.52
16	1.6	1.8	15	51	11	11	4.4	3.1	1.0	.00	.37	.45
17	1.7	1.8	14	47	7.8	8.0	4.2	3.0	.98	.00	.62	.41
18	1.8	1.8	11	16	6.4	6.9	11	2.9	1.1	.00	1.7	.36
19	1010	2.0	16	3.7	6.4	5.9	9.1	3.2	1.7	.17	.78	.30
20	40	1.8	11	3.6	5.7	5.8	5.3	3.2	.93	.00	2.4	.24
21	22	1.6	6.7	3.1	5.2	5.5	4.4	2.8	.82	.00	8.8	.24
22	10	1.5	5.6	4.0	6.2	5.0	4.0	2.5	.76	2.4	1.2	.18
23	7.4	1.4	5.6	12	5.3	4.3	3.8	2.3	.88	2.1	.62	.17
24	5.9	1.3	14	4.6	4.3	3.8	3.9	2.3	.70	160	.54	.24
25	4.6	1.3	24	107	3.6	3.5	3.8	33	.69	194	.48	.24
26	3.9	97	7.9	12	3.6	9.6	3.3	18	.58	8.6	.41	.24
27	3.5	14	7.1	6.8	4.4	5.2	3.1	4.5	.55	4.9	.36	.21
28	3.7	7.8	6.3	56	3.7	4.0	38	3.1	.49	3.5	1.2	.13
29	3.6	5.8	6.2	11	---	14	9.3	2.4	.41	3.1	1.1	.53
30	2.9	5.0	5.6	9.7	---	11	5.8	2.6	.35	1.8	.54	.49
31	2.8	---	4.8	5.6	---	111	---	2.4	---	1.4	.41	---
TOTAL	1242.64	197.2	1101.7	404.0	287.4	432.6	319.5	211.5	129.54	389.82	31.47	25.76
MEAN	40.1	6.57	35.5	13.0	10.3	14.0	10.6	6.82	4.32	12.6	1.02	.86
MAX	1010	97	230	107	63	111	72	33	55	194	8.8	11
MIN	.83	1.3	4.8	1.9	3.6	3.5	3.1	2.3	.35	.00	.36	.13
CFSM	7.48	1.23	6.63	2.43	1.91	2.60	1.99	1.27	.81	2.35	.19	.16
IN.	8.62	1.37	7.65	2.80	1.99	3.00	2.22	1.47	.90	2.71	.22	.18

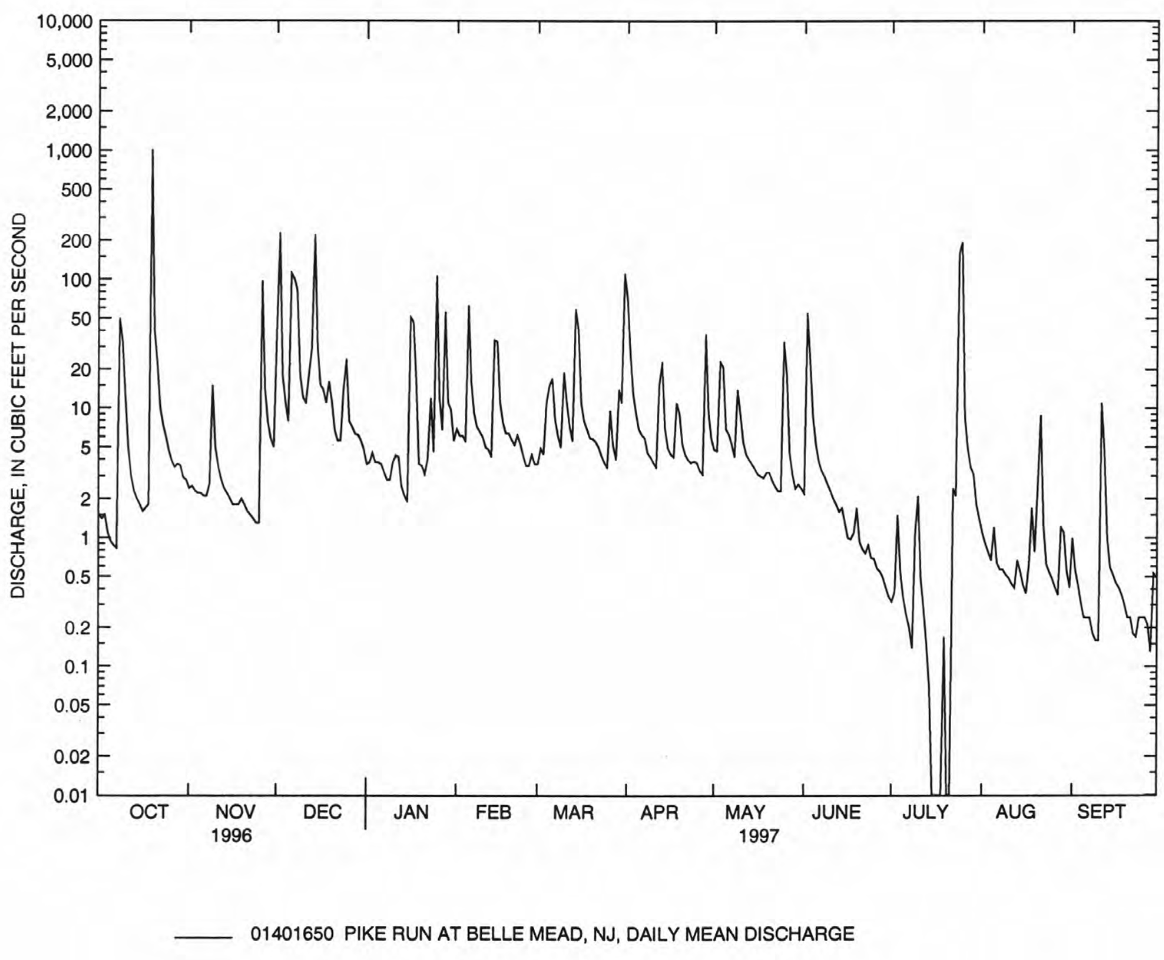
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.16	9.05	12.1	13.9	12.7	14.3	13.2	8.71	4.90	7.01	3.24	2.96
MAX	40.1	22.3	35.5	43.3	27.5	38.8	43.1	26.2	20.9	26.1	9.94	17.1
(WY)	1997	1989	1997	1996	1994	1994	1983	1989	1989	1984	1990	1989
MIN	.55	2.09	.73	.043	4.74	3.05	2.18	1.89	.37	.36	.17	.51
(WY)	1995	1985	1981	1981	1992	1981	1985	1986	1995	1980	1980	1983

01401650 PIKE RUN AT BELLE MEAD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1980 - 1997	
ANNUAL TOTAL	6243.85		4773.13			
ANNUAL MEAN	17.1		13.1		9.07	
HIGHEST ANNUAL MEAN					14.3	1984
LOWEST ANNUAL MEAN					3.79	1981
HIGHEST DAILY MEAN	1010	Oct 19	1010	Oct 19	1010	Oct 19 1996
LOWEST DAILY MEAN	.23	Sep 4	.00	Jul 15	.00	Aug 20 1980
ANNUAL SEVEN-DAY MINIMUM	.31	Aug 30	.02	Jul 15	.00	Aug 20 1980
INSTANTANEOUS PEAK FLOW			4690	Oct 19	4690	Oct 19 1996
INSTANTANEOUS PEAK STAGE			12.17a	Oct 19	12.17a	Oct 19 1996
INSTANTANEOUS LOW FLOW			.00	Many days	.00	Aug 20 1980
ANNUAL RUNOFF (CFSM)	3.18		2.44		1.69	
ANNUAL RUNOFF (INCHES)	43.33		33.13		22.99	
10 PERCENT EXCEEDS	28		20		16	
50 PERCENT EXCEEDS	4.8		3.7		2.8	
90 PERCENT EXCEEDS	.84		.38		.32	

a From high-water mark in gage.



01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ

LOCATION.--Lat 40°28'30", long 74°34'34", Somerset County, Hydrologic Unit 02030105, on left bank 30 ft downstream from highway bridge at Blackwells Mills, and 0.3 mi downstream from Six Mile Run.

DRAINAGE AREA.--258 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1903 to December 1904 (gage heights only), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at Millstone" 1903-04.

REVISED RECORDS.--WSP 1552: 1924-25(M), 1926.

GAGE.--Water-stage recorder. Concrete control since Nov. 18, 1933. Datum of gage is 26.97 ft above sea level. June 27, 1903 to Dec. 31, 1904, nonrecording gage at bridge 2.0 mi downstream at Millstone at different datum. Aug. 4, 1921 to Aug. 16, 1928, nonrecording gage at present site and datum.

REMARKS.--Records good. Inflow from and losses to Delaware and Raritan Canal above station. Flow slightly regulated by Carnegie Lake, capacity, 310,000,000 gal and several smaller reservoirs, combined capacity, 49,800,000 gal. Several measurements of water temperature were made during the year. National Weather Service gage-height telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0445	*13,400	*15.53	Dec. 14	2230	6,120	10.70
Dec. 2	2130	5,790	10.41	July 25	1315	6,530	11.03
Dec. 8	1230	4,720	9.38				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	221	681	323	505	264	2360	407	202	82	129	110
2	193	219	4150	300	481	308	2520	385	804	80	112	86
3	177	209	4070	309	437	312	1810	522	1500	123	105	78
4	150	199	1710	300	403	441	923	865	860	105	99	71
5	132	189	810	290	1520	590	627	550	469	85	186	67
6	122	181	1940	285	1750	757	491	398	337	75	208	64
7	119	180	2930	260	1040	546	459	372	259	72	154	62
8	319	192	4380	233	696	404	385	324	224	75	120	61
9	1990	457	3070	223	558	334	332	506	198	85	99	60
10	1280	433	1510	265	476	500	300	605	179	284	88	58
11	747	311	873	288	415	721	279	419	165	171	83	116
12	448	251	878	247	383	502	362	325	149	119	77	200
13	311	211	845	224	361	380	1040	267	178	96	79	122
14	252	193	3830	207	715	633	663	250	271	81	90	100
15	212	183	4630	188	1470	1910	441	226	243	72	85	87
16	189	176	2190	833	1100	1060	346	206	199	66	83	77
17	173	171	1130	1300	745	643	307	188	152	63	79	68
18	159	170	843	667	532	465	674	174	138	61	90	65
19	3910	172	796	421	447	394	1040	174	366	66	94	63
20	11500	173	856	287	395	362	786	175	225	58	97	63
21	5160	168	613	250	361	341	520	167	159	57	426	58
22	2110	161	478	240	357	315	385	155	133	109	259	55
23	820	154	432	416	336	285	337	142	166	127	190	56
24	569	149	462	409	302	256	325	135	138	1000	132	55
25	430	146	1040	2250	269	249	342	406	123	5430	104	54
26	356	1510	709	2390	259	345	306	1840	112	3280	86	55
27	312	2330	542	1100	292	382	268	1120	101	946	78	53
28	294	1030	460	1450	266	303	872	568	90	441	85	53
29	286	590	425	1610	---	268	952	301	85	263	93	76
30	261	402	403	806	---	351	599	243	83	188	87	79
31	237	---	365	575	---	1290	---	223	---	153	82	---
TOTAL	33459	11131	48051	18946	16871	15911	21051	12638	8308	13913	3779	2272
MEAN	1079	371	1550	611	603	513	702	408	277	449	122	75.7
MAX	11500	2330	4630	2390	1750	1910	2520	1840	1500	5430	426	200
MIN	119	146	365	188	259	249	268	135	83	57	77	53
CFSM	4.18	1.44	6.01	2.37	2.34	1.99	2.72	1.58	1.07	1.74	.47	.29
IN.	4.82	1.60	6.93	2.73	2.43	2.29	3.04	1.82	1.20	2.01	.54	.33

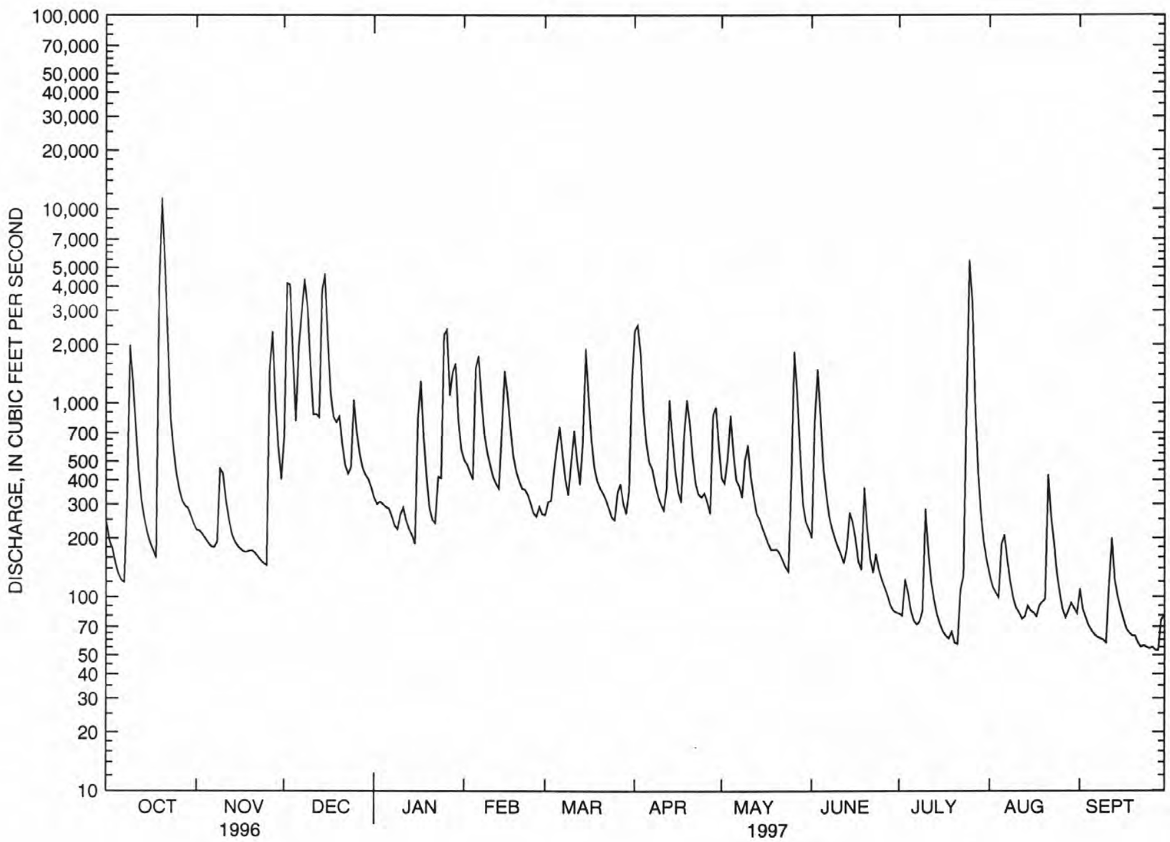
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

MEAN	202	337	472	515	568	692	540	356	238	250	219	218
MAX	1079	1113	1550	1743	1199	1882	1520	1264	823	1808	1267	1277
(WY)	1997	1973	1997	1979	1925	1994	1983	1989	1989	1975	1971	1938
MIN	42.6	51.2	67.0	62.9	105	158	103	82.8	45.5	19.3	17.3	20.2
(WY)	1942	1966	1966	1981	1934	1985	1985	1963	1963	1966	1981	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	267719		206330			
ANNUAL MEAN	731		565		383	
HIGHEST ANNUAL MEAN					690	1975
LOWEST ANNUAL MEAN					165	1985
HIGHEST DAILY MEAN	11500	Oct 20	11500	Oct 20	17400	Aug 28 1971
LOWEST DAILY MEAN	83	Sep 5	53	Sep 27	5.0	Sep 16 1923
ANNUAL SEVEN-DAY MINIMUM	90	Aug 31	54	Sep 22	6.3	Aug 7 1966
INSTANTANEOUS PEAK FLOW			13400	Oct 20	22200	Aug 28 1971
INSTANTANEOUS PEAK STAGE			15.53	Oct 20	18.68a	Aug 28 1971
INSTANTANEOUS LOW FLOW			50	Sep 27	5.0	Sep 16 1923
ANNUAL RUNOFF (CFSM)	2.84		2.19		1.48	
ANNUAL RUNOFF (INCHES)	38.60		29.75		20.17	
10 PERCENT EXCEEDS	1760		1190		825	
50 PERCENT EXCEEDS	358		287		200	
90 PERCENT EXCEEDS	142		79		59	

a From high-water mark.



——— 01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ, DAILY MEAN DISCHARGE

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-1969, 1973, 1976-1980, 1991 to current year.

REMARKS.--For the definitions of split and concurrent replicate samples, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Analyses of the split and concurrent replicate samples were performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
NOV 1996									
13...	1200	ENVIRONMENTAL	209	237	7.3	7.0	769	9.3	76
FEB 1997									
13...	1100	ENVIRONMENTAL	352	335	7.0	2.5	776	13.0	94
MAR									
25...	1100	ENVIRONMENTAL	236	267	7.6	7.0	767	11.7	96
25...	*1100*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
25...	*1101*	*CONCURRENT REPLICATE*	--	--	--	--	--	--	--
MAY									
15...	1100	ENVIRONMENTAL	218	236	7.1	16.0	754	8.5	87
15...	*1100*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
15...	*1101*	*CONCURRENT REPLICATE*	--	--	--	--	--	--	--
JUL									
22...	1100	ENVIRONMENTAL	123	281	7.1	23.0	763	5.5	64
22...	*1100*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
22...	*1101*	*CONCURRENT REPLICATE*	--	--	--	--	--	--	--

DATE	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV 1996										
13...	<1.0	110	50	65	15	6.7	16	3.6	37	25
FEB 1997										
13...	E1.5	20	40	61	14	6.3	33	2.6	26	23
MAR										
25...	E1.1	20	20	66	15	7.0	22	2.7	30	27
25...	--	--	--	*66*	*15*	*7.0*	*E24*	*3.0*	*31*	*27*
25...	--	--	--	*69*	*16*	*7.0*	*E23*	*3.0*	*31*	*27*
MAY										
15...	E1.6	490	10	67	15	7.1	18	2.9	37	23
15...	--	--	--	*64*	*14*	*7.0*	*17*	*3.0*	*38*	*23*
15...	--	--	--	*66*	*15*	*7.0*	*18*	*3.0*	*37*	*23*
JUL										
22...	2.8	>24000	14000	69	14	8.3	23	4.6	39	30
22...	--	--	--	*68*	*14*	*8.0*	*22*	*5.0*	*43*	*30*
22...	--	--	--	*68*	*14*	*8.0*	*22*	*6.0*	*41*	*30*

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 1996									
13...	25	.2	12	132	136	4	.015	2.4	.04
FEB 1997									
13...	53	.1	11	168	170	6	.012	2.5	.09
MAR									
25...	35	.2	9.6	144	148	4	.012	2.5	.03
25...	*37*	*.14*	--	*135*	--	*4*	*<.025*	*2.39*	*<.05*
25...	*37*	*.15*	--	*137*	--	*4*	*<.025*	*2.36*	*<.05*
MAY									
15...	26	.2	7.4	140	129	6	.140	1.8	.06
15...	*26*	*.22*	--	*119*	*121*	*5*	*<.025*	*1.77*	*<.05*
15...	*26*	*.21*	--	*137*	*122*	*6*	*<.025*	*1.74*	*<.05*
JUL									
22...	31	.2	6.9	170	154	43	.022	2.8	<.03
22...	*30*	*.21*	--	*189*	*146*	*24*	*.030*	*2.38*	*.15*
22...	*30*	*.5*	--	*186*	*145*	*30*	*<.030*	*2.28*	*.15*

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996									
13...	.04	.4	.28	2.8	2.7	.21	.19	3.6	.5
FEB 1997									
13...	.07	.3	.28	2.8	2.8	.16	.07	2.7	--
MAR									
25...	<.03	.3	.22	2.8	2.7	.19	.15	2.5	.6
25...	<.05	.48	.35	2.9	2.7	.19	.15	2.7	--
25...	<.05	.42	.27	2.8	2.6	.19	.15	2.5	--
MAY									
15...	<.03	.3	.09	2.1	1.9	.24	.18	3.7	1.1
15...	<.05	.55	.40	2.3	2.2	.26	.20	3.1	--
15...	<.05	.60	.41	2.3	2.2	.27	.21	3.2	--
JUL									
22...	<.03	.7	.47	3.5	3.3	.52	.41	5.2	1.2
22...	.10	.56	.32	2.9	2.7	.54	.46	5.1	--
22...	.09	.49	.35	2.8	2.6	.55	.48	5.0	--

DATE	TIME	SAMPLE TYPE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
NOV 1996								
13...	1200	ENVIRONMENTAL	14	1	<10	50	<1	<1.0
MAY 1997								
15...	1100	ENVIRONMENTAL	10	1	<10	50	<1	1.3
15...	1100	SPLIT REPLICATE	<10	<3	<5.0	--	<1	<10
15...	1101	CONCURRENT REPLICATE	<10	<3	<5.0	--	<1	<10

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996								
13...	2	460	<1	50	<.1	2	<1	<10
MAY 1997								
15...	2	500	1	60	<.1	1	<1	<10
15...	E2	620	<2	66	<.2	<2	<5	7.0
15...	E3	450	<2	63	<.2	<2	<5	7.0

01403060 RARITAN RIVER BELOW CALCO DAM, AT BOUND BROOK, NJ

LOCATION.--Lat 40°33'05", long 74°32'54", Somerset County, Hydrologic Unit 02030105, on right bank 1,000 ft downstream from Calco Dam and Cuckold Brook, 1,400 ft upstream from bridge on Interstate 287, 1.2 mi downstream from Millstone River, and 1.2 mi southwest of Bound Brook.

DRAINAGE AREA.--785 mi^2 (includes 11 mi^2 which drains into the Delaware and Raritan Canal).

PERIOD OF RECORD.--September 1903 to March 1909, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1966 published as "Raritan River at Bound Brook" (station 01403000).

REVISED RECORDS.--WSP 1552: 1903-07, 1946(M), 1949, 1952(P).

GAGE.--Water-stage recorder. Datum of gage is sea level. Sept. 12, 1903 to Mar. 31, 1909, nonrecording gages at highway bridge, 1.2 mi downstream at different datum. October 1944 to Sept. 30, 1966, water-stage recorder and concrete control at site 1,000 ft upstream at datum 18.06 ft higher.

REMARKS.--Records good except for estimated discharges, which are fair. Water diverted 1.2 mi above station by Elizabethtown Water Co. for municipal supply (see Raritan River basin, diversions). Flow regulated by Spruce Run and Round Valley Reservoirs (see Raritan River basin, reservoirs in). Diversions to and releases from Round Valley Reservoir (see Raritan River basin, diversions and station 01399690). Slight diurnal fluctuations at low flow. Several measurements of water temperature were made during the year. National Weather Service gage-height telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0530	*40,100	*35.58	Dec. 14	2130	19,000	28.43
Dec. 2	2015	20,000	28.90	July 25	1330	14,300	26.46
Dec. 8	1030	14,800	26.70				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	438	672	2070	1170	1580	720	6610	1120	452	162	254	250
2	374	640	13700	1080	1590	831	5630	1200	1530	206	231	214
3	406	587	11100	1120	1410	861	4150	2140	3320	293	211	177
4	431	533	4610	1100	1350	1110	2760	3420	1830	239	207	162
5	414	494	2850	1020	3870	1390	2060	1850	1020	185	380	166
6	392	488	6220	1050	3920	2030	1710	1440	744	150	377	170
7	384	483	7420	1050	2420	1680	1560	1400	595	140	242	160
8	1010	517	12000	923	1830	1170	1310	1190	504	174	202	155
9	5450	2200	6790	863	1560	994	1160	1630	432	188	181	173
10	2690	1820	4080	957	1340	1160	1010	1780	390	584	153	187
11	1660	1210	2910	974	1170	1860	882	1250	351	328	165	898
12	1140	943	3270	743	1070	1370	995	971	362	207	193	2390
13	876	805	3050	640	968	1070	2690	896	382	188	193	524
14	739	699	11900	673	1490	1540	1820	841	468	161	207	330
15	619	659	11800	675	3510	6160	1230	775	426	151	174	292
16	584	608	5600	2200	2700	3170	1010	719	353	151	163	257
17	553	580	3710	3050	1810	2090	929	672	315	175	226	198
18	518	564	3110	1250	1400	1720	1690	581	305	192	331	157
19	e9070	592	2940	892	1280	1440	2430	590	719	364	332	150
20	e32700	577	2880	847	1250	1280	1680	727	467	251	232	182
21	e10400	545	2130	898	1130	1200	1230	725	301	180	1120	182
22	4570	511	1800	837	1150	1070	1040	490	284	522	555	154
23	2520	493	1710	1540	1110	965	917	435	310	358	328	164
24	1930	446	1710	1220	869	796	879	397	264	3140	241	170
25	1530	431	3480	6510	796	735	875	816	230	11400	210	160
26	1250	3900	2250	4960	721	1070	789	3220	197	5010	183	165
27	1060	5530	1840	2370	805	1230	698	1780	182	1590	166	173
28	958	2490	1680	4080	810	893	2290	902	178	814	251	180
29	916	1660	1580	4320	---	867	2450	561	176	567	333	233
30	811	1290	1540	1980	---	1050	1490	494	158	369	229	233
31	746	---	1320	1540	---	3160	---	490	---	302	194	---
TOTAL	87139	32967	143050	52532	44909	46682	55974	35502	17245	28741	8464	9006
MEAN	2811	1099	4615	1695	1604	1506	1866	1145	575	927	273	300
MAX	32700	5530	13700	6510	3920	6160	6610	3420	3320	11400	1120	2390
MIN	374	431	1320	640	721	720	698	397	158	140	153	150

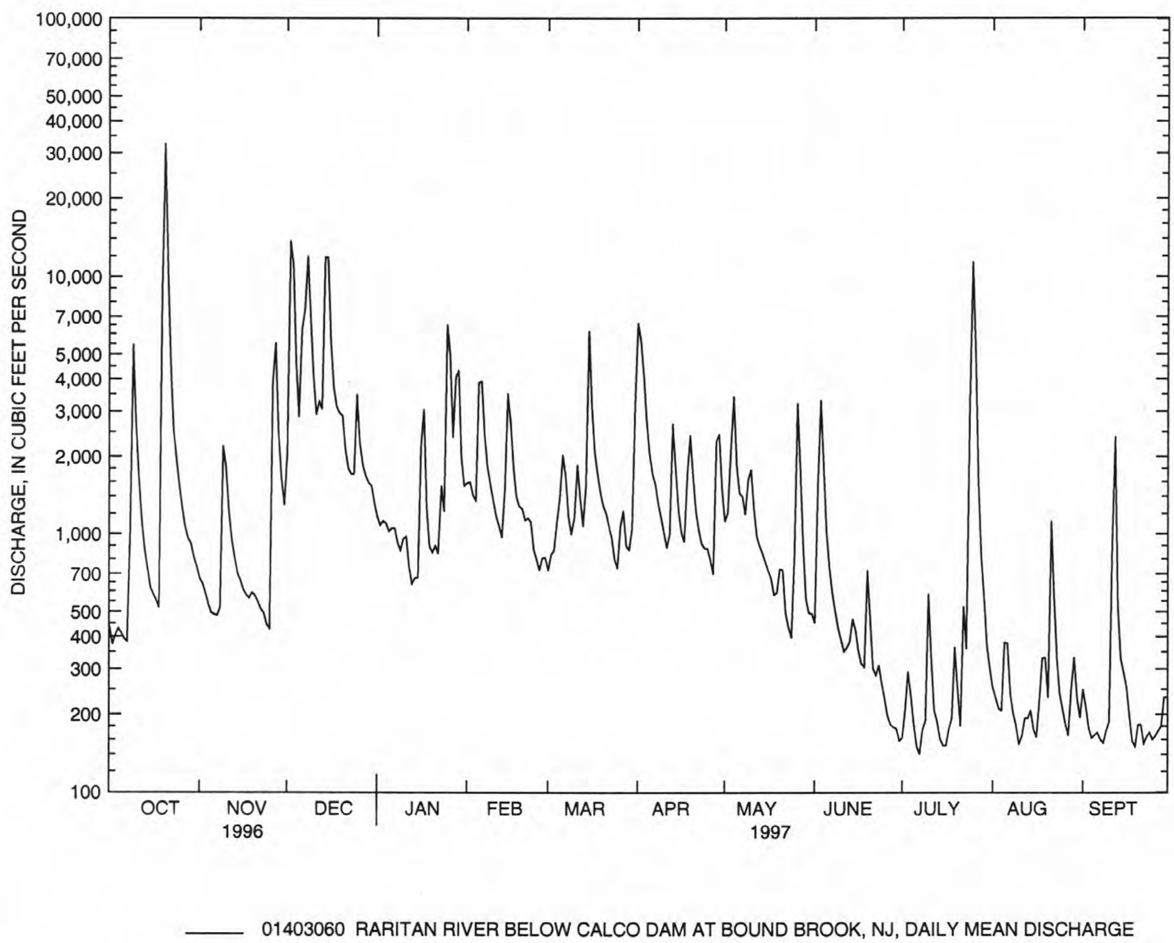
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	691	1059	1504	1616	1694	2156	1777	1256	769	696	664	653
MAX	2953	3684	4615	5825	3232	5093	5326	3862	3883	4624	3576	3158
(WY)	1904	1973	1997	1979	1971	1994	1983	1989	1972	1975	1955	1975
MIN	113	138	178	179	485	454	230	329	117	84.7	69.9	76.1
(WY)	1958	1966	1966	1981	1980	1985	1985	1992	1965	1955	1957	1957

01403060 RARITAN RIVER BELOW CALCO DAM, AT BOUND BROOK, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1903 - 1997	
ANNUAL TOTAL	745314		562211			
ANNUAL MEAN	2036		1540		1208	
HIGHEST ANNUAL MEAN					2046	1975
LOWEST ANNUAL MEAN					480	1985
HIGHEST DAILY MEAN	32700	Oct 20	32700	Oct 20	34100	Aug 28 1971
LOWEST DAILY MEAN	167	Sep 3	140	Jul 7	37	Sep 6 1964
ANNUAL SEVEN-DAY MINIMUM	178	Aug 30	166	Sep 18	46	Sep 4 1957
INSTANTANEOUS PEAK FLOW			40100	Oct 20	46100	Aug 28 1971
INSTANTANEOUS PEAK STAGE			35.58	Oct 20	37.47a	Aug 28 1971
INSTANTANEOUS LOW FLOW			107	Jul 6	----	
10 PERCENT EXCEEDS	4590		3240		2620	
50 PERCENT EXCEEDS	1140		876		640	
90 PERCENT EXCEEDS	363		182		170	

a From floodmark, highest since 1896.
e Estimated.



01403150 WEST BRANCH MIDDLE BROOK NEAR MARTINSVILLE, NJ

LOCATION.--Lat 40°36'44", long 74°35'28", Somerset County, Hydrologic Unit 02030105, on left bank 150 ft upstream from bridge on Crim Road, 1.4 mi northwest of Martinsville, and 1.8 mi upstream from confluence with East Branch, Middle Brook.

DRAINAGE AREA.--1.99 mi^2.

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

REVISED RECORDS.--WDR NJ-91-1: 1990. WDR NJ-96-1: 1980-94 (P).

GAGE.--Water-stage recorder. Datum of gage is 240.48 ft above sea level (levels by Somerset County).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Rain-gage and gage-height radio telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1430	*569	*6.89	Dec. 2	0400	360	5.53

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	2.8	24	1.5	2.0	1.6	23	2.2	.79	.26	.22	.22
2	.84	2.7	65	1.6	1.6	2.0	9.9	1.8	10	.26	.22	.18
3	.82	2.6	3.4	1.8	1.8	1.8	4.5	24	4.2	.30	.22	.17
4	.74	2.4	2.3	1.4	1.8	3.1	2.9	6.8	1.6	.28	.29	.15
5	.74	2.4	1.9	1.5	24	6.1	2.3	2.6	1.2	.25	.58	.14
6	.73	2.3	40	1.4	3.5	5.7	2.2	2.9	.97	.22	.44	.13
7	.67	2.4	42	1.2	2.4	2.5	2.1	2.1	.84	.22	.23	.12
8	42	2.9	19	1.1	2.0	2.1	1.8	1.8	.77	.21	.22	.10
9	8.4	8.4	3.9	1.2	1.9	1.7	1.7	5.7	.69	.22	.22	.10
10	3.6	1.7	2.8	1.6	1.6	5.9	1.6	3.0	.62	.28	.21	.10
11	1.4	1.4	3.9	1.3	1.5	3.2	1.5	2.0	.57	.17	.19	12
12	1.1	1.2	6.0	1.0	1.4	2.1	7.3	1.8	.57	.16	.19	1.1
13	1.0	1.1	7.9	.97	1.2	1.7	4.8	1.6	.94	.15	.21	.33
14	.98	1.1	70	.93	12	34	2.2	1.4	.58	.13	.20	.24
15	1.0	.95	7.9	.90	10	9.8	1.9	1.3	.50	.13	.19	.22
16	.96	.90	4.2	24	2.7	2.8	1.6	1.2	.47	.12	.20	.19
17	.96	.87	4.3	2.8	2.1	2.2	1.8	1.1	.45	.11	.22	.18
18	1.3	.87	3.5	e1.2	2.0	1.9	4.3	1.1	.48	1.4	.82	.17
19	181	1.0	5.6	e.90	2.3	1.7	2.8	1.3	1.2	.31	.22	.16
20	14	.88	3.3	e.83	2.1	1.8	1.9	1.6	.49	.15	3.2	.17
21	3.6	e.82	2.4	e.87	1.9	1.7	1.6	1.0	.43	.14	2.1	.24
22	2.3	e.70	2.3	e1.4	2.3	1.7	1.4	.97	.40	1.3	.40	.19
23	1.9	e.64	2.2	3.1	1.7	1.4	1.3	.87	.34	.33	.27	.19
24	1.8	e.65	8.0	3.8	1.6	1.3	1.4	.84	.30	46	.21	.18
25	1.6	e.72	6.0	45	1.4	1.2	1.3	8.9	.31	39	.19	.16
26	1.5	42	2.4	2.6	1.5	4.4	1.2	2.6	.30	1.0	.18	.16
27	1.5	3.2	2.3	1.8	2.0	1.8	1.1	1.1	.30	.51	.16	.16
28	1.7	1.9	2.1	27	1.4	1.4	20	.92	.29	.47	.51	.16
29	1.9	1.5	2.3	2.6	---	2.5	2.9	.83	.29	.33	.26	.32
30	2.1	1.3	2.2	1.7	---	2.0	2.1	.99	.26	.29	.21	.22
31	2.9	---	2.0	1.6	---	46	---	.85	---	.25	.18	---
TOTAL	285.78	94.30	355.1	140.60	93.7	159.1	116.4	87.17	31.15	94.95	13.16	18.15
MEAN	9.22	3.14	11.5	4.54	3.35	5.13	3.88	2.81	1.04	3.06	.42	.60
MAX	181	42	70	45	24	46	23	24	10	46	3.2	12
MIN	.67	.64	1.9	.83	1.2	1.2	1.1	.83	.26	.11	.16	.10
CFSM	4.63	1.58	5.76	2.28	1.68	2.58	1.95	1.41	.52	1.54	.21	.30
IN.	5.34	1.76	6.64	2.63	1.75	2.97	2.18	1.63	.58	1.77	.25	.34

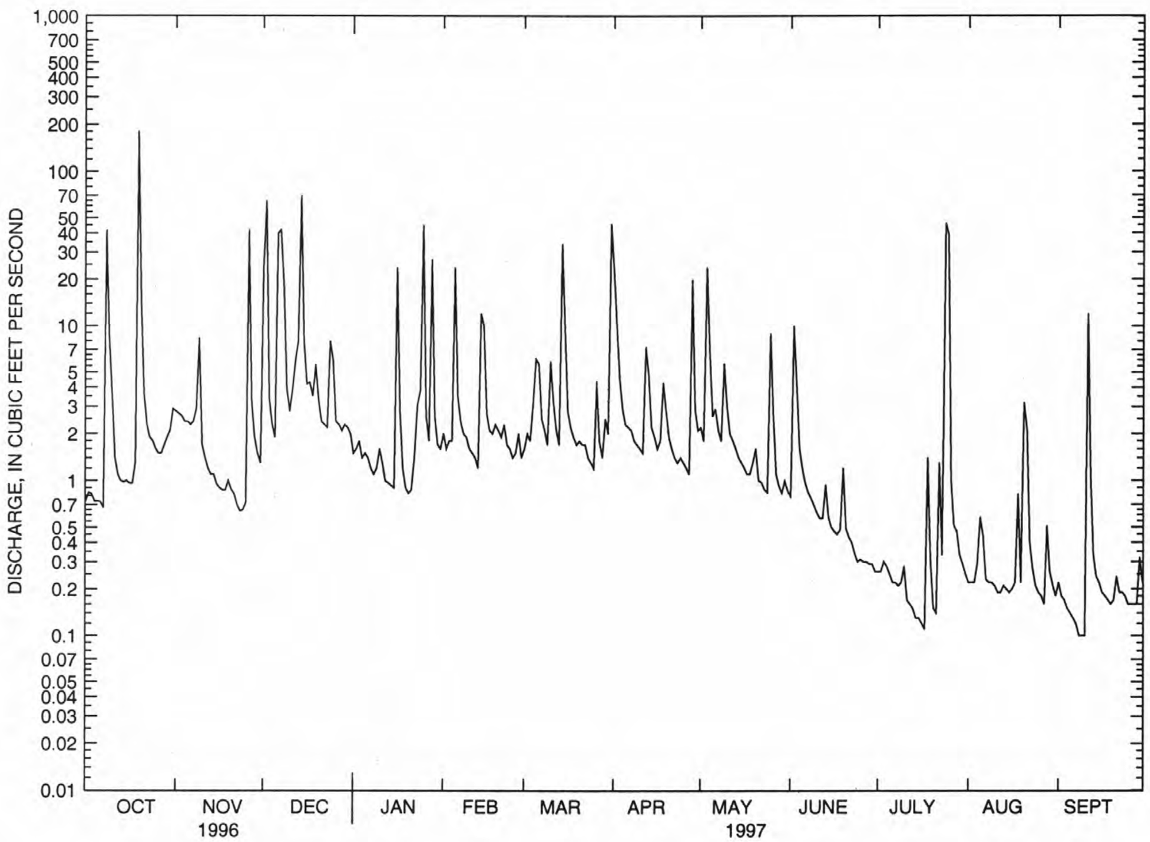
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.59	3.94	4.79	4.73	4.27	6.58	5.95	4.71	2.25	2.25	1.10	1.62
MAX	9.28	10.5	11.5	11.9	9.02	21.4	11.6	19.4	6.88	6.40	5.85	7.43
(WY)	1990	1989	1984	1996	1988	1994	1983	1989	1989	1984	1990	1989
MIN	.22	.67	.18	.12	.92	1.64	.74	.76	.41	.083	.12	.11
(WY)	1987	1981	1981	1981	1980	1985	1985	1986	1980	1980	1980	1980

01403150 WEST BRANCH MIDDLE BROOK NEAR MARTINSVILLE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1979 - 1997	
ANNUAL TOTAL	2077.64		1489.56			
ANNUAL MEAN	5.68		4.08		3.74	
HIGHEST ANNUAL MEAN					5.48	1989
LOWEST ANNUAL MEAN					1.88	1981
HIGHEST DAILY MEAN	181	Oct 19	181	Oct 19	181	Dec 11 1992
LOWEST DAILY MEAN	.37	Sep 5	.10	Sep 8	.00	Sep 19 1980
ANNUAL SEVEN-DAY MINIMUM	.42	Aug 30	.12	Sep 4	.00	Sep 19 1980
INSTANTANEOUS PEAK FLOW			569	Oct 19	569	Oct 19 1996
INSTANTANEOUS PEAK STAGE			6.89	Oct 19	6.89	Oct 19 1996
INSTANTANEOUS LOW FLOW			.10	Many days	.00	Sep 19 1980
ANNUAL RUNOFF (CFSM)	2.85		2.05		1.88	
ANNUAL RUNOFF (INCHES)	38.84		27.85		25.51	
10 PERCENT EXCEEDS	8.9		6.0		6.5	
50 PERCENT EXCEEDS	2.0		1.4		.90	
90 PERCENT EXCEEDS	.65		.19		.15	

e Estimated.



01403150 WEST BRANCH MIDDLE BROOK NEAR MARTINSVILLE, NJ, DAILY MEAN DISCHARGE

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ

LOCATION.--Lat 40°33'34", long 74°31'41", Somerset County, Hydrologic Unit 02030105, at Queens Bridge on Main street in Bound Brook, 1.7 mi upstream from Fieldsville Dam.

DRAINAGE AREA.--804 mi^2.

PERIOD OF RECORD.--Water years 1964-69, 1971-73, 1978, 1981 to current year. Published as "at Bound Brook" (station 01403000) 1964-66, and as "below Calco Dam at Bound Brook" (station 01403060) 1967-69.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997.

INSTRUMENTATION.--Water temperature data logger (in situ system, measurements recorded hourly) located 150 ft downstream from bridge.

REMARKS.--Instantaneous discharges are determined at Raritan River below Calco Dam at Bound Brook (station 01403060). Continuous records of water temperature were collected as part of the LINJ NAWQA study. On Jan. 28 and June 12, water-column synoptic studies were conducted at this site as part of the NAWQA program. For synoptic data from other sites, see section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section

COOPERATION.--Some field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Some samples were collected by USGS personnel for the LINJ NAWQA study.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
OCT 1996											
10...	1020	ENVIRONMENTAL	2780	200	7.6	18.0	14.5	753	8.8	89	--
22...	1010	ENVIRONMENTAL	4860	150	7.1	14.0	12.5	760	8.1	79	--
NOV											
14...	1200	ENVIRONMENTAL	690	263	7.5	--	7.0	772	11.6	94	<1.0
20...	1020	ENVIRONMENTAL	590	260	7.9	6.0	6.0	761	12.1	100	--
DEC											
06...	1150	ENVIRONMENTAL	6290	150	7.5	0.0	6.0	752	11.3	95	--
JAN 1997											
09...	*0950*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
09...	1100	ENVIRONMENTAL	810	260	8.1	-1.0	1.5	759	14.0	100	--
28...	1450	ENVIRONMENTAL	5110	320	7.5	3.5	2.0	--	--	--	--
FEB											
10...	1040	ENVIRONMENTAL	1350	300	7.8	3.0	2.0	765	12.7	91	--
13...	1130	ENVIRONMENTAL	990	314	7.7	--	2.0	770	13.8	99	<1.0
MAR											
10...	*1018*	*SPLIT REPLICATE*	--	*350*	*8.2*	*6.0*	*5.5*	*759*	*5.5*	*114*	--
10...	1020	ENVIRONMENTAL	970	350	8.2	6.0	5.5	759	14.1	114	--
APR											
03...	1100	ENVIRONMENTAL	4370	225	7.5	--	8.0	759	10.5	89	E1.8
17...	1000	ENVIRONMENTAL	910	260	8.9	6.0	12.5	755	11.9	113	--
17...	*1001*	*SPLIT REPLICATE*	--	--	--	--	--	--	--	--	--
21...	1130	ENVIRONMENTAL	1260	220	8.7	15.0	11.0	--	--	--	--
29...	0940	ENVIRONMENTAL	3180	210	7.7	13.5	13.0	755	9.6	92	--
MAY											
12...	1000	ENVIRONMENTAL	980	240	8.2	21.0	15.5	755	10.3	104	--
26...	1030	ENVIRONMENTAL	3250	170	7.2	22.0	17.0	757	8.0	83	--
JUN											
03...	1040	ENVIRONMENTAL	3610	200	7.3	16.0	15.0	763	8.4	84	--
04...	1100	ENVIRONMENTAL	1860	188	7.3	--	15.5	757	8.4	85	E1.6
12...	1100	ENVIRONMENTAL	360	310	7.7	23.0	22.5	755	8.0	94	--
24...	1330	ENVIRONMENTAL	210	434	7.8	--	--	--	--	--	--
JUL											
09...	1010	ENVIRONMENTAL	140	350	7.6	31.0	25.0	760	7.8	95	--
25...	1200	ENVIRONMENTAL	14300	120	7.2	31.0	17.5	766	8.8	91	--
31...	1100	ENVIRONMENTAL	270	216	7.6	--	24.5	765	11.5	138	E1.2
AUG											
13...	1000	ENVIRONMENTAL	140	370	7.2	28.0	24.5	761	6.9	83	--
13...	*1001*	*SPLIT REPLICATE*	--	--	*7.2*	--	--	--	--	--	--
SEP											
10...	*1025*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
10...	*1045*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
10...	1110	ENVIRONMENTAL	140	370	7.3	20.5	20.0	761	8.5	94	--

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 1996												
10...	--	--	61	15	5.6	12	2.9	50	--	42	41	18
22...	--	--	45	11	4.2	8.7	3.2	34	--	28	28	14
NOV												
14...	50	20	74	18	7.1	15	3.0	--	--	44	--	23
20...	--	--	84	21	7.7	16	2.5	61	--	51	50	26
DEC												
06...	--	--	49	12	4.6	9.2	2.1	36	--	31	30	13
JAN 1997												
09...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
09...	--	--	80	19	7.8	16	2.0	51	--	46	42	24
28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
10...	--	--	63	15	6.2	29	1.8	40	--	36	33	21
13...	<20	<10	63	15	6.1	29	2.1	--	--	32	--	22
MAR												
10...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*44*	*--*	*--*	*36*	*--*
10...	--	--	77	19	7.2	33	2.0	44	--	40	36	24
APR												
03...	130	160	45	11	4.2	22	1.9	--	--	23	--	16
17...	--	--	73	18	6.9	19	1.9	52	.20	47	42	24
17...	*--*	*--*	*72*	*18*	*6.8*	*19*	*1.9*	*--*	*--*	*47*	*--*	*24*
21...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	60	15	5.6	14	1.8	45	--	37	37	17
MAY												
12...	--	--	71	18	6.7	16	1.9	53	--	45	43	21
26...	--	--	47	12	4.4	12	2.3	35	--	30	29	14
JUN												
03...	--	--	61	15	5.6	13	2.1	50	--	41	41	16
04...	2400	350	54	13	5.2	13	2.2	--	--	33	--	17
12...	--	--	86	21	8.1	22	2.8	62	--	63	51	33
24...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
09...	--	--	93	23	8.7	25	3.6	59	--	50	48	40
25...	--	--	33	8.3	2.9	6.0	3.0	25	--	22	21	10
31...	490	100	63	15	6.1	15	2.7	--	--	34	--	25
AUG												
13...	--	--	110	26	9.5	26	3.5	61	--	53	50	43
13...	*--*	*--*	*110*	*27*	*9.6*	*26*	*3.6*	*--*	*--*	*52*	*--*	*43*
SEP												
10...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
10...	*--*	*--*	*--*	*<.02*	*<.01*	*<.2*	*<.1*	*--*	*--*	*2.0*	*--*	*<.1*
10...	--	--	100	24	9.4	27	3.3	67	--	56	55	43

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT 1996												
10...	18	.1	9.1	120	113	--	.01	1.6	.02	.7	.40	2.3
22...	14	.1	9.7	108	87	--	.02	1.0	.03	.5	.30	1.5
NOV												
14...	23	.2	11	148	135	5	--	1.8	--	.4	.21	2.2
20...	25	.1	11	150	148	--	.01	1.8	.06	.3	.20	2.1
DEC												
06...	15	<.1	8.9	89	87	--	.02	1.0	.04	.9	.30	1.9
JAN 1997												
09...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
09...	27	.1	11	146	141	--	.02	2.0	.04	.3	.20	2.3
28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
10...	48	.1	10	162	159	--	.03	1.8	.04	.3	.20	2.1
13...	48	.1	11	160	162	5	--	2.1	--	.3	.13	2.4
MAR												
10...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
10...	58	.2	8.5	188	182	--	.01	1.8	.02	.3	.18	2.1
APR												
03...	39	.1	8.0	131	121	23	--	1.2	--	.4	.24	1.6
17...	32	<.1	6.3	157	139	--	.01	1.2	<.015	.4	.18	1.6
17...	*32*	*<.1*	*6.2*	*158*	*142*	*--*	*.01*	*1.3*	*<.015*	*.4*	*.20*	*1.7*
21...	--	--	--	--	--	--	--	--	--	--	--	--
29...	23	<.1	7.4	123	112	--	.01	1.1	.05	.7	.40	1.7
MAY												
12...	27	<.1	7.5	129	130	--	.01	1.3	<.02	.4	.20	1.7
26...	16	.1	5.7	95	88	--	.02	1.1	.12	1.1	.50	2.3
JUN												
03...	20	.1	8.5	131	112	--	.03	1.3	.10	.9	.50	2.2
04...	19	.1	8.8	116	105	16	--	1.5	--	.8	.49	2.3
12...	34	.1	8.6	192	171	--	.03	2.1	.04	.6	.30	2.7
24...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
09...	35	.2	6.9	213	188	--	.02	3.3	.04	.5	.40	3.8
25...	8.6	<.1	5.4	84	65	--	.02	1.7	.07	1.0	.60	2.7
31...	21	.1	10	145	123	<1	--	1.9	--	.3	.29	2.2
AUG												
13...	39	.2	5.8	214	198	--	.02	2.8	.05	.7	.50	3.5
13...	*38*	*.2*	*5.9*	*207*	*199*	*--*	*.02*	*3.0*	*.05*	*.7*	*.50*	*3.7*
SEP												
10...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
10...	*<.1*	*<.1*	*.02*	*7*	*--*	*--*	*<.01*	*.05*	*<.02*	*<.2*	*<.20*	*--*
10...	36	.2	6.0	222	197	--	.01	3.0	.03	.5	.40	3.5

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITROGEN DIS-SOLVED (MG/L AS N) (00602)	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996											
10...	2.0	.18	.09	.10	54	47	25	5.4	1.0	32	242
22...	1.3	.18	.09	.07	43	470	35	6.2	1.4	30	391
NOV											
14...	2.0	.14	.10	--	--	--	--	3.6	.3	--	--
20...	2.0	.16	.12	.12	60	79	32	2.8	.2	1	2.2
DEC											
06...	1.3	.26	.05	.07	33	68	23	4.1	3.6	177	3000
JAN 1997											
09...	--	--	--	--	--	--	--	*<.1*	--	--	--
09...	2.2	.10	.08	.09	43	75	35	1.9	.3	2	4.2
28...	--	--	--	--	--	--	--	--	--	--	--
FEB											
10...	2.0	.07	.07	.04	37	57	35	2.1	.2	7	26
13...	2.2	.06	.04	--	--	--	--	2.3	.4	--	--
MAR											
10...	--	--	--	--	--	--	--	--	--	--	--
10...	2.0	.07	.04	.07	50	86	43	2.2	.4	5	12
APR											
03...	1.4	.07	.06	--	--	--	--	3.9	1.3	--	--
17...	1.4	.13	.11	.11	45	110	38	2.8	.7	5	13
17...	*1.5*	*.14*	*.10*	*.11*	*42*	*100*	*36*	--	--	*5*	--
21...	--	--	--	--	--	--	--	--	--	--	--
29...	1.4	.13	.08	.05	39	87	32	4.2	--	25	211
MAY											
12...	1.5	.10	.09	.10	46	140	40	2.9	.3	3	7.1
26...	1.6	.29	.08	.08	46	110	22	6.4	--	122	1070
JUN											
03...	1.8	.22	.06	.08	50	90	20	5.4	2.5	64	626
04...	2.0	.14	.06	--	--	--	--	4.7	1.2	--	--
12...	2.4	.30	.20	.22	74	81	48	3.9	.3	5	5.1
24...	--	--	--	--	--	--	--	--	--	--	--
JUL											
09...	3.7	.56	.55	.42	110	65	42	3.6	.4	3	1.2
25...	2.3	.27	.12	.11	40	70	44	6.5	1.9	114	4380
31...	2.2	--	.12	--	--	--	--	4.6	.2	--	--
AUG											
13...	3.3	.58	.48	.48	140	63	24	3.8	.7	2	.83
13...	*3.5*	*.59*	*.49*	*.50*	*140*	*60*	*23*	*3.8*	*.4*	*.9*	--
SEP											
10...	--	--	--	--	--	--	--	*.1*	*<.2*	--	--
10...	--	*.03*	*.01*	*.01*	*<4.0*	*<3*	*<1*	--	--	--	--
10...	3.4	.45	.38	.39	96	47	25	3.1	.2	4	1.5

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
14...	1200	<10	1	<10	40	<1	1.0	2
JUN 1997								
04...	1100	10	2	<10	40	<1	1.0	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
14...	340	<1	30	<.1	2	<1	<10
JUN 1997							
04...	840	2	80	<.1	2	<1	10

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE NEW JERSEY DEPARTMENT OF HEALTH, PUBLIC HEALTH, AND ENVIRONMENTAL LABORATORIES

DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV 1996				
14...	1200	.010	.04	.03
FEB 1997				
13...	1130	.011	.06	<.03
APR				
03...	1100	.008	<.03	<.03
JUN				
04...	1100	.031	.09	.09
JUL				
31...	1100	.011	.03	.04

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels in "Explanation of Records" section). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels in "Explanation of Records" section). Only pesticides measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)
OCT 1996										
10...	1020	ENVIRONMENTAL	<.002	.007	.035	E.0178	<.002	E.2330	<.003	<.004
22...	1010	ENVIRONMENTAL	<.002	.008	.035	E.0322	<.002	E.0323	E.0110	<.004
NOV										
20...	1020	ENVIRONMENTAL	<.002	.005	.032	E.0398	<.002	<.003	<.003	<.004
20...	*1022*	*SPLIT SPIKE*	*E.1370*	*.135*	*.169*	*E.1580*	*E.1230*	*E.2520*	*E.1980*	*.130*
20...	*1023*	*SPLIT SPIKE*	*E.1310*	*.129*	*.162*	*E.1400*	*E.1180*	*E.2410*	*E.1910*	*.128*
20...	*1024*	*SPLIT SPIKE*	--	--	--	--	--	--	--	--
20...	*1025*	*SPLIT SPIKE*	--	--	--	--	--	--	--	--
DEC										
06...	1150	ENVIRONMENTAL	<.002	.005	.017	E.0055	<.002	E.0089	<.003	E.0013
JAN 1997										
09...	*1010*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.002*	*<.003*	*<.003*	*<.004*
09...	1100	ENVIRONMENTAL	<.002	.006	.031	E.0318	<.002	<.003	E.0042	<.004
MAR										
10...	1020	ENVIRONMENTAL	<.002	.005	.025	E.0102	<.002	<.003	<.003	<.004
APR										
29...	0940	ENVIRONMENTAL	<.002	.005	.036	E.0170	<.002	E.0380	<.010	<.004
MAY										
12...	1000	ENVIRONMENTAL	.008	.010	.108	E.0282	<.002	<.010	E.0176	<.004
JUL										
09...	1010	ENVIRONMENTAL	<.002	.008	.181	E.0199	<.002	E.0465	E.0154	<.004
25...	1200	ENVIRONMENTAL	.021	.073	.344	E.0392	<.002	E.0842	E.0110	.009
AUG										
13...	1000	ENVIRONMENTAL	<.002	.007	.056	E.0181	<.002	E.0071	<.003	<.004
13...	*1001*	*SPLIT SPIKE*	*<.002*	*.007*	*.049*	*E.0222*	*<.002*	*E.0074*	*<.003*	*<.004*
SEP										
10...	*1055*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.002*	*<.003*	*<.003*	*<.004*
10...	1110	ENVIRONMENTAL	<.002	<.002	.030	E.0165	<.002	<.003	<.003	<.004

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
OCT 1996											
10...	<.004	E.0026	.041	<.004	<.005	.036	<.004	<.003	<.004	.021	<.004
22...	<.025	.007	.020	<.004	<.005	.039	<.004	<.003	<.004	.020	<.004
NOV											
20...	<.004	<.002	<.002	<.004	<.005	.030	<.004	<.003	<.004	E.0144	.005
20...	.175	.144	.157	.136	E.1430	.186	E.1350	.130	.119	.139	E.1660
20...	.170	.137	.130	.136	.139	E.1810	E.1300	.128	.118	.134	E.1590
20...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	<.004	<.002	.028	<.004	<.005	.012	<.004	<.003	<.004	E.0071	<.004
JAN 1997											
09...	<.004	<.002	<.002	<.004	<.005	<.002	<.004	<.003	<.004	<.018	<.004
09...	<.004	<.002	<.008	<.004	<.005	.016	<.004	<.003	<.004	E.0077	<.004
MAR											
10...	<.004	<.002	<.002	<.004	<.005	.028	<.004	<.003	<.004	E.0102	<.004
APR											
29...	.025	<.002	.025	<.004	<.005	.053	<.004	<.003	<.010	.018	<.004
MAY											
12...	.019	E.0023	<.002	<.004	<.005	.052	<.004	<.003	<.004	.041	<.004
JUL											
09...	.101	.005	<.002	<.004	<.005	.152	<.004	<.003	<.004	.043	<.004
25...	.109	E.0023	.103	<.004	<.005	.783	.018	.014	<.004	.036	<.004
AUG											
13...	.017	E.0022	<.002	<.004	<.005	.052	<.004	<.003	<.004	.021	<.004
13...	.021	E.0022	<.002	<.004	<.005	.052	<.004	<.003	<.004	.020	<.004
SEP											
10...	<.004	<.002	<.002	<.004	<.005	<.002	<.004	<.003	<.004	<.018	<.004
10...	<.004	<.002	<.002	<.004	<.005	.018	<.004	<.003	<.004	.075	<.004

DATE	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	2,4-D, DIS-SOLVED (UG/L) (39732)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	FLUO-METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)
OCT 1996											
10...	.005	<.010	<.002	<.016	E.030	<.028	<.05	<.035	.320	<.02	<.035
22...	.008	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
NOV											
20...	<.005	E.0068	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
20...	.163	E.2340	E.1240	--	--	--	--	--	--	--	--
20...	.156	E.2230	E.1220	--	--	--	--	--	--	--	--
20...	--	--	--	<.016	1.20	.970	.60	E.9600	.690	.99	1.10
20...	--	--	--	<.016	1.10	.810	.56	E1.000	.600	.92	.960
DEC											
06...	.006	<.010	E.0017	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
JAN 1997											
09...	<.005	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
09...	E.0045	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	E.110
MAR											
10...	.006	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	E.040
APR											
29...	.071	<.010	<.002	<.016	E.0200	<.028	.10	<.035	.57	E.0200	<.035
MAY											
12...	.024	<.010	.004	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
JUL											
09...	.024	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
25...	.033	<.010	E.0040	<.016	.05	<.028	<.05	<.035	<.035	<.02	<.035
AUG											
13...	.012	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
13...	.010	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
SEP											
10...	<.005	<.010	<.002	--	--	--	--	--	--	--	--
10...	.009	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	.05

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Samples were analyzed for volatile organic compounds (VOCs) on schedule 2020 (listed with minimum reporting levels in "Explanation of Records" section). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)
OCT 1996										
10...	1020	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
22...	1010	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
NOV										
20...	1020	ENVIRONMENTAL	<.05	E.007	<.05	<.05	<.10	<.05	<.05	<.05
20...	1026	CONCURRENT SPIKE	<.05	2.20	<.05	<.05	2.60	<.05	<.05	<.05
20...	1027	CONCURRENT SPIKE	<.05	2.20	<.05	<.05	2.60	<.05	<.05	<.05
DEC										
06...	1150	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
JAN 1997										
09...	1100	ENVIRONMENTAL	<.05	E.007	<.05	<.05	<.10	<.05	<.05	<.05
28...	1450	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
FEB										
12...	1430	ENVIRONMENTAL	<.05	<.05	<.05	<.05	<.10	<.05	<.05	<.05
MAR										
10...	1020	ENVIRONMENTAL	<.05	E.005	<.05	<.05	<.10	<.05	<.05	<.05
APR										
21...	1130	ENVIRONMENTAL	<.05	E.006	<.05	<.05	<.10	<.05	<.05	<.05
29...	0940	ENVIRONMENTAL	<.05	<.05	<.05	<.05	<.10	<.05	<.05	<.05
MAY										
12...	1000	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
JUN										
24...	1330	ENVIRONMENTAL	<.06	<.06	<.06	<.13	<.09	<.46	<.48	<.25
JUL										
09...	1010	ENVIRONMENTAL	<.06	<.06	<.06	<.13	<.09	<.46	<.48	<.25
25...	1200	ENVIRONMENTAL	<.06	<.06	<.06	<.13	<.09	<.46	<.48	<.25
AUG										
13...	1000	ENVIRONMENTAL	<.06	<.06	<.06	<.13	<.09	<.46	<.48	<.25
13...	1001	CONCURRENT REPLICATE	<.064	<.064	<.064	<.132	<.088	<.46	<.48	<.248
SEP										
10...	1110	ENVIRONMENTAL	<.03	<.03	<.03	<.07	<.04	<.23	<.24	<.12

DATE	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)
OCT 1996											
10...	<.40	E.007	<.10	<.10	E.009	<.10	<.10	<.10	E.004	<.10	<10
22...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
NOV											
20...	<.20	E.010	<.05	E.050	E.010	E.010	E.010	E.030	<.05	<.05	<5.0
20...	E.010	E.010	<.05	E.050	E.030	E.010	2.20	E.070	<.05	<.05	20
20...	E.010	E.010	<.05	E.050	E.030	E.010	2.20	E.070	<.05	<.05	20
DEC											
06...	<.40	E.050	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
JAN 1997											
09...	E.010	<.05	<.05	E.030	<.05	E.020	E.010	E.009	<.05	<.05	E.500
28...	<.40	E.010	<.10	<.10	<.10	<.10	<.10	E.020	<.10	<.10	<10
FEB											
12...	<.20	<.05	<.05	E.020	<.05	E.010	E.010	E.020	<.05	<.05	E.300
MAR											
10...	E.009	E.010	<.05	E.020	<.05	E.010	E.010	E.020	<.05	<.05	<5.0
APR											
21...	E.008	<.05	<.05	E.020	E.008	E.006	E.008	E.010	<.05	<.05	<5
29...	<.20	<.05	<.05	E.010	E.009	<.05	<.05	E.020	<.05	<.05	<5
MAY											
12...	<.40	<.10	<.10	E.020	<.10	<.10	<.10	<.10	<.10	<.10	<10
JUN											
24...	E.02	<.11	<.09	E.07	<.13	E.040	<.10	<.13	<.08	<.22	E2
JUL											
09...	E.07	<.11	<.09	E.1	<.13	E.090	E.03	<.13	<.08	<.22	E.8
25...	<.38	<.11	<.09	<.10	<.13	<.11	<.10	<.13	E.03	<.22	<3.3
AUG											
13...	<.38	<.11	<.09	E.04	<.13	E.060	<.10	<.13	<.08	<.22	<3.3
13...	E.03	<.112	<.088	E.07	<.128	E.07	E.01	<.128	<.084	<.22	<3.3
SEP											
10...	E.02	<.06	<.04	E.02	<.06	E.030	E.01	<.06	<.04	<.11	<1.6

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	ACRO-LEIN TOTAL (UG/L) (34210)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)
OCT 1996										
10...	<.10	<4.0	<10	<10	<.10	E.090	E.009	E.010	E.020	<.20
22...	<.10	<4.0	<10	<10	E.100	E.060	E.007	E.010	<.20	<.20
NOV										
20...	<.05	<2.0	<5.0	<5.0	.39	.18	E.030	E.030	E.070	<.10
20...	E.005	<2.0	<5.0	<5.0	.52	2.50	E.030	<.05	2.40	<.10
20...	E.005	<2.0	<5.0	3.1	.50	2.50	E.030	<.05	2.40	<.10
DEC										
06...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
JAN 1997										
09...	<.05	<2.0	<5.0	<5.0	.13	.15	<.05	E.040	E.070	<.10
28...	<.10	<4.0	<10	E3.40	<.10	<.20	<.10	<.10	<.20	<.20
FEB										
12...	<.05	<2.0	<5.0	E1.50	.12	E.040	E.006	E.030	<.10	<.10
MAR										
10...	E.004	<2.0	<5.0	<5.0	E.070	E.070	<.05	E.020	E.030	<.10
APR										
21...	<.05	<2	<5	2.3	E.060	E.070	E.020	E.010	<.10	<.10
29...	<.05	<2	<5	E1	E.040	E.040	E.010	E.008	<.10	<.10
MAY										
12...	<.10	<4	<10	<10	E.050	<.20	<.10	<.10	<.20	<.20
JUN										
24...	<.20	<2.9	<.75	E9	.71	.61	E.040	E.020	E.1	E.1
JUL										
09...	<.20	<2.9	<.75	E4	.79	.96	<.16	E.010	.32	<.24
25...	<.20	<2.9	<.75	<9.8	E.1	<.10	E.090	<.06	<.36	<.24
AUG										
13...	<.20	<2.9	<.75	E4	E.1	.94	<.16	E.010	.42	<.24
13...	<.20	<2.86	<.75	E5	.43	1.0	<.16	E.01	.45	<.24
SEP										
10...	<.10	<1.4	<.37	E3	.26	.69	<.08	E.010	.32	<.12

DATE	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
OCT 1996										
10...	E.060	<.10	<.40	<.21	<.20	<.10	<.10	<.10	.72	<.10
22...	<.40	<.10	<.40	<.20	<.20	E.010	<.10	<.10	.53	<.10
NOV										
20...	<.20	E.010	<.20	<.10	E.040	E.010	<.05	E.080	.95	<.05
20...	E.090	E.080	<.20	3.80	3.90	2.30	<.05	.120	3.30	E.020
20...	E.100	E.090	<.20	3.80	4.00	2.30	<.05	.110	3.40	E.020
DEC										
06...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	E.050	.64	<.10
JAN 1997										
09...	E.040	E.010	<.20	<.10	E.030	E.005	<.05	E.040	.67	<.05
28...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	<.10	.67	<.10
FEB										
12...	<.20	E.010	<.20	<.10	<.10	E.007	<.05	E.040	.91	<.05
MAR										
10...	<.20	E.010	<.20	<.10	<.10	E.007	<.05	E.040	.79	<.05
APR										
21...	<.20	E.008	<.20	<.10	<.10	<.05	<.05	E.060	1.1	<.05
29...	<.10	E.009	<.20	<.10	<.10	<.05	<.05	E.050	.68	<.05
MAY										
12...	<.40	<.10	<.40	.66	<.20	<.10	<.10	<.10	.58	<.10
JUN										
24...	E.20	<.08	<.19	<.76	E.10	<.06	E.040	E.070	1.3	<.37
JUL										
09...	<.51	<.08	<.19	<.76	E.08	<.06	<.15	E.070	.34	<.37
25...	<.51	<.08	<.19	<.76	<.34	<.06	<.15	E.10	.29	<.37
AUG										
13...	<.51	<.08	<.19	<.76	E.1	<.06	<.15	<.08	.53	<.37
13...	<.51	<.08	<.19	<.76	E.1	<.06	<.15	<.08	.56	<.37
SEP										
10...	<.25	E.010	<.10	<.38	<.17	<.03	<.08	E.030	.20	<.19

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	BROMO-FORM TOTAL (UG/L) (32104)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
OCT 1996										
10...	<.10	<.40	<.10	<.20	E.010	<10	<.40	E.010	<.20	.26
22...	<.10	<.40	E.009	E.030	E.010	<10	<.40	E.010	<.20	E.100
NOV										
20...	<.05	E.040	E.005	E.010	E.040	<5.0	<.20	E.020	<.10	.44
20...	*<.05*	*E.050*	*E.005*	*<.100*	*2.30*	*<5.0*	*2.40*	*2.40*	*<.10*	*.460*
20...	*<.05*	*E.050*	*E.005*	*<.100*	*2.30*	*<5.0*	*2.50*	*2.40*	*<.10*	*.450*
DEC										
06...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	E.050
JAN 1997										
09...	<.05	E.010	<.05	E.040	E.030	<5.0	<.20	E.020	<.10	.25
28...	<.10	<.40	<.10	E.020	<.10	<10	<.40	<.10	<.20	E.030
FEB										
12...	<.05	<.20	<.05	E.080	E.030	<5.0	<.20	E.020	<.10	E.090
MAR										
10...	<.05	E.010	<.05	E.030	E.020	<5.0	<.20	E.020	<.10	.21
APR										
21...	<.05	<.20	<.05	E.050	E.020	<5	<.20	E.010	<.10	.31
29...	<.05	<.20	<.05	E.010	E.010	<5	<.20	E.010	<.10	.12
MAY										
12...	<.10	<.20	<.10	<.20	<.10	<10	<.4	<.1	<.2	E.1
JUN										
24...	<.08	<.50	<.08	<.22	E.020	<2.3	<.21	E.020	<.18	1.8
JUL										
09...	<.08	<.50	<.08	<.22	E.030	<2.3	<.21	E.020	<.18	2.9
25...	<.08	<.50	<.08	<.22	<.08	<2.3	<.21	<.08	<.18	E.040
AUG										
13...	<.08	<.50	<.08	<.22	E.040	E.40	<.21	E.010	<.18	2.0
13...	*<.084*	*<.50*	*<.08*	*<.22*	*E.040*	*E.40*	*E.05*	*E.010*	*<.18*	*2.3*
SEP										
10...	<.04	<.25	<.04	<.11	E.030	<1.1	E.030	E.010	<.09	1.5

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	17.5	14.5	16.0
2	---	---	---	---	---	---	---	---	---	16.5	13.5	15.0
3	---	---	---	---	---	---	---	---	---	14.5	12.5	14.0
4	---	---	---	---	---	---	---	---	---	14.0	13.0	13.5
5	---	---	---	---	---	---	---	---	---	15.5	13.0	14.0
6	---	---	---	---	---	---	---	---	---	15.5	14.0	14.5
7	---	---	---	---	---	---	---	---	---	14.5	12.5	13.5
8	---	---	---	---	---	---	---	---	---	14.0	11.5	13.0
9	---	---	---	---	---	---	---	---	---	13.0	12.5	12.5
10	---	---	---	---	---	---	11.0	8.0	9.5	14.0	12.0	13.0
11	---	---	---	---	---	---	11.0	8.5	9.5	16.0	12.5	14.0
12	---	---	---	---	---	---	9.0	8.5	9.0	18.0	14.5	16.0
13	---	---	---	---	---	---	11.0	9.0	10.0	16.5	15.0	16.0
14	---	---	---	---	---	---	12.5	10.0	11.0	16.0	13.5	15.0
15	---	---	---	---	---	---	13.5	10.5	11.5	18.5	14.5	16.5
16	---	---	---	---	---	---	14.0	11.0	12.0	17.5	15.0	16.5
17	---	---	---	---	---	---	13.0	11.5	12.5	15.0	14.0	14.5
18	---	---	---	---	---	---	11.5	8.0	10.0	16.0	13.0	14.5
19	---	---	---	---	---	---	9.0	7.0	8.0	19.0	14.0	16.5
20	---	---	---	---	---	---	11.0	9.0	10.0	20.0	17.0	18.5
21	---	---	---	---	---	---	12.5	10.0	11.0	18.0	15.5	17.0
22	---	---	---	---	---	---	13.0	10.5	12.0	17.5	14.5	15.5
23	---	---	---	---	---	---	13.0	11.5	12.0	18.5	13.5	16.0
24	---	---	---	---	---	---	13.0	11.0	12.0	19.5	15.0	17.5
25	---	---	---	---	---	---	14.5	11.0	12.5	18.0	16.5	17.5
26	---	---	---	---	---	---	16.5	12.0	14.0	17.5	16.0	17.0
27	---	---	---	---	---	---	17.0	12.5	14.5	18.0	16.5	17.5
28	---	---	---	---	---	---	14.5	11.0	12.5	19.0	16.0	17.5
29	---	---	---	---	---	---	15.0	12.0	13.5	19.5	16.5	18.0
30	---	---	---	---	---	---	17.5	14.0	15.5	18.0	17.0	17.5
31	---	---	---	---	---	---	---	---	---	20.0	17.0	18.0
MONTH	---	---	---	---	---	---	---	---	---	20.0	11.5	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.0	18.5	19.0	27.0	23.0	24.5	26.5	21.5	24.0	26.5	22.0	24.0
2	19.0	16.5	17.5	25.0	23.5	24.5	26.5	22.5	24.5	26.0	22.5	24.0
3	16.5	15.0	15.5	26.5	23.5	25.0	27.5	22.5	25.0	26.5	20.0	23.5
4	16.0	14.5	15.5	26.5	23.0	24.5	25.5	23.0	24.0	25.5	18.0	21.5
5	18.5	15.5	17.0	26.0	22.0	24.0	26.0	22.0	24.0	25.5	17.0	21.0
6	18.5	16.5	17.5	25.5	21.5	23.5	25.5	22.0	23.5	24.5	19.0	21.0
7	18.0	16.5	17.5	25.5	21.5	23.5	26.0	21.0	23.5	26.0	19.0	22.0
8	19.0	16.0	17.5	27.0	22.0	24.0	26.0	20.0	23.0	23.5	20.5	21.5
9	20.0	16.5	18.5	27.0	23.0	24.5	28.5	21.0	24.0	23.0	20.0	21.0
10	21.0	17.5	19.5	26.5	23.5	24.5	27.0	21.0	24.0	20.5	19.5	20.0
11	22.5	19.0	21.0	27.0	22.5	24.5	28.5	21.5	25.0	21.0	20.0	20.5
12	23.0	20.5	21.5	27.5	22.0	24.5	26.0	23.5	24.5	22.0	20.0	21.0
13	22.0	21.0	21.5	28.0	23.0	25.0	26.5	23.5	24.5	23.0	20.5	21.5
14	23.0	20.5	21.5	28.5	23.5	25.5	28.5	23.5	25.5	23.5	20.0	22.0
15	22.5	20.0	21.0	29.0	24.0	26.5	28.0	23.0	25.0	25.0	20.0	22.0
16	22.0	19.5	20.5	30.0	25.0	27.5	30.0	24.0	26.5	25.0	20.0	22.0
17	20.5	19.5	20.0	30.0	25.0	27.5	30.0	25.0	27.0	26.0	20.0	22.5
18	20.0	19.5	19.5	29.0	25.5	27.0	27.0	24.0	25.5	26.5	20.5	22.5
19	22.0	19.5	20.5	27.5	24.0	25.5	26.0	22.5	24.0	27.0	18.5	22.5
20	23.5	20.5	22.0	26.5	22.5	24.5	23.0	20.0	21.5	24.5	20.5	22.0
21	25.0	21.5	23.0	26.5	22.0	24.0	22.0	19.0	20.5	24.5	18.0	20.5
22	26.0	22.5	24.0	---	---	---	24.5	20.5	22.5	23.5	15.5	19.0
23	25.5	22.5	24.0	24.0	22.5	23.0	23.5	20.5	22.0	18.5	17.5	18.0
24	24.5	22.0	23.5	22.5	18.0	19.5	26.0	19.5	22.5	18.5	15.5	17.0
25	28.0	22.5	25.0	19.5	17.0	18.0	25.5	20.5	22.5	20.5	14.0	17.0
26	28.5	24.0	25.5	21.5	19.0	20.0	26.5	20.5	23.0	21.5	15.5	18.5
27	27.5	22.5	24.5	25.0	21.5	23.0	26.0	20.5	23.0	22.5	15.5	18.5
28	28.0	22.0	24.5	26.5	23.0	25.0	23.0	21.5	22.0	19.5	16.0	17.5
29	28.5	22.0	25.0	26.5	23.5	25.0	25.5	21.5	23.0	21.5	18.0	19.0
30	27.0	22.0	24.5	26.0	21.5	23.5	27.0	21.0	23.5	21.0	17.5	18.5
31	---	---	---	26.5	21.0	23.5	27.0	21.0	23.5	---	---	---
MONTH	28.5	14.5	21.0	30.0	17.0	24.0	30.0	19.0	24.0	27.0	14.0	20.5

01403400 GREEN BROOK AT SEELEY MILLS, NJ

LOCATION.--Lat 40°39'58", long 74°24'15" (revised), Somerset County, Hydrologic Unit 02030105, on right bank at Seeley Mills, 250 ft downstream from Blue Brook, 300 ft downstream from bridge on Diamond Hill Road, and 0.5 mi northwest of Scotch Plains.

DRAINAGE AREA.--6.23 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959-64, 1969: annual maximum, water years 1969-79. June 1979 to current year. Fragmentary records 1944-53 in the files of the Geological Survey. Crest-stage data 1927-38, 1958-68 in files of Union County Park Commission.

REVISED RECORDS.--WDR-NJ 81-1: 1979(M). WDR-NJ 87-1: 1971(M), 1973(M), 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 184.44 ft above sea level. From 1944 to 1953, water-stage recorder and masonry dam about 400 ft downstream above lower Seeley Mills dam at different datum. From July 1969 to May 1979, crest-stage gage about 450 ft downstream below lower Seeley Mills dam (washed out May 29, 1968) at different datum.

REMARKS.--Records are poor. Several measurements of water temperature were made during the year. Rain-gage and gage-height radio telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 23, 1938 reached an elevation of 196.5 ft, New Jersey Geological Survey datum, above lower Seeley Mills dam, discharge, 5,840 ft^3/s, computed by State Water Policy Commission.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1545	*2,190	*7.05	Dec. 14	0845	253	2.40
Nov. 26	0900	308	2.63	July 24	1215	303	2.61
Dec. 2	0445	331	2.72	July 25	0230	838	4.26

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	e7.0	46	e7.0	e10	2.2	95	6.2	2.6	1.6	1.5	1.4
2	4.1	e6.0	111	e6.0	e9.0	2.5	49	5.2	43	1.7	1.5	1.5
3	3.2	e5.0	28	e6.0	e9.0	3.1	25	52	20	1.7	1.5	1.5
4	2.6	e4.0	15	e6.0	e9.0	5.9	14	44	5.5	1.6	1.5	1.4
5	2.7	e4.0	11	e6.0	53	8.8	10	21	3.7	1.6	1.7	1.3
6	2.6	e4.0	71	e5.0	20	16	8.1	21	3.3	1.6	1.6	1.3
7	2.6	e4.0	73	e5.0	8.8	8.4	6.7	15	3.1	1.6	1.5	1.3
8	55	e4.0	67	e4.0	5.9	6.6	5.4	11	2.7	1.6	1.4	1.3
9	50	30	28	e4.0	5.0	5.5	5.1	21	2.5	2.6	1.4	1.3
10	31	11	18	e6.0	3.5	15	4.3	13	2.5	2.1	1.4	1.3
11	13	e4.0	19	e5.0	2.8	12	3.9	9.2	2.5	1.6	1.4	13
12	9.1	e3.0	23	e4.0	2.4	7.9	23	7.4	2.5	1.6	1.4	1.8
13	7.7	e3.0	22	e4.0	2.0	6.5	25	5.7	4.3	1.6	1.4	1.6
14	7.3	e4.0	108	e4.0	43	87	7.4	5.3	2.5	1.6	1.4	1.6
15	7.3	e4.0	38	e3.0	36	63	5.5	4.7	2.4	1.6	1.4	1.5
16	7.1	e3.0	21	38	9.0	18	4.7	4.3	2.3	1.5	1.4	1.5
17	6.9	e3.0	18	11	4.1	11	4.9	3.9	2.3	1.6	1.5	1.5
18	7.7	e3.0	14	e8.0	2.7	9.1	8.6	3.8	2.2	3.2	2.4	1.6
19	554	e3.0	16	e5.0	2.8	7.2	6.2	4.0	5.7	1.8	1.4	1.5
20	91	e3.0	12	e4.0	2.9	7.3	4.4	8.6	2.2	1.5	4.1	1.7
21	32	e3.0	9.2	e4.0	2.7	6.0	3.8	3.9	2.1	1.5	4.2	1.7
22	e11	e3.0	9.2	e6.0	3.3	5.3	3.7	3.5	2.0	7.3	1.5	1.5
23	e7.0	e3.0	9.2	e8.0	2.7	4.0	3.4	3.2	1.9	1.5	1.4	1.5
24	e10	e3.0	17	e6.0	2.2	3.7	3.6	2.9	1.9	95	1.4	1.5
25	e10	e3.0	16	72	1.8	3.5	3.1	21	1.9	e230	1.4	1.6
26	e9.0	82	9.2	13	1.9	17	2.7	12	1.9	5.4	1.4	1.6
27	e8.0	22	e8.0	8.2	2.8	6.0	2.4	3.8	1.7	2.2	1.4	1.6
28	e9.0	9.8	e7.0	50	2.1	4.7	53	3.2	1.7	2.0	1.6	1.6
29	e9.0	8.2	e7.0	18	---	15	13	2.9	1.7	1.7	1.4	2.3
30	e8.0	8.2	e8.0	e11	---	9.9	6.0	2.9	1.6	1.6	1.4	1.5
31	e7.0	---	e7.0	e10	---	116	---	2.8	---	1.6	1.4	---
TOTAL	988.0	257.2	865.8	347.2	260.4	494.1	410.9	328.4	136.2	385.1	51.3	57.3
MEAN	31.9	8.57	27.9	11.2	9.30	15.9	13.7	10.6	4.54	12.4	1.65	1.91
MAX	554	82	111	72	53	116	95	52	43	230	4.2	13
MIN	2.6	3.0	7.0	3.0	1.8	2.2	2.4	2.8	1.6	1.5	1.4	1.3
CFSM	5.12	1.38	4.48	1.80	1.49	2.56	2.20	1.70	.73	1.99	.27	.31
IN.	5.90	1.54	5.17	2.07	1.55	2.95	2.45	1.96	.81	2.30	.31	.34

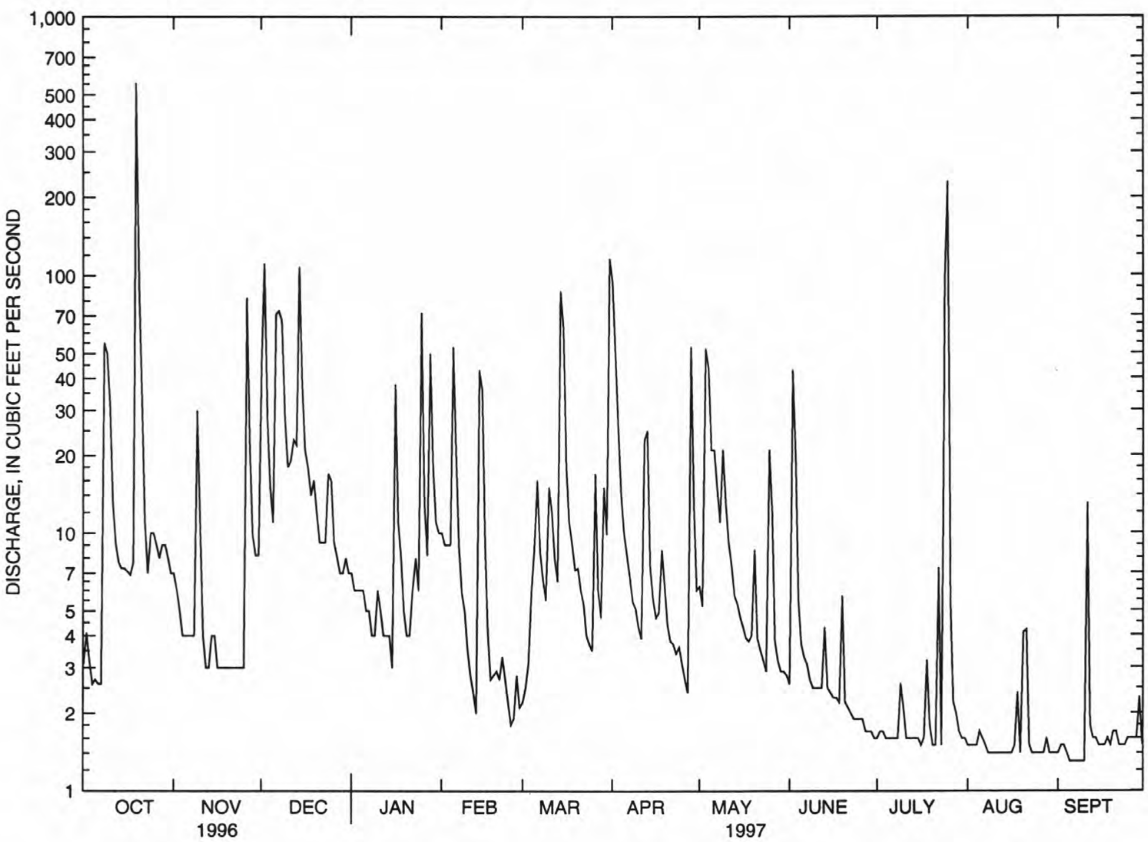
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.91	10.3	12.6	12.1	11.3	17.5	18.4	12.9	7.27	7.16	4.67	5.53
MAX	31.9	22.4	46.9	27.1	20.9	40.9	41.1	42.0	23.4	18.9	16.1	24.6
(WY)	1997	1986	1984	1996	1984	1994	1983	1989	1992	1984	1990	1989
MIN	1.21	2.04	2.57	1.67	2.95	5.11	3.50	4.48	2.74	1.68	1.33	1.68
(WY)	1995	1982	1981	1981	1980	1985	1985	1986	1981	1993	1981	1994

01403400 GREEN BROOK AT SEELEY MILLS, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1979 - 1997	
ANNUAL TOTAL	5435.7		4581.9			
ANNUAL MEAN	14.9		12.6		10.6	
HIGHEST ANNUAL MEAN					18.2	1984
LOWEST ANNUAL MEAN					5.16	1981
HIGHEST DAILY MEAN	554	Oct 19	554	Oct 19	554	Oct 19 1996
LOWEST DAILY MEAN	2.2	Jan 7	1.3	Sep 5	.00	Sep 11 1981
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 30	1.3	Sep 4	.05	Sep 24 1981
INSTANTANEOUS PEAK FLOW			2190	Oct 19	6240a	Aug 2 1973
INSTANTANEOUS PEAK STAGE			7.05	Oct 19	16.10b	Aug 2 1973
INSTANTANEOUS LOW FLOW			1.3	Sep 7	.00	Sep 11 1981
ANNUAL RUNOFF (CFSM)	2.38		2.01		1.71	
ANNUAL RUNOFF (INCHES)	32.46		27.36		23.19	
10 PERCENT EXCEEDS	28		24		21	
50 PERCENT EXCEEDS	7.1		4.0		5.0	
90 PERCENT EXCEEDS	3.0		1.5		1.6	

a From rating curve extended above 600 ft^3/s on basis of slope-area measurement of peak flow.
b Site and datum then in use.
e Estimated.



——— 01403400 GREEN BROOK AT SEELEY MILLS, NJ, DAILY MEAN DISCHARGE

01403535 EAST BRANCH STONY BROOK AT BEST LAKE, AT WATCHUNG, NJ

LOCATION.--Lat 40°38'25", long 74°26'52", Somerset County, Hydrologic Unit 02030105, 700 ft upstream from dam on Best Lake in Watchung, 1,400 ft upstream from mouth, and 0.5 mi northeast of Watchung.

DRAINAGE AREA.--1.57 mi^2.

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

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 193.87 ft above sea level (levels by Somerset County).

REMARKS.--Records fair except those below 2.0 ft^3/s and estimated daily discharges, which are poor. Records given herein represent flow over dam and leakage through ports in dam. Several measurements of water temperature were made during the year. Rain-gage and gage-height radio telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 2, 1973, reached a stage of 5.9 ft, present datum, from floodmarks, discharge, 2,840 ft^3/s, by computation of flow over dam, embankment, and road.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1445	*2,240	*5.24	Jan. 25	0115	113	1.71
Nov. 26	0745	180	1.90	Mar. 31	0815	103	1.68
Dec. 2	0330	180	1.90	July 24	1145	180	1.90
Dec. 6	0745	106	1.69	July 25	0130	475	2.58
Dec. 14	0815	137	1.78				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.53	4.2	14	1.9	2.4	2.0	24	2.9	.73	.27	.52	.28
2	e.58	3.9	38	2.0	2.0	1.8	9.7	2.3	9.5	.26	.49	.29
3	e.53	3.4	5.5	1.9	2.0	1.9	6.4	15	3.6	.27	.46	.29
4	e.44	3.3	3.6	1.8	1.9	2.5	4.6	6.7	1.6	.27	.44	.29
5	e.44	2.8	2.8	1.9	16	4.0	3.9	3.6	1.1	.24	.46	.28
6	e.43	2.8	29	1.5	4.5	4.9	3.9	4.1	.83	.22	.46	.28
7	e.42	2.8	30	1.3	3.1	2.2	3.1	3.0	.76	.21	.44	.29
8	e13	3.5	15	1.0	2.7	2.0	2.6	2.5	.76	.19	.43	.29
9	e8.1	8.9	6.2	1.1	2.4	1.8	2.2	4.4	.75	e.25	.43	.30
10	e3.7	1.9	4.7	1.5	2.0	4.1	1.9	3.0	.75	.34	.42	.30
11	e1.7	1.4	5.0	1.2	1.7	2.8	1.8	2.2	.74	.30	.41	4.1
12	e1.4	1.2	5.5	.87	1.7	1.9	6.8	2.0	.71	.27	.39	.77
13	e1.2	1.0	5.6	.78	1.4	1.6	5.3	1.7	.73	.24	.38	.69
14	e.86	1.1	41	.77	8.5	24	2.9	1.4	.71	.21	.38	.65
15	e.76	1.1	8.2	.76	6.8	11	2.5	1.2	.66	e.19	.37	.60
16	e.69	1.0	5.8	12	3.5	3.8	2.2	1.0	.60	e.18	.40	.56
17	e.44	1.0	5.2	2.4	2.8	3.2	2.2	.86	.56	e.18	.48	.54
18	.45	1.0	4.6	1.3	2.4	2.9	3.5	.78	.54	e.18	.50	.52
19	176	1.3	5.2	.85	2.4	2.9	2.4	.90	.71	.21	.50	.51
20	15	1.1	3.8	.76	2.2	3.0	2.0	1.4	.66	e.19	.75	.50
21	5.4	.92	2.9	.74	2.4	2.6	1.9	.80	.59	e.18	1.5	.51
22	3.8	.81	2.8	1.1	2.4	2.4	1.6	.78	.55	e.25	.34	.50
23	3.8	.77	2.8	1.8	1.8	2.0	1.9	.78	.51	.32	e.23	.49
24	4.2	.77	5.7	1.7	1.6	1.9	1.7	.76	.47	33	e.10	.49
25	6.1	.80	4.7	26	1.5	1.7	1.4	4.0	.44	58	e.10	.49
26	6.3	28	3.1	3.3	1.5	4.4	1.3	2.0	.41	1.7	e.10	.50
27	6.3	3.8	2.9	2.2	1.8	2.3	1.3	.87	.38	.79	e.10	.50
28	6.1	2.4	2.8	16	1.5	2.1	15	.77	.35	.72	e.15	.50
29	4.6	1.8	2.8	3.6	---	4.9	3.6	.75	.31	.66	.24	.65
30	5.6	1.5	2.5	2.4	---	2.7	3.0	.76	.29	.59	.27	.68
31	4.6	---	2.3	2.2	---	36	---	.75	---	.54	.27	---
TOTAL	283.47	90.27	274.0	98.63	86.9	147.3	126.6	73.96	31.30	101.42	12.51	17.64
MEAN	9.14	3.01	8.84	3.18	3.10	4.75	4.22	2.39	1.04	3.27	.40	.59
MAX	176	28	41	26	16	36	24	15	9.5	58	1.5	4.1
MIN	.42	.77	2.3	.74	1.4	1.6	1.3	.75	.29	.18	.10	.28
CFSM	5.82	1.92	5.63	2.03	1.98	3.03	2.69	1.52	.66	2.08	.26	.37
IN.	6.72	2.14	6.49	2.34	2.06	3.49	3.00	1.75	.74	2.40	.30	.42

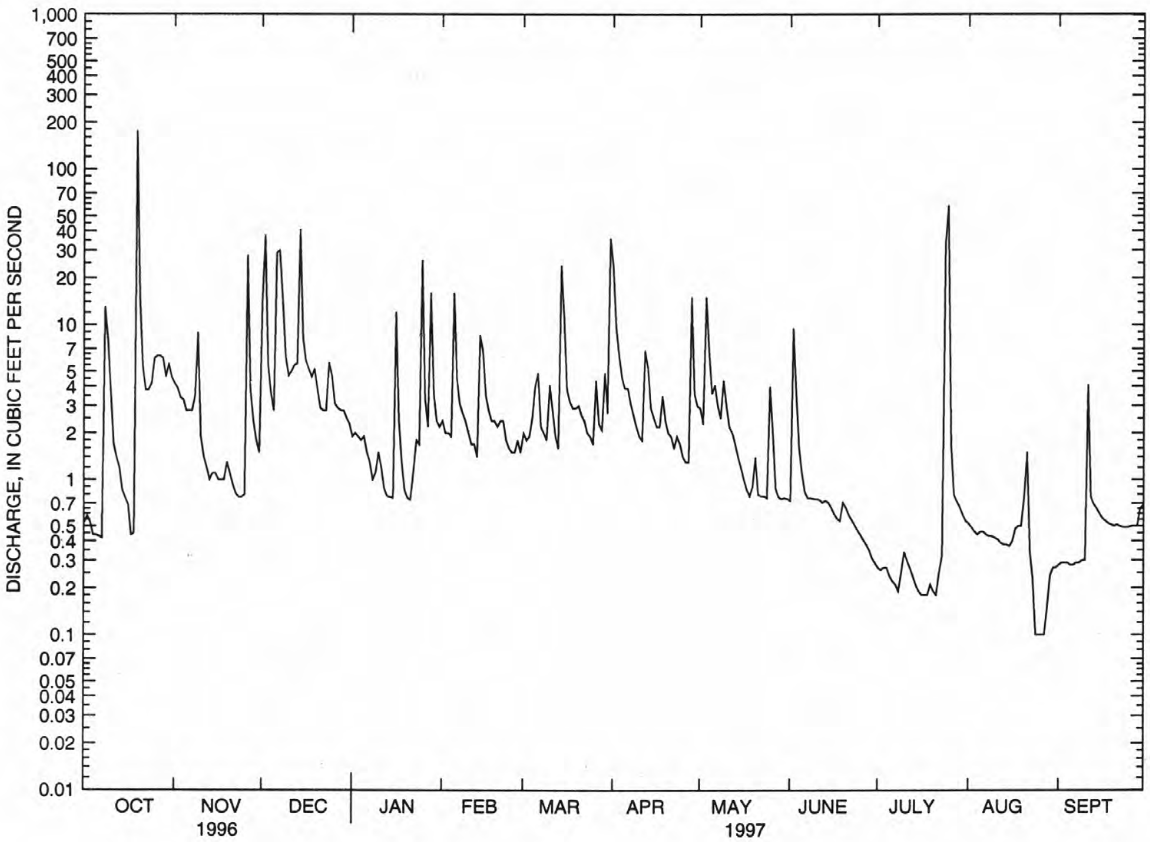
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.85	2.86	3.38	3.15	3.22	4.55	4.65	3.46	1.78	1.66	.85	.95
MAX	9.14	5.73	10.1	7.90	5.75	10.7	10.2	10.9	4.97	4.53	2.19	4.65
(WY)	1997	1986	1984	1996	1984	1994	1983	1989	1992	1984	1990	1989
MIN	.12	.80	.52	.068	1.40	1.67	.82	1.25	.56	.36	.095	.24
(WY)	1995	1995	1981	1981	1992	1981	1985	1986	1993	1980	1980	1994

01403535 EAST BRANCH STONY BROOK AT BEST LAKE, AT WATCHUNG, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1980 - 1997	
ANNUAL TOTAL	1746.30		1344.00			
ANNUAL MEAN	4.77		3.68		2.71	
HIGHEST ANNUAL MEAN					4.47	1984
LOWEST ANNUAL MEAN					1.48	1981
HIGHEST DAILY MEAN	176	Oct 19	176	Oct 19	176	Oct 19 1996
LOWEST DAILY MEAN	.30	Sep 3	.10	Aug 24	.00	Aug 30 1980
ANNUAL SEVEN-DAY MINIMUM	.36	Aug 30	.15	Aug 23	.00	Sep 3 1980
INSTANTANEOUS PEAK FLOW			2240	Oct 19	2240	Oct 19 1996
INSTANTANEOUS PEAK STAGE			5.24	Oct 19	5.24	Oct 19 1996
INSTANTANEOUS LOW FLOW			---		.00	Aug 30 1980
ANNUAL RUNOFF (CFSM)	3.04		2.35		1.73	
ANNUAL RUNOFF (INCHES)	41.38		31.85		23.44	
10 PERCENT EXCEEDS	8.3		6.1		5.5	
50 PERCENT EXCEEDS	2.5		1.5		1.1	
90 PERCENT EXCEEDS	.46		.29		.27	

e Estimated.



——— 01403535 EAST BRANCH STONY BROOK AT BEST LAKE AT WATCHUNG, NJ, DAILY MEAN DISCHARGE

01403540 STONY BROOK AT WATCHUNG, NJ

LOCATION.--Lat 40°38'12", long 74°27'06", Somerset County, Hydrologic Unit 02030105, on right bank at Watchung Borough Administration Building, 150 ft downstream from bridge on Mountain Boulevard, and 2.9 mi upstream from confluence with Green Brook.

DRAINAGE AREA.--5.51 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR NJ-86-1: 1973 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 162.24 ft above sea level. Prior to Oct. 1, 1996, at datum 10.00 ft higher.

REMARKS.--Records poor. Occasional regulation from Watchung and Best Lakes directly upstream from station and other small lakes. Several measurements of water temperature were made during the year. Gage-height radio telemetry at station. Channel significant enlarged and modified in 1991.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 2, 1973, reached a stage of 24.5 ft, from floodmark, corrected to current datum, discharge, 10,500 ft^3/s, from slope-area measurements of peak flow.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 8	2115	383	12.65	Jan. 25	0315	355	12.06
Oct. 19	1430	*3,040	*15.61	Mar. 31	0830	303	11.91
Nov. 26	1045	439	12.30	July 24	1215	380	12.14
Dec. 2	0430	492	12.42	July 25	0130	1670	14.29
Dec. 14	0930	335	12.00				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	e5.5	34	e7.0	e9.0	e5.2	67	e9.0	e3.0	.93	2.0	1.2
2	2.9	e5.0	112	e6.8	e8.0	e5.8	39	e7.0	31	.94	1.9	1.1
3	2.9	e4.5	20	e6.6	11	e9.0	26	47	15	1.0	1.8	1.1
4	2.9	e4.2	13	e6.3	11	13	19	26	e6.4	1.0	1.8	.95
5	2.9	e4.0	11	e6.0	54	15	15	13	e4.7	.93	2.2	.88
6	2.8	e4.2	81	e5.5	18	17	13	14	e3.8	.81	2.0	.76
7	2.7	e4.0	79	e5.2	e9.0	7.7	e11	12	e3.8	.80	1.6	.69
8	52	e4.2	56	e4.6	e7.0	8.4	e9.0	11	e3.3	.89	1.5	.76
9	18	26	23	e6.0	e6.0	8.4	e7.0	16	e3.1	1.8	1.4	.73
10	10	e8.0	17	e5.3	e5.5	14	e6.0	12	e2.8	2.8	1.3	.70
11	5.7	e6.0	16	e4.8	e5.0	11	e6.0	e10	2.5	1.2	1.2	17
12	4.3	e5.0	22	e4.0	e4.0	8.7	26	e8.0	2.3	1.0	1.2	2.5
13	4.1	e4.5	19	e3.3	16	8.4	20	e7.0	2.9	.92	1.2	1.7
14	2.8	e4.3	112	e4.0	39	65	e10	e6.0	2.6	.80	1.2	e1.5
15	2.5	e4.0	30	10	30	35	e8.0	e5.0	2.3	.80	1.0	e1.6
16	2.5	e3.8	20	42	17	14	e7.0	e4.9	2.2	.69	1.2	e1.6
17	2.4	e3.8	19	e8.0	e10	12	e7.0	e4.3	2.1	.65	1.4	e1.3
18	2.4	e3.9	16	e5.0	e7.0	11	16	e4.2	2.3	.86	3.5	e1.2
19	525	e3.8	18	e4.3	e6.0	e9.0	e10	e4.5	3.7	1.4	1.7	e1.2
20	37	e3.6	14	e5.0	e6.0	e8.0	e7.0	e6.8	2.2	.84	5.4	e1.2
21	12	e3.4	11	e8.0	e6.0	e7.0	e6.0	e4.3	1.8	.64	11	e1.3
22	8.6	e3.3	e10	11	e6.5	e6.5	e5.5	e3.7	1.7	7.4	3.1	e1.2
23	7.6	e3.2	11	13	e5.5	e5.4	e5.3	e3.5	1.6	16	2.2	e1.2
24	6.9	e3.1	17	11	e5.0	e5.1	e5.3	e3.2	1.5	98	1.7	e1.1
25	6.5	4.7	20	91	e4.5	e4.9	e4.7	19	1.5	204	1.5	e1.1
26	e6.2	80	11	16	e5.5	15	e4.3	12	1.3	10	1.2	e1.1
27	e5.9	12	e9.5	12	e5.5	e8.0	e3.9	e4.6	1.2	8.8	1.1	e1.1
28	e5.5	8.5	e9.0	58	e5.0	e6.0	51	e3.8	1.1	11	2.0	e1.1
29	e5.3	7.8	e8.3	17	---	19	13	e3.6	1.0	7.7	1.6	e1.6
30	e5.0	7.7	e7.5	e9.0	---	11	e9.0	e3.6	.97	2.4	1.3	e1.3
31	e5.2	---	e7.1	e10	---	105	---	e3.3	---	2.2	1.2	---
TOTAL	763.4	246.0	853.4	405.7	322.0	478.5	437.0	292.3	115.67	389.20	64.4	51.77
MEAN	24.6	8.20	27.5	13.1	11.5	15.4	14.6	9.43	3.86	12.6	2.08	1.73
MAX	525	80	112	91	54	105	67	47	31	204	11	17
MIN	2.4	3.1	7.1	3.3	4.0	4.9	3.9	3.2	.97	.64	1.0	.69
CFSM	4.47	1.49	5.00	2.38	2.09	2.80	2.64	1.71	.70	2.28	.38	.31
IN.	5.15	1.66	5.76	2.74	2.17	3.23	2.95	1.97	.78	2.63	.43	.35

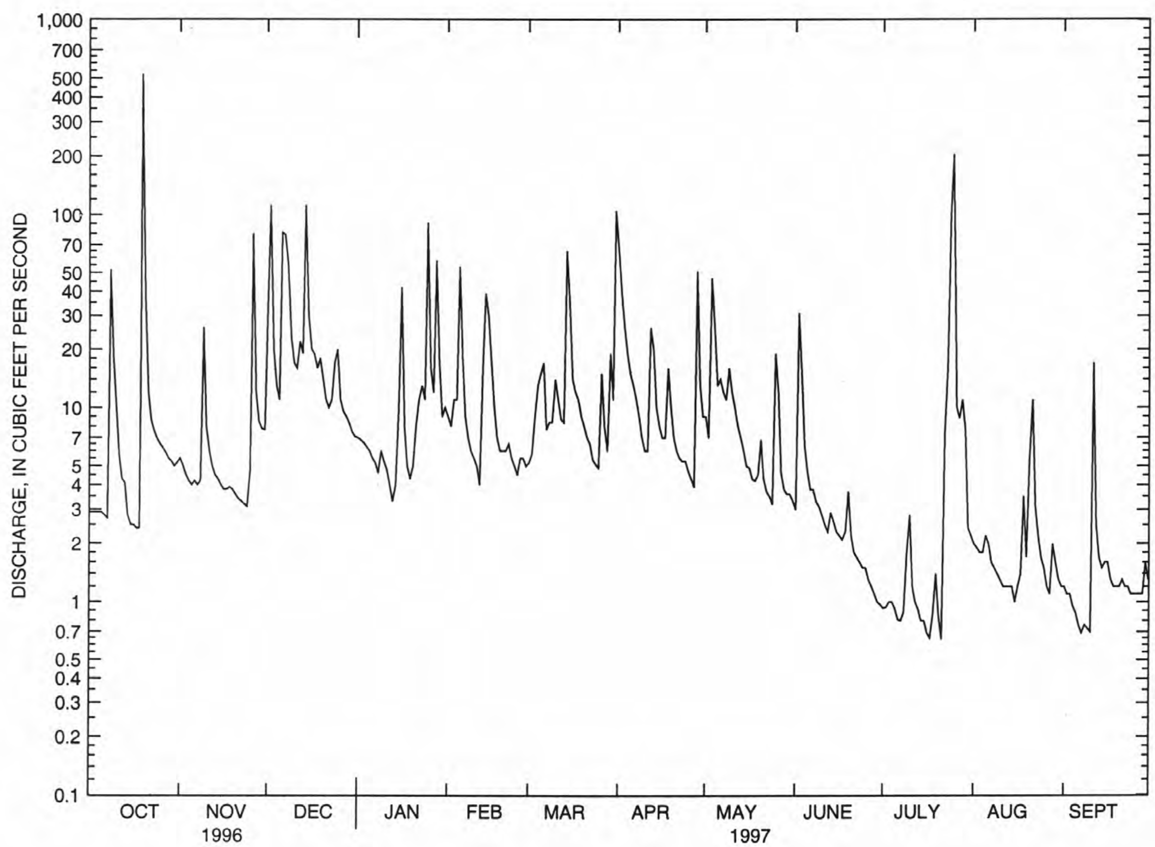
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.32	9.80	12.7	14.1	12.0	17.8	16.4	11.9	6.59	6.65	3.70	4.64
MAX	24.6	25.6	37.1	37.5	20.1	45.0	38.3	37.8	20.1	32.1	11.0	18.6
(WY)	1997	1996	1984	1979	1988	1994	1983	1989	1992	1975	1990	1975
MIN	.81	1.94	1.79	1.08	3.60	5.60	3.89	3.42	2.27	1.27	.81	.87
(WY)	1995	1977	1981	1981	1980	1985	1985	1986	1980	1977	1981	1983

01403540 STONY BROOK AT WATCHUNG, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1975 - 1997	
ANNUAL TOTAL	5433.1		4419.34			
ANNUAL MEAN	14.8		12.1		10.2	
HIGHEST ANNUAL MEAN					16.0	1984
LOWEST ANNUAL MEAN			z		5.43	1995
HIGHEST DAILY MEAN	525	Oct 19	525	Oct 19	525	Oct 19 1996
LOWEST DAILY MEAN	1.0	Jul 6	.64	Jul 21	.00	Sep 18 1982
ANNUAL SEVEN-DAY MINIMUM	1.8	Jul 1	.78	Sep 4	.06	Sep 13 1982
INSTANTANEOUS PEAK FLOW			3040	Oct 19	4420a	Jul 14 1975
INSTANTANEOUS PEAK STAGE			15.61	Oct 19	20.40b	Jul 14 1975
INSTANTANEOUS LOW FLOW					.00	Sep 13 1982
ANNUAL RUNOFF (CFSM)	2.69		2.20		1.85	
ANNUAL RUNOFF (INCHES)	36.68		29.84		25.17	
10 PERCENT EXCEEDS	28		20		20	
50 PERCENT EXCEEDS	8.1		5.3		4.7	
90 PERCENT EXCEEDS	2.1		1.2		1.1	

a From rating curve above 500 ft3/s on basis of slope-area measurement of peak flow.
b Corrected to current datum.
e Estimated.



——— 01403540 STONY BROOK AT WATCHUNG, NJ, DAILY MEAN DISCHARGE

01403900 BOUND BROOK AT MIDDLESEX, NJ

LOCATION.--Lat 40°35'06", long 74°30'29", Somerset County, Hydrologic Unit 02030105, at bridge on Sebring Mill Road, 0.4 mi downstream from mouth of Green Brook, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--48.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to October 1977, April 1996 to current year. Operated as a crest-stage water years 1992-95.

GAGE.--Water-stage recorder. Datum of gage is 26.52 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water diverted from Baltusrol well field by New Jersey-American Water Company, for municipal supply and from private and industrial wells in Plainfield and vicinity.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	2400	*5,230	*11.96	Dec. 14	1500	1,320	6.81
Nov. 26	1430	1,190	6.41	Jan. 25	0730	1,100	6.15
Dec. 2	1115	1,400	7.02	July 25	1000	2,830	9.78
Dec. 8	0215	1,250	6.59				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	27	203	41	54	36	787	59	e20	11	e21	27
2	19	26	916	40	51	39	326	69	e290	47	e19	12
3	21	23	285	42	46	39	137	251	208	11	18	9.9
4	16	20	103	38	45	67	92	241	55	11	17	9.5
5	15	20	66	35	324	60	67	74	37	10	21	9.0
6	15	20	624	35	159	76	58	75	28	9.5	e39	8.0
7	15	20	483	32	77	52	57	e81	26	9.1	e19	e8.3
8	158	24	785	28	60	42	53	e64	22	9.6	16	e8.3
9	379	202	206	28	57	38	52	e110	20	19	15	7.2
10	119	53	105	44	55	82	45	74	18	35	15	7.2
11	54	35	84	39	53	69	43	52	85	14	14	183
12	32	29	136	27	48	48	94	44	18	13	14	39
13	24	26	111	24	46	39	211	42	38	13	18	11
14	22	26	790	24	192	148	65	38	42	13	19	8.2
15	19	23	374	21	193	433	53	36	18	e13	14	6.8
16	16	22	135	299	77	103	e47	32	16	14	13	6.7
17	16	22	110	157	58	69	e47	30	16	15	e14	6.7
18	15	22	86	99	52	59	97	28	16	33	42	6.7
19	1400	24	101	44	49	54	71	29	63	60	33	7.2
20	2590	23	87	28	47	54	51	45	20	e29	30	7.0
21	476	22	58	26	43	53	46	30	15	e20	e161	6.7
22	129	21	54	27	47	47	45	e24	15	e59	e47	6.7
23	74	20	52	53	41	41	43	e20	18	e32	e26	6.7
24	58	20	75	36	37	38	46	e20	14	650	e18	6.7
25	49	19	165	656	35	36	47	e77	e14	e1750	e14	6.7
26	39	610	61	155	33	107	37	e59	13	e430	e12	6.6
27	32	233	55	57	44	53	35	e23	12	e64	e12	6.3
28	35	70	51	359	35	42	344	e21	12	52	24	6.2
29	39	56	50	134	---	52	109	e20	e12	32	15	32
30	31	48	52	59	---	69	63	22	e11	e27	12	9.1
31	30	---	45	54	---	645	---	21	---	e23	11	---
TOTAL	5960	1806	6508	2741	2058	2790	3268	1811	1192	3528.2	763	482.4
MEAN	192	60.2	210	88.4	73.5	90.0	109	58.4	39.7	114	24.6	16.1
MAX	2590	610	916	656	324	645	787	251	290	1750	161	183
MIN	15	19	45	21	33	36	35	20	11	9.1	11	6.2

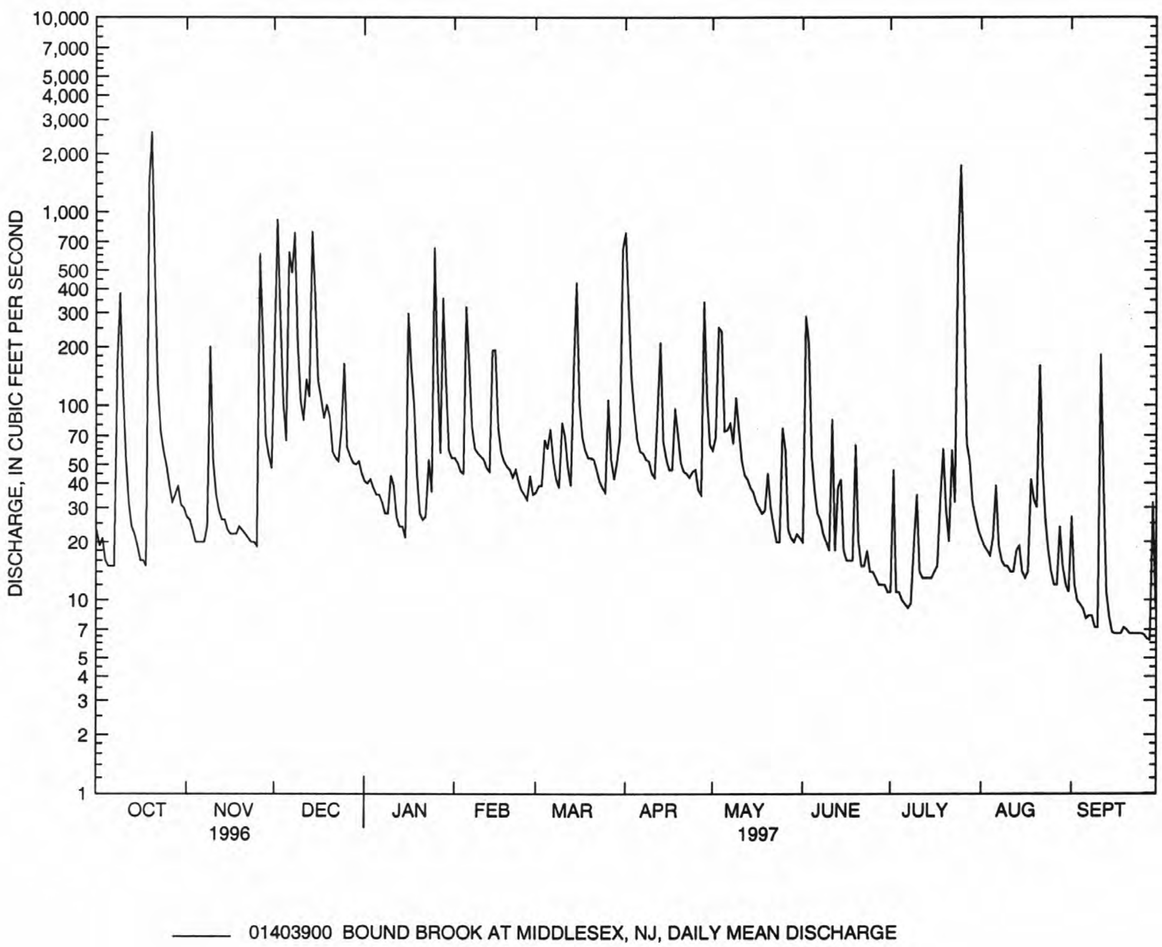
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	77.7	58.9	120	81.7	88.7	91.1	100	69.9	52.0	81.8	58.2	54.9
MAX	192	125	210	112	170	110	178	146	128	263	258	198
(WY)	1997	1973	1997	1975	1973	1977	1973	1975	1975	1975	1973	1975
MIN	21.7	17.4	30.6	16.5	41.7	57.6	58.0	27.3	22.8	9.45	13.0	8.75
(WY)	1973	1977	1977	1977	1974	1976	1976	1977	1974	1974	1972	1972

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1973 - 1997	
ANNUAL TOTAL	32907.6			
ANNUAL MEAN	90.2		79.3	
HIGHEST ANNUAL MEAN			112	1973
LOWEST ANNUAL MEAN			40.3	1977
HIGHEST DAILY MEAN	2590	Oct 20	2990	Aug 3 1973
LOWEST DAILY MEAN	6.2	Sep 28	2.5	Jul 21 1974
ANNUAL SEVEN-DAY MINIMUM	6.6	Sep 22	3.3	Jul 16 1974
INSTANTANEOUS PEAK FLOW	5230	Oct 19	7000	Aug 2 1973
INSTANTANEOUS PEAK STAGE	11.96	Oct 19	41.18	Aug 2 1973
INSTANTANEOUS LOW FLOW	5.7	Sep 27	2.5	Jul 21 1974
10 PERCENT EXCEEDS	172		151	
50 PERCENT EXCEEDS	39		37	
90 PERCENT EXCEEDS	12		9.5	

e Estimated.



01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1996 to current year.
WATER TEMPERATURE: July 1996 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1996 (in situ system, measurements recorded hourly) located at the downstream side of bridge.

REMARKS.--Interruptions in daily record were due to buried intake. On Jan. 29 and June 12, water-column synoptic studies were conducted at this site as part of the LINJ NAWQA program. For synoptic data from other sites, see section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: maximum recorded, 1,480 µS/cm, Feb. 14, 1997; minimum, 115 µS/cm, Oct. 20, 1996.
WATER TEMPERATURE: maximum, 28.0 °C, July 17, 1997; minimum, 0.0 °C, on several days during January 1997.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: maximum recorded, 1,480 µS/cm, Feb. 14, but may have been higher during period of missing record, Jan. 17-Feb. 12; minimum, 115 µS/cm, Oct. 20.
WATER TEMPERATURE: maximum, 28.0 °C, July 17; minimum, 0.0 °C, on several days during January.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 1996										
07...	1010	ENVIRONMENTAL	15	460	7.5	12.5	10.5	765	8.8	82.0
19...	1420	ENVIRONMENTAL	1200	140	6.9	14.0	13.5	--	--	--
29...	1140	ENVIRONMENTAL	36	--	--	15.0	12.0	--	--	--
NOV										
19...	0940	ENVIRONMENTAL	23	490	7.6	10.0	7.0	761	10.2	87.7
DEC										
04...	1050	ENVIRONMENTAL	110	280	7.5	9.5	7.0	761	10.6	89.0
06...	1000	ENVIRONMENTAL	910	190	7.5	--	6.0	--	--	--
JAN 1997										
02...	1000	ENVIRONMENTAL	41	470	7.4	4.0	4.0	755	--	--
16...	1230	ENVIRONMENTAL	610	630	7.8	4.0	0.5	745	13.4	99.7
29...	1230	ENVIRONMENTAL	105	430	7.5	-1.0	1.5	--	--	--
FEB										
12...	0950	ENVIRONMENTAL	49	710	6.8	5.0	3.0	763	13.1	97.4
24...	1040	ENVIRONMENTAL	38	540	8.0	6.0	6.0	769	--	--
MAR										
12...	0940	ENVIRONMENTAL	49	720	7.0	2.0	4.5	767	12.9	100
25...	1000	ENVIRONMENTAL	36	500	7.7	9.0	6.0	773	14.3	113
25...	*1001*	*SPLIT REPLICATE*	--	*500*	*7.6*	--	--	--	--	--
APR										
09...	1010	ENVIRONMENTAL	54	460	7.3	1.5	9.0	762	11.8	102
15...	1000	ENVIRONMENTAL	57	390	7.5	11.0	9.5	769	11.3	98
21...	0940	ENVIRONMENTAL	47	410	7.8	11.0	9.5	756	11.0	97
28...	1210	ENVIRONMENTAL	680	300	7.6	21.0	12.5	750	9.1	87
MAY										
14...	0940	ENVIRONMENTAL	38	410	7.8	17.5	13.5	756	9.6	93
26...	0920	ENVIRONMENTAL	200	200	7.4	16.5	16.5	757	7.0	72
JUN										
03...	0940	ENVIRONMENTAL	220	200	7.6	12.5	15.0	763	8.1	79
12...	1230	ENVIRONMENTAL	18	490	7.7	26.0	21.5	755	6.6	75
24...	0940	ENVIRONMENTAL	14	430	7.8	25.0	21.0	763	6.4	72
24...	*0941*	*SPLIT REPLICATE*	--	*440*	*7.9*	--	--	--	--	--
JUL										
01...	*1435*	*FIELD BLANK*	--	--	--	--	--	--	--	--
07...	1000	ENVIRONMENTAL	7.2	520	7.7	29.5	20.5	763	5.9	65
22...	1000	ENVIRONMENTAL	97	280	7.4	23.0	21.5	762	5.1	58
24...	1210	ENVIRONMENTAL	720	120	7.3	16.0	--	764	--	--
25...	1020	ENVIRONMENTAL	2820	83	7.4	19.0	17.0	766	7.2	74
AUG										
14...	*0920*	*FIELD BLANK*	--	--	--	--	--	--	--	--
14...	1010	ENVIRONMENTAL	18	510	7.3	27.0	22.5	758	5.7	66
26...	1000	ENVIRONMENTAL	12	380	7.1	25.5	19.0	764	6.5	70
SEP										
08...	0950	ENVIRONMENTAL	8.3	460	7.2	22.0	18.5	764	6.6	70

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
OCT 1996											
07...	160	46	11	25	2.5	120	97	99	49	50	.1
19...	46	13	3.2	8.3	2.3	31	26	28	14	15	<.1
29...	--	--	--	--	--	--	--	--	--	--	--
NOV											
19...	170	48	12	25	2.2	120	99	102	54	51	.1
DEC											
04...	89	24	7.0	18	1.9	62	51	53	26	32	<.1
06...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
02...	150	43	11	25	1.8	99	81	86	46	52	<.1
16...	76	22	5.0	80	1.9	38	31	34	22	150	<.1
29...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	150	43	11	74	1.7	85	70	76	40	140	<.1
24...	150	42	11	39	1.6	94	77	82	44	88	<.1
MAR											
12...	130	35	9.7	81	1.6	70	D57	63	30	150	<.1
25...	150	41	11	31	1.6	96	79	83	45	72	<.1
25...	*160*	*43*	*12*	*33*	*1.6*	*100*	*82*	*84*	*45*	*73*	*<.1*
APR											
09...	140	38	10	31	1.6	--	--	78	44	66	<.1
15...	110	29	8.2	29	1.3	71	58	61	30	60	<.1
21...	120	33	9.3	28	1.4	83	68	69	34	59	<.1
28...	88	25	6.3	19	1.3	66	54	55	26	37	<.1
MAY											
14...	140	38	10	26	1.6	90	74	81	36	52	<.1
26...	60	17	3.9	14	1.8	44	36	39	15	22	<.1
JUN											
03...	57	16	3.9	14	1.5	46	38	40	16	21	.1
12...	160	46	12	27	2.0	110	93	99	50	51	<.1
24...	150	43	11	22	2.1	110	88	91	47	45	<.1
24...	*150*	*43*	*11*	*22*	*2.1*	*110*	*89*	*91*	*47*	*45*	*.1*
JUL											
01...	*--*	*.09*	*<.01*	*<.20*	*<.10*	*--*	*--*	*<1.0*	*.20*	*<.10*	*<.1*
07...	180	52	13	26	2.4	120	100	104	57	54	.1
22...	90	26	6.1	14	2.2	63	52	49	31	26	<.1
24...	33	9.7	2.2	7.6	1.2	23	19	19	11	12	<.1
25...	20	5.9	1.4	6.2	1.7	18	15	16	7.1	9.1	<.1
AUG											
14...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
14...	180	51	12	24	2.4	130	100	106	61	46	<.1
26...	130	36	9.2	21	2.0	85	70	74	42	39	<.1
SEP											
08...	160	44	12	22	2.1	110	87	92	53	44	.1

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
OCT 1996										
07...	13	264	260	.02	1.2	.06	.3	.20	1.5	1.4
19...	5.3	62	79	.02	.51	.10	1.4	.30	1.9	.81
29...	--	--	--	--	--	--	--	--	--	--
NOV										
19...	16	290	274	.02	1.2	.11	.2	.20	1.4	1.4
DEC										
04...	14	167	159	.01	1.2	.07	.4	.30	1.6	1.5
06...	--	--	--	--	--	--	--	--	--	--
JAN 1997										
02...	17	258	251	.01	1.3	.11	.2	.30	1.5	1.6
16...	5.3	321	308	.02	.54	.17	1.5	.40	2.0	.94
29...	--	--	--	--	--	--	--	--	--	--
FEB										
12...	14	383	372	.02	1.3	.04	.2	.17	1.5	1.5
24...	12	294	288	.05	.94	<.02	.2	.08	1.1	1.0
MAR										
12...	11	380	357	.02	.96	.05	.4	.20	1.4	1.2
25...	11	276	264	.01	.96	.02	.2	.13	1.2	1.1
25...	*12*	*276*	*273*	*.01*	*.97*	*.03*	*.4*	*<.20*	*1.4*	--
APR										
09...	12	270	253	.01	.92	.04	.3	.20	1.2	1.1
15...	9.5	224	206	.01	.79	.03	.3	.19	1.1	.98
21...	10	233	219	.01	.80	.06	.2	.18	1.0	.98
28...	8.5	178	160	.01	.87	.07	1.0	.20	1.9	1.0
MAY										
14...	13	248	226	.02	.82	.09	.4	.40	1.2	1.2
26...	6.1	110	104	.02	.49	.14	.7	.40	1.2	.92
JUN										
03...	7.1	130	106	.02	.57	.09	.7	.40	1.3	.93
12...	15	286	262	.04	.80	.11	.4	.40	1.2	1.2
24...	14	268	240	.03	.71	.06	.6	.30	1.3	1.0
24...	*14*	*258*	*241*	*.03*	*.71*	*.06*	*.7*	*.20*	*1.4*	*.96*
JUL										
01...	*.03*	*<1*	--	*<.01*	*<.05*	*<.02*	*<.2*	*<.20*	--	--
07...	15	317	283	.03	.81	.09	.4	.30	1.2	1.1
22...	6.9	175	148	.04	.81	.16	1.0	.50	1.8	1.3
24...	3.4	73	61	.01	.39	.09	1.8	.20	2.2	.55
25...	3.7	60	47	.01	.61	.04	.6	.20	1.3	.85
AUG										
14...	--	--	--	--	--	--	--	--	--	--
14...	12	321	275	.03	.91	.08	.4	.30	1.3	1.2
26...	12	245	208	.02	1.0	.09	.2	.30	1.3	1.3
SEP										
08...	12	289	246	.02	1.1	.05	.3	.20	1.4	1.3

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996										
07...	.02	<.01	.02	140	66	74	3.1	.4	.7	.03
19...	.34	.07	.07	58	100	60	6.8	3.0	256	828
29...	--	--	--	--	--	--	--	--	--	--
NOV										
19...	.02	<.01	.01	130	68	120	2.8	.2	.6	.04
DEC										
04...	.05	.03	.03	85	130	59	4.7	.5	9	2.7
06...	--	--	--	--	--	--	--	--	--	--
JAN 1997										
02...	.02	<.01	<.01	110	120	150	2.1	.3	2	.24
16...	.36	.03	.02	52	26	87	3.3	8.8	328	540
29...	--	--	--	--	--	--	--	--	--	--
FEB										
12...	.03	<.01	<.01	95	75	130	2.1	.3	5	.60
24...	<.01	<.01	<.01	110	83	130	2.2	.2	3	.30
MAR										
12...	.04	<.01	<.01	77	78	110	2.6	.5	7	.93
25...	.02	<.01	<.01	98	86	120	2.1	.3	3	.26
25...	*.03*	*<.01*	*<.01*	*96*	*61*	*130*	*2.2*	*.5*	*3*	*.26*
APR										
09...	.02	<.01	<.01	100	110	110	2.9	.4	4	.51
15...	.03	<.01	.01	83	190	93	3.7	--	4	.65
21...	.02	<.01	.01	83	160	100	3.1	.3	3	.38
28...	.16	.01	.02	68	58	88	4.3	4.3	116	212
MAY										
14...	.02	<.01	<.01	100	99	120	3.0	.2	3	.34
26...	.15	.04	.04	65	110	90	5.4	1.1	28	15
JUN										
03...	.12	.03	.04	66	130	52	5.7	.9	24	14
12...	.02	<.01	.02	140	58	130	3.7	.2	6	.27
24...	.08	.01	.02	130	44	180	3.9	.9	5	.20
24...	*.08*	*.03*	*.02*	*130*	*60*	*180*	*3.6*	*1.4*	*4*	*--*
JUL										
01...	*<.01*	*.02*	*<.01*	*--*	*3*	*<1*	*--*	*--*	*--*	*--*
07...	.05	.04	.03	160	25	140	4.0	.3	3	.05
22...	.15	.06	.06	96	65	130	6.9	1.2	22	5.8
24...	.39	<.01	.03	51	49	87	3.3	6.6	295	574
25...	.16	.04	.05	42	82	47	4.7	.9	65	491
AUG										
14...	*--*	*--*	*--*	*--*	*--*	*--*	*<.1*	*<.2*	*--*	*--*
14...	.07	.06	.04	150	25	67	3.4	.3	4	.18
26...	.05	.04	.04	130	82	89	2.9	.3	4	.14
SEP										
08...	.08	<.01	.02	130	29	86	2.9	.3	4	.09

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels in "Explanation of Records" section). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels in "Explanation of Records" section). Only pesticides measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)
OCT 1996										
07...	1010	ENVIRONMENTAL	<.002	<.002	.012	E.0049	<.002	E.0290	<.003	<.004
07...	*1012*	*SPLIT SPIKE*	*.122*	*.131*	*.125*	*E.0472*	*.133*	*E.3340*	*E.2500*	*.123*
07...	*1013*	*SPLIT SPIKE*	*.118*	*.131*	*.124*	*E.0469*	*.137*	*E.3290*	*E.2490*	*.123*
07...	*1014*	*SPLIT SPIKE*	--	--	--	--	--	--	--	--
07...	*1015*	*SPLIT SPIKE*	--	--	--	--	--	--	--	--
19...	1420	ENVIRONMENTAL	<.002	<.002	.007	<.002	<.002	E.0591	<.003	.011
NOV										
19...	0940	ENVIRONMENTAL	<.002	<.002	.010	E.0075	<.002	<.003	<.003	<.004
DEC										
04...	1050	ENVIRONMENTAL	<.002	<.002	.006	E.0030	<.002	<.030	<.003	<.004
JAN 1997										
16...	1230	ENVIRONMENTAL	<.002	<.002	<.006	<.002	<.002	E.0191	<.003	<.004
FEB										
12...	0950	ENVIRONMENTAL	<.002	<.002	.008	E.0050	<.002	<.005	<.003	<.004
MAR										
12...	0940	ENVIRONMENTAL	<.002	<.002	.008	E.0052	<.002	E.0262	<.003	<.004
APR										
15...	1000	ENVIRONMENTAL	<.002	<.002	.007	E.0060	.005	E.0340	<.003	<.004
28...	1210	ENVIRONMENTAL	<.002	<.002	<.001	<.002	<.002	<.003	<.003	<.004
MAY										
14...	0940	ENVIRONMENTAL	<.002	E.0034	.021	E.0114	.004	E.0551	<.003	.005
JUN										
12...	1230	ENVIRONMENTAL	<.002	<.002	.025	E.0044	<.002	E.0432	<.003	.022
24...	0940	ENVIRONMENTAL	<.002	<.002	.021	E.0064	<.002	E.0489	<.003	.007
24...	*0941*	*SPLIT SPIKE*	*<.002*	*<.002*	*.017*	*E.0068*	*<.002*	*E.0410*	*<.003*	*.007*
JUL										
07...	1000	ENVIRONMENTAL	<.002	<.002	.014	E.0066	<.002	<.003	<.003	.005
24...	1210	ENVIRONMENTAL	<.002	<.002	.005	<.002	<.002	E.0581	<.003	.008
25...	1020	ENVIRONMENTAL	<.002	<.002	<.001	E.0060	<.002	E.1570	<.003	.017
AUG										
14...	*0930*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.002*	*<.003*	*<.003*	*<.004*
14...	1010	ENVIRONMENTAL	<.002	<.002	.015	E.0059	<.002	<.003	<.003	<.004
SEP										
08...	0950	ENVIRONMENTAL	<.002	<.002	.006	E.0031	<.002	E.0112	<.003	<.004

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
OCT 1996											
07...	<.004	<.002	.017	<.004	<.005	.016	<.004	<.003	<.004	.025	<.004
07...	.122	.113	.135	.121	E.1420	.150	.128	.112	.158	.145	.131
07...	.122	.111	.129	.122	E.1420	.149	.125	.113	.161	.149	.129
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
19...	<.004	E.0012	.049	<.004	<.005	.008	<.004	<.003	<.004	.057	<.004
NOV											
19...	<.004	<.002	<.002	.014	<.005	.010	<.004	<.003	<.004	.020	<.004
DEC											
04...	<.004	<.002	<.002	<.004	<.005	.006	<.004	<.003	<.004	.020	<.004
JAN 1997											
16...	<.004	.004	.018	<.004	<.005	E.0038	<.042	<.003	<.004	<.018	<.004
FEB											
12...	<.004	<.002	<.002	<.004	<.005	.004	<.004	<.003	<.004	E.0156	<.004
MAR											
12...	<.004	<.002	<.002	<.004	<.005	.007	<.004	<.003	<.004	.030	<.004
APR											
15...	<.004	E.0010	.020	<.004	<.005	.006	<.004	<.003	.015	.062	<.004
28...	<.004	<.002	<.002	<.004	<.005	<.002	<.004	<.003	<.004	<.018	<.004
MAY											
14...	.009	E.0017	.018	<.004	<.005	.015	<.004	<.003	.009	.041	<.004
JUN											
12...	.005	E.00080	.012	<.004	<.005	.011	<.004	<.003	<.004	.032	<.004
24...	<.004	E.0014	.095	<.004	<.005	.017	<.004	<.003	<.004	.054	<.004
24...	<.004	E.0013	.090	<.004	<.005	.017	<.004	<.003	<.004	.050	<.004
JUL											
07...	<.004	<.002	.017	<.004	<.005	.006	<.004	<.003	<.004	.028	<.004
24...	<.004	E.0016	.240	<.004	.010	.013	<.004	<.003	<.004	.078	<.004
25...	<.004	E.0025	.213	<.004	.012	.026	<.004	<.003	<.004	.070	<.004
AUG											
14...	<.004	<.002	<.002	<.004	<.005	<.002	<.004	<.003	<.004	<.018	<.004
14...	<.004	<.002	.030	<.004	<.005	.007	<.004	<.003	<.004	.037	<.004
SEP											
08...	<.004	<.002	.024	<.004	<.005	<.002	<.004	<.003	<.004	.100	<.004

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	2,4-D, DIS- SOLVED (UG/L) (39732)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)
OCT 1996											
07...	<.005	E.0081	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.04	<.035
07...	.114	.169	.144	--	--	--	--	--	--	--	--
07...	.119	.148	.148	--	--	--	--	--	--	--	--
07...	--	--	--	.390	1.00	1.40	E.7400	E.7100	.460	1.00	1.50
07...	--	--	--	.290	1.00	1.20	.76	E.5100	.750	1.00	1.50
19...	<.005	<.010	.007	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
NOV											
19...	.007	E.0076	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
DEC											
04...	<.005	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
JAN 1997											
16...	<.005	<.010	E.0035	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
FEB											
12...	.006	E.0118	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
MAR											
12...	E.0048	E.0087	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
APR											
15...	.006	E.0040	.006	<.016	<.008	<.028	<.05	<.035	.30	.27	<.035
28...	<.005	<.010	<.002	<.016	E.0300	<.028	<.05	<.035	1.4	.27	<.035
MAY											
14...	.014	E.0090	.004	<.016	.04	<.028	<.05	<.035	.19	.28	<.035
JUN											
12...	.008	E.0053	<.002	--	--	--	--	--	--	--	--
24...	.013	E.0044	E.0020	<.016	<.008	<.028	<.05	<.035	.22	.16	<.035
24...	.012	E.0056	E.0019	<.016	<.008	<.028	<.05	<.035	.22	.18	<.035
JUL											
07...	.008	E.0055	<.002	.13	<.008	<.028	<.05	E.6600	<.035	.15	<.035
24...	<.005	<.010	.005	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
25...	<.005	<.010	E.0080	<.016	.06	<.028	<.05	E.1500	<.035	<.02	<.035
AUG											
14...	<.005	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
14...	.008	.011	<.002	<.016	<.008	<.028	<.05	<.035	<.035	.09	<.035
SEP											
08...	<.005	<.010	<.002	<.016	<.008	<.028	<.05	E.0500	<.035	.07	<.035

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Samples were analyzed for volatile organic compounds (VOCs) on schedule 2020 (listed with minimum reporting levels in "Explanation of Records" section). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)
OCT 1996										
07...	1010	ENVIRONMENTAL	<.10	E.015	<.10	<.10	<.20	<.10	<.10	<.10
07...	*1016*	*SPLIT SPIKE*	*<.10*	*1.9*	*<.10*	*<.10*	*2.3*	*<.10*	*<.10*	*<.10*
07...	*1017*	*SPLIT SPIKE*	*<.10*	*1.8*	*<.10*	*<.10*	*2.3*	*<.10*	*<.10*	*<.10*
19...	1420	ENVIRONMENTAL	<.10	E.010	<.10	<.10	<.20	<.10	<.10	<.10
29...	1140	ENVIRONMENTAL	<.10	E.030	<.10	<.10	E.010	<.10	<.10	<.10
NOV										
19...	0940	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
DEC										
04...	1050	ENVIRONMENTAL	<.10	E.020	<.10	<.10	<.20	<.10	<.10	<.10
06...	1000	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
JAN 1997										
02...	1000	ENVIRONMENTAL	<.10	E.020	<.10	<.10	<.20	<.10	<.10	<.10
16...	1230	ENVIRONMENTAL	E.006	E.020	<.10	<.10	E.030	E.030	E.020	E.040
29...	1230	ENVIRONMENTAL	<.10	E.030	<.10	<.10	<.20	E.010	<.10	<.10
FEB										
12...	0950	ENVIRONMENTAL	<.05	E.030	E.010	E.010	E.020	<.05	<.05	<.05
MAR										
12...	0940	ENVIRONMENTAL	<.05	E.030	<.05	<.05	E.010	<.05	<.05	<.05
25...	1000	ENVIRONMENTAL	<.05	E.020	E.006	<.05	E.010	<.05	<.05	<.05
APR										
15...	1000	ENVIRONMENTAL	<.05	E.020	<.05	<.05	E.010	<.05	<.05	<.05
28...	1210	ENVIRONMENTAL	<.05	E.020	E.010	<.05	E.030	<.05	<.05	<.05
MAY										
14...	0940	ENVIRONMENTAL	<.05	E.020	<.05	<.05	<.10	<.05	<.05	<.05
JUN										
24...	0940	ENVIRONMENTAL	<.13	<.13	<.13	<.26	<.18	<.92	<.96	<.50
JUL										
07...	1000	ENVIRONMENTAL	<.06	E.010	<.06	<.13	<.09	<.46	<.48	<.25
24...	1210	ENVIRONMENTAL	<.06	E.040	<.06	<.13	<.09	<.46	<.48	<.25
25...	1020	ENVIRONMENTAL	<.06	E.010	<.06	<.13	<.09	<.46	<.48	<.25
AUG										
14...	1010	ENVIRONMENTAL	<.06	<.06	<.06	<.13	<.09	<.46	<.48	<.25
SEP										
08...	*0910*	*CANNISTER BLANK*	*<.03*	*<.03*	*<.03*	*<.07*	*<.04*	*<.23*	*<.24*	*<.12*
08...	*0915*	*FIELD BLANK*	*<.03*	*<.03*	*<.03*	*<.07*	*<.04*	*<.23*	*<.24*	*<.12*
08...	0950	ENVIRONMENTAL	<.03	E.010	<.03	<.07	E.008	<.23	<.24	<.12

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)
OCT 1996											
07...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
07...	*<.40*	*E.015*	*<.10*	*<.10*	*<.10*	*<.10*	*1.8*	*<.10*	*<.10*	*<.10*	*10*
07...	*<.40*	*E.014*	*<.10*	*<.10*	*<.10*	*<.10*	*1.7*	*<.10*	*<.10*	*<.10*	*10*
19...	<.40	E.020	<.10	<.10	E.020	<.10	<.10	E.040	<.10	E.010	<10
29...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
NOV											
19...	<.40	<.10	<.10	<.10	<.10	<.10	E.010	<.10	<.10	<.10	<10
DEC											
04...	<.40	E.010	<.10	<.10	E.010	<.10	E.010	E.030	<.10	<.10	<10
06...	<.40	E.020	<.10	E.009	<.10	<.10	<.10	<.10	<.10	<.10	<10
JAN 1997											
02...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
16...	<.40	E.100	E.030	E.008	.35	<.10	E.010	.67	<.10	E.010	E1.60
29...	<.40	E.020	<.10	<.10	E.020	<.10	<.10	E.030	<.10	<.10	E.500
FEB											
12...	<.20	E.010	<.05	E.007	E.010	<.05	E.010	E.020	<.05	<.05	E.600
MAR											
12...	<.20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<5.0
25...	<.20	<.05	<.05	<.05	E.020	<.05	<.05	E.030	<.05	<.05	E.900
APR											
15...	<.2	<.05	<.05	<.05	E.008	<.05	<.05	E.010	<.05	<.05	E.3
28...	<.2	<.05	<.05	<.05	E.010	<.05	<.05	E.020	<.05	<.05	<5
MAY											
14...	<.20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<5.0
JUN											
24...	<.75	<.22	<.18	<.19	<.26	<.22	<.20	<.26	<.17	<.44	<6.6
JUL											
07...	<.38	<.11	<.09	<.10	<.13	<.11	E.01	<.13	<.08	<.22	E1
24...	<.38	E.01	<.09	<.10	<.13	<.11	<.10	<.13	<.08	E.02	<3.3
25...	<.38	<.11	<.09	<.10	<.13	<.11	<.10	E.02	<.08	E.02	<3.3
AUG											
14...	<.38	<.11	<.09	<.10	<.13	<.11	<.10	<.13	<.08	<.22	<3.3
SEP											
08...	*<.19*	*<.06*	*<.04*	*<.05*	*<.06*	*<.05*	*<.05*	*<.06*	*<.04*	*<.11*	*<1.6*
08...	*<.19*	*<.06*	*<.04*	*<.05*	*<.06*	*<.05*	*<.05*	*<.06*	*<.04*	*<.11*	*<1.6*
08...	<.19	<.06	<.04	<.05	<.06	<.05	E.01	<.06	<.04	<.11	<1.6

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	ACRO-LEIN TOTAL (UG/L) (34210)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)
OCT 1996										
07...	<.10	<4.0	<10	<10	<.10	<.20	E.011	.37	<.20	<.20
07...	*<.10*	*<4.0*	*<10*	*E.014*	*E.120*	*2.1*	*<.10*	*.40*	*2.1*	*<.20*
07...	*<.10*	*<4.0*	*<10*	*E.074*	*E.100*	*2.0*	*<.10*	*.40*	*2.0*	*<.20*
19...	<.10	<4.0	<10	<10	<.10	<.20	E.010	E.007	<.20	<.20
29...	<.10	<4.0	<10	E2.30	<.10	<.20	<.10	E.200	<.20	<.20
NOV										
19...	<.10	<4.0	<10	<10	<.10	<.20	<.10	.35	<.20	<.20
DEC										
04...	<.10	<4.0	<10	E2.00	<.10	<.20	<.10	E.100	<.20	<.20
06...	<.10	<4.0	<10	3.3	<.10	<.20	<.10	<.10	<.20	<.20
JAN 1997										
02...	<.10	<4.0	<10	<10	<.10	<.20	<.10	.31	<.20	<.20
16...	E.030	<4.0	E.300	E8.80	E.090	<.20	E.080	E.020	<.20	E.050
29...	<.10	<4.0	<10	E4.80	<.10	<.20	<.10	E.100	<.20	<.20
FEB										
12...	<.05	<2.0	<5.0	2.3	E.040	E.010	E.010	.30	<.10	<.10
MAR										
12...	<.05	<2.0	E.100	E8.00	<.05	E.010	E.009	.26	<.10	<.10
25...	<.05	<2.0	<5.0	3.3	E.050	E.010	<.05	.32	<.10	<.10
APR										
15...	<.05	<2	E.050	<5	<.05	E.010	<.05	.22	<.10	<.10
28...	<.05	E2.10	E.1	E4	<.05	<.10	E.090	E.010	<.10	E.070
MAY										
14...	<.05	<2.0	<5.0	E1.00	<.05	E.010	E.009	.24	<.10	<.10
JUN										
24...	<.40	<5.7	<1.5	<20	E.020	<.19	<.32	E.1	<.73	<.48
JUL										
07...	<.20	<2.9	<.75	<9.8	<.06	<.10	<.16	E.1	<.36	<.24
24...	<.20	<2.9	E.2	E9	<.06	<.10	<.16	E.010	<.36	<.24
25...	<.20	<2.9	<.75	E7	<.06	<.10	<.16	<.06	<.36	<.24
AUG										
14...	<.20	<2.9	<.75	<9.8	<.06	<.10	<.16	E.1	<.36	<.24
SEP										
08...	*<.10*	*<1.4*	*<.37*	*<4.9*	*<.03*	*<.05*	*<.08*	*<.03*	*<.18*	*<.12*
08...	*<.10*	*<1.4*	*<.37*	*<4.9*	*<.03*	*<.05*	*<.08*	*<.03*	*<.18*	*<.12*
08...	<.10	<1.4	<.37	E2	E.030	<.05	<.08	.22	<.18	<.12

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
OCT 1996										
07...	<.40	E.042	<.40	<.20	<.20	<.10	<.10	<.10	.97	<.10
07...	*E.380*	*E.093*	*<.40*	*2.8*	*3.4*	*1.9*	*E.02*	*<.10*	*3.0*	*E.025*
07...	*E.400*	*E.089*	*<.40*	*2.6*	*3.4*	*1.8*	*<.10*	*E.100*	*2.9*	*E.017*
19...	E.050	E.020	<.40	<.20	<.20	E.010	<.10	<.10	.51	<.10
29...	<.40	E.080	<.40	<.20	<.20	<.10	<.10	<.10	1.2	<.10
NOV										
19...	<.40	E.080	<.40	<.20	<.20	<.10	<.10	<.10	2.0	<.10
DEC										
04...	<.40	E.060	<.40	<.24	<.20	E.010	<.10	E.100	2.2	<.10
06...	<.40	E.050	<.40	<.20	<.20	<.10	<.10	.23	1.1	<.10
JAN 1997										
02...	<.40	E.080	<.40	E.040	<.20	<.10	<.10	E.100	1.8	<.10
16...	<.40	E.100	<.40	<.20	<.20	E.090	<.10	.27	4.8	<.10
29...	<.40	E.070	<.40	<.20	<.20	<.10	<.10	<.10	2.2	<.10
FEB										
12...	<.20	.15	<.20	<.10	<.10	E.010	<.05	E.090	3.3	<.05
MAR										
12...	<.20	E.080	<.20	<.10	<.10	<.05	<.05	<.05	2.0	<.05
25...	<.20	E.090	<.20	<.10	<.10	E.010	<.05	E.090	1.9	<.05
APR										
15...	<.20	E.080	<.20	<.10	<.10	<.05	<.05	E.060	1.3	<.05
28...	E.103	.16	<.20	<.10	<.10	<.05	<.05	.11	1.3	<.05
MAY										
14...	<.20	E.070	<.20	<.10	<.10	<.05	<.05	E.090	.93	<.05
JUN										
24...	<1.0	E.040	<.38	<1.5	<.68	<.12	<.30	E.080	1.2	<.74
JUL										
07...	<.51	E.030	<.19	E.8	<.34	<.06	<.15	E.060	2.9	<.37
24...	E.1	E.010	<.19	<.76	<.34	<.06	<.15	.26	.38	<.37
25...	<.51	E.010	<.19	<.76	<.34	<.06	<.15	E.1	.54	<.37
AUG										
14...	<.51	E.030	<.19	<.76	<.34	<.06	<.15	<.08	2.7	<.37
SEP										
08...	*E.01*	*<.04*	*<.10*	*<.38*	*<.17*	*<.03*	*<.08*	*<.04*	*<.11*	*<.19*
08...	*<.25*	*<.04*	*<.10*	*<.38*	*<.17*	*<.03*	*<.08*	*<.04*	*<.11*	*<.19*
08...	<.25	E.030	<.10	<.38	<.17	<.03	<.08	E.030	10	<.19

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	BROMO-FORM TOTAL (UG/L) (32104)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
OCT 1996										
07...	<.10	<.40	<.10	<.20	E.057	<10	<.40	E.080	<.20	E.056
07...	*<.10*	*<.40*	*<.10*	*<.20*	*1.7*	*<10*	*2.1*	*2.1*	*<.20*	*E.067*
07...	*<.10*	*<.40*	*<.10*	*<.20*	*1.6*	*<10*	*2.0*	*2.0*	*<.20*	*E.068*
19...	<.10	<.40	<.10	E.010	E.010	<10	<.40	E.030	<.20	E.010
29...	<.10	<.40	<.10	<.20	E.090	<10	<.40	E.100	<.20	E.060
NOV										
19...	<.10	<.40	<.10	E.020	E.100	<10	<.40	E.100	<.20	E.070
DEC										
04...	<.10	<.40	<.10	E.030	E.070	<10	<.40	E.060	<.20	E.050
06...	<.10	<.40	<.10	<.20	E.040	<10	<.40	E.080	<.20	<.10
JAN 1997										
02...	<.10	<.40	<.10	E.020	E.100	<10	<.40	E.100	<.20	E.040
16...	E.010	.22	E.010	E.070	E.100	<10	<.40	.36	E.060	E.020
29...	<.10	E.030	<.10	E.030	E.070	<10	<.40	E.070	<.20	E.030
FEB										
12...	<.05	E.030	<.05	E.050	.14	<5.0	<.20	.19	<.10	E.050
MAR										
12...	<.05	<.20	<.05	E.030	.14	<5.0	<.20	.11	<.10	E.060
25...	<.05	<.20	<.05	E.030	.11	<5.0	<.20	.13	<.10	E.060
APR										
15...	<.05	<.20	<.05	E.020	.11	<5	<.20	.10	<.10	E.090
28...	<.05	<.20	<.05	E.010	E.060	<5	<.20	.19	<.10	E.030
MAY										
14...	<.05	<.20	<.05	<.10	.10	<5.0	<.20	.11	<.10	E.060
JUN										
24...	<.17	<1	<.17	<.45	E.060	<4.6	<.42	E.080	<.37	E.070
JUL										
07...	<.08	<.50	<.08	<.22	E.070	<2.3	<.21	E.090	<.18	E.060
24...	<.08	<.50	<.08	<.22	E.020	<2.3	<.21	E.070	<.18	E.020
25...	<.08	<.50	<.08	<.22	E.020	<2.3	<.21	E.020	<.18	E.020
AUG										
14...	<.08	<.50	<.08	<.22	E.040	<2.3	<.21	E.060	<.18	E.050
SEP										
08...	*<.04*	*<.25*	*<.04*	*<.11*	*<.04*	*<1.2*	*<.10*	*<.04*	*<.09*	*<.05*
08...	*<.04*	*<.25*	*<.04*	*<.11*	*<.04*	*<1.2*	*<.10*	*<.04*	*<.09*	*<.05*
08...	<.04	<.25	<.04	E.05	E.070	<1.1	<.10	E.090	<.09	E.050

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	344	337	341	438	427	432	406	306	364	465	449	456
2	367	343	354	451	435	443	306	136	176	481	461	471
3	394	367	381	465	448	455	246	173	216	516	481	498
4	424	394	411	489	456	469	297	246	271	489	473	479
5	437	424	430	492	479	484	331	297	315	482	472	476
6	454	436	445	510	487	490	338	186	236	486	475	481
7	518	453	473	499	486	493	206	163	188	475	461	467
8	513	190	409	510	487	496	178	145	158	469	454	460
9	241	211	222	502	280	351	254	178	218	478	449	459
10	298	241	267	334	291	318	298	254	276	901	478	679
11	319	298	312	359	328	345	348	298	312	925	863	893
12	342	319	329	396	359	377	352	326	335	982	829	890
13	363	334	351	438	395	419	327	312	320	964	814	903
14	375	359	368	449	429	441	322	163	214	814	718	773
15	388	374	381	474	449	459	235	168	197	718	647	681
16	388	377	381	502	468	483	285	235	260	836	481	613
17	390	382	385	531	487	503	308	285	295	---	---	---
18	387	375	380	540	487	518	404	308	331	---	---	---
19	376	121	199	546	486	518	431	326	373	---	---	---
20	133	115	121	527	502	507	418	382	410	---	---	---
21	197	133	164	531	502	514	412	396	402	---	---	---
22	245	197	222	539	519	524	436	408	421	---	---	---
23	345	245	269	539	526	530	451	433	442	---	---	---
24	365	301	319	542	527	534	502	369	468	---	---	---
25	370	325	346	560	540	544	460	369	414	---	---	---
26	393	338	352	571	181	283	425	395	407	---	---	---
27	394	345	359	276	183	227	438	355	409	---	---	---
28	378	359	367	307	266	281	404	385	394	---	---	---
29	420	342	383	346	303	323	434	401	419	---	---	---
30	430	415	423	391	346	366	448	432	441	---	---	---
31	436	421	429	---	---	---	457	447	450	---	---	---
MONTH	518	115	341	571	181	438	502	136	327	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	519	488	501	---	---	---	406	373	395
2	---	---	---	508	489	496	411	331	347	420	361	392
3	---	---	---	814	475	544	370	348	359	434	248	339
4	---	---	---	1130	746	920	386	370	376	312	262	280
5	---	---	---	943	880	904	396	386	391	350	312	334
6	---	---	---	942	650	753	414	391	404	359	318	345
7	---	---	---	661	600	631	420	370	405	376	325	359
8	---	---	---	611	579	591	419	397	403	392	372	380
9	---	---	---	582	557	567	433	412	418	385	321	346
10	---	---	---	1100	543	792	425	405	415	358	347	351
11	---	---	---	862	725	780	423	403	414	382	353	365
12	---	---	---	734	673	704	425	309	386	431	381	403
13	659	580	624	677	607	633	340	294	311	443	422	433
14	1480	572	950	697	412	565	423	314	374	436	416	422
15	960	591	699	425	370	404	423	369	391	440	423	433
16	591	528	552	---	---	---	427	407	419	455	434	443
17	531	513	521	---	---	---	462	426	440	461	445	450
18	519	473	509	---	---	---	427	351	389	465	445	452
19	525	505	513	---	---	---	422	382	402	472	436	454
20	520	502	509	---	---	---	426	406	416	461	409	422
21	520	505	513	---	---	---	438	415	422	447	419	439
22	524	499	510	---	---	---	453	422	434	458	441	446
23	525	507	517	---	---	---	466	429	445	467	445	453
24	538	509	519	---	---	---	474	449	458	468	448	454
25	513	501	507	---	---	---	496	471	482	463	207	377
26	520	496	505	---	---	---	509	481	494	310	191	226
27	526	495	504	---	---	---	510	486	494	318	244	285
28	526	500	510	---	---	---	510	231	315	343	315	327
29	---	---	---	---	---	---	351	257	313	380	342	362
30	---	---	---	---	---	---	389	351	370	385	366	376
31	---	---	---	---	---	---	---	---	---	400	377	384
MONTH	---	---	---	---	---	---	510	231	403	472	191	385

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	413	390	400	501	480	490	472	409	445	468	290	405
2	415	188	293	528	493	505	494	405	466	470	419	435
3	243	196	212	525	498	508	499	422	470	546	411	432
4	297	243	274	559	509	538	499	426	471	602	470	566
5	331	297	311	586	520	552	500	406	465	470	441	450
6	353	331	344	570	518	546	510	413	458	471	443	450
7	372	353	362	538	513	528	496	406	456	460	443	450
8	388	362	376	578	515	539	462	446	450	470	447	459
9	401	380	391	583	278	511	471	446	458	483	462	468
10	421	396	408	472	330	427	483	459	469	590	481	517
11	438	418	427	482	438	456	484	464	470	519	211	339
12	443	433	437	462	430	446	522	463	475	307	254	271
13	463	407	434	467	441	450	493	468	477	349	301	324
14	467	374	403	456	438	446	533	493	516	379	330	360
15	379	369	374	454	438	443	533	508	520	396	359	383
16	376	367	372	476	428	443	532	501	518	404	390	396
17	382	374	377	453	431	439	539	504	520	416	395	407
18	388	375	381	454	227	402	513	358	440	430	410	420
19	384	316	358	416	240	361	454	435	443	442	416	427
20	364	340	351	419	390	403	463	257	422	456	430	442
21	383	362	372	403	380	389	296	225	257	485	445	463
22	403	377	390	403	262	299	297	230	263	502	477	485
23	409	358	381	347	291	318	335	288	313	511	491	499
24	465	409	436	---	---	---	365	333	347	520	498	504
25	483	447	462	---	---	---	375	355	363	510	496	501
26	487	466	475	---	---	---	405	371	385	522	501	509
27	498	467	475	306	245	282	411	395	402	531	509	518
28	496	461	478	421	306	330	420	350	393	532	518	524
29	498	467	480	447	380	417	429	388	404	522	455	489
30	502	476	486	437	405	415	445	420	436	506	484	497
31	---	---	---	457	406	426	468	429	442	---	---	---
MONTH	502	188	391	586	245	413	539	225	433	602	211	446

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.5	18.0	19.0	23.5	21.5	22.5	23.0	20.5	22.0	23.5	20.5	22.0
2	19.0	16.0	17.5	22.5	21.5	22.0	23.5	21.5	22.5	23.0	21.5	22.0
3	16.0	14.5	15.0	24.0	21.5	22.5	24.0	21.5	23.0	22.5	19.0	21.0
4	17.0	13.5	15.5	24.5	21.5	23.0	23.0	21.5	22.0	19.5	17.0	18.0
5	18.0	14.5	16.5	23.0	20.5	22.0	22.5	20.5	21.5	19.0	15.5	17.0
6	17.5	15.5	17.0	22.5	19.5	21.0	23.0	19.5	21.5	19.0	16.0	17.5
7	17.0	15.5	16.5	22.5	20.0	21.5	22.5	19.5	21.0	20.0	16.5	18.5
8	18.5	15.0	16.5	24.0	20.5	22.5	21.5	19.0	20.0	19.5	18.0	19.0
9	19.5	15.5	17.5	24.5	21.5	23.0	23.0	19.5	21.0	19.5	18.0	19.0
10	21.5	17.0	19.0	25.0	22.5	23.5	23.0	20.5	22.0	19.0	18.0	18.0
11	23.0	19.0	21.0	24.5	21.5	23.0	23.5	20.5	22.5	21.0	18.0	20.0
12	23.0	20.5	21.5	24.5	20.5	23.0	23.0	22.0	22.5	22.0	20.5	21.0
13	23.0	20.5	21.5	25.0	21.5	23.5	24.0	21.5	22.5	21.5	19.5	20.5
14	22.5	20.5	22.0	26.0	21.5	24.0	24.5	22.5	23.5	20.5	19.0	20.0
15	21.5	18.0	20.0	26.5	23.0	25.0	23.5	21.5	22.5	20.5	18.0	19.5
16	20.5	17.0	19.0	27.0	24.0	25.5	26.0	22.5	24.0	21.0	18.0	19.5
17	19.5	17.5	18.5	28.0	23.5	25.5	26.5	23.0	24.5	21.0	18.5	20.0
18	19.0	18.0	18.5	27.0	24.0	25.0	24.5	22.0	23.5	21.5	19.5	20.0
19	22.0	18.0	20.5	26.5	23.5	25.0	23.5	21.0	22.0	21.0	17.5	19.0
20	23.0	19.5	21.5	23.5	20.5	22.0	21.0	19.5	20.0	20.5	18.5	19.5
21	24.5	21.5	23.0	23.0	19.5	21.5	20.5	19.5	20.0	19.0	15.5	17.0
22	25.5	23.0	24.0	24.5	21.5	23.0	22.0	19.5	21.0	17.0	13.5	15.0
23	24.5	22.5	23.5	23.5	21.5	22.0	20.5	19.0	20.0	15.0	14.0	15.0
24	23.0	20.5	21.5	21.5	17.5	19.0	20.5	18.0	19.5	15.0	13.0	14.5
25	24.5	20.5	22.5	18.5	16.0	17.5	21.5	18.5	19.5	14.5	11.5	13.0
26	26.5	23.0	24.5	20.5	18.0	19.0	21.5	19.0	20.0	16.0	13.0	14.5
27	24.5	21.5	23.5	22.5	20.0	21.5	21.5	19.0	20.5	16.5	13.0	14.5
28	24.5	20.5	22.5	24.5	22.0	23.0	20.5	19.5	20.5	15.5	13.5	14.5
29	24.5	20.5	22.5	24.0	22.0	23.0	22.0	20.5	21.0	18.0	15.5	17.0
30	24.0	21.0	22.5	23.0	20.0	21.5	22.5	19.5	21.0	17.5	16.0	16.5
31	---	---	---	23.0	19.5	21.5	21.5	19.5	20.5	---	---	---
MONTH	26.5	13.5	20.0	28.0	16.0	22.5	26.5	18.0	21.5	23.5	11.5	18.0

01405030 LAWRENCE BROOK AT WESTONS MILLS, NJ

LOCATION.--Lat 40°28'59", long 74°24'45", Middlesex County, Hydrologic Unit 02030105, on left bank at dam on Westons Mill Pond at Westons Mills, 200 ft downstream from bridge on State Route 18, and 1.3 mi upstream from mouth.

DRAINAGE AREA.--44.9 mi^2.

PERIOD OF RECORD.--Water-quality records water years 1976-81. December 1988 to October 1994, July 1995 to current year.

REVISED RECORDS.--WDR NJ-89-1: Drainage area.

GAGE.--Water-stage recorder above masonry dam. Datum of gage is sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Bypass gates were closed during the water year. Flow regulated by Farrington Lake, capacity, 655,250,000 gal. Diversion at gage by New Brunswick Water Department (records given herein). Several measurements of water temperature were made during the year.

COOPERATION.--Water-stage recorder inspected by and records of gate openings and diversions provided by employees of City of New Brunswick.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	40	e98	43	53	37	373	e44	e29	e17	18	43
2	33	40	768	41	48	42	225	e62	e120	e16	17	26
3	30	37	161	40	e41	43	108	e75	e160	14	15	18
4	25	34	76	39	40	76	74	e100	e62	12	19	12
5	22	37	53	40	287	71	58	e55	e69	14	85	9.7
6	23	34	404	40	137	77	50	e49	e29	14	67	9.4
7	22	39	e328	40	76	52	e45	e43	e28	12	26	8.1
8	127	44	e580	34	65	42	e34	e29	e26	12	18	9.8
9	305	115	147	32	64	37	e33	e84	e10	13	16	11
10	110	59	85	47	50	74	e31	e64	e15	24	13	9.8
11	58	41	60	44	40	71	e25	e45	e13	27	13	73
12	39	36	73	36	43	54	e51	e25	e11	27	11	40
13	33	33	82	e33	40	45	e103	e22	e12	26	23	19
14	30	31	511	31	134	102	e69	e23	e13	21	27	13
15	26	30	261	27	169	228	e49	e22	e14	24	15	14
16	23	28	127	270	85	83	e43	e18	e15	20	13	22
17	22	27	99	136	62	61	e38	e27	e22	29	13	8.8
18	23	20	81	e54	52	53	e140	e25	e15	29	25	8.5
19	1250	19	85	e40	48	49	e103	e18	e116	30	19	8.2
20	e490	18	79	e31	41	48	e84	e20	e34	27	37	10
21	e80	26	48	e33	41	45	e55	e18	e17	28	145	10
22	e60	32	39	36	44	41	e49	e15	e16	28	41	9.9
23	57	32	39	57	39	39	e43	e15	e17	30	24	12
24	50	32	53	47	36	36	e49	e20	e15	461	18	15
25	41	24	106	543	34	36	e47	e89	e14	1080	15	13
26	32	372	66	157	36	67	e42	e420	e14	145	14	13
27	27	140	56	85	43	52	e37	e88	e13	68	11	15
28	35	52	52	194	34	40	e191	e69	e12	52	20	14
29	43	37	53	117	---	40	e108	e27	e12	44	21	14
30	43	32	51	62	---	41	e55	e32	e17	28	18	13
31	40	---	46	51	---	334	---	e31	---	23	13	---
TOTAL	3233	1541	4767	2480	1882	2116	2412	1674	960	2395	830	502.2
MEAN	104	51.4	154	80.0	67.2	68.3	80.4	54.0	32.0	77.3	26.8	16.7
MAX	1250	372	768	543	287	334	373	420	160	1080	145	73
MIN	22	18	39	27	34	36	25	15	10	12	11	8.1
(†)	5.69	5.36	12.3	2.24	3.17	.68	3.05	13.1	16.0	0	0	0

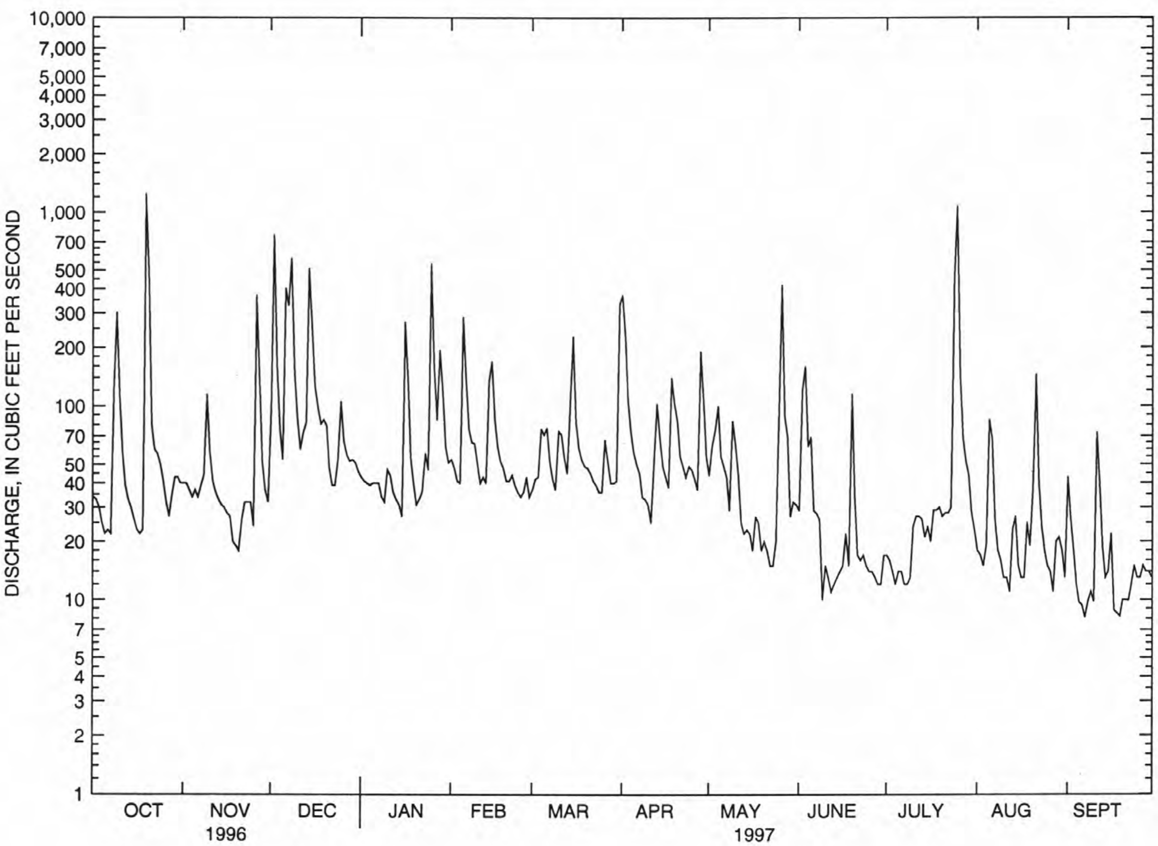
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	44.8	43.5	75.6	66.7	48.3	79.0	73.1	62.6	44.1	47.4	49.9	44.4
MAX	104	70.9	174	114	67.2	179	116	169	98.9	92.7	103	184
(WY)	1997	1996	1993	1996	1997	1993	1993	1989	1989	1989	1990	1989
MIN	13.1	14.6	15.3	28.0	21.3	44.7	27.4	24.9	16.4	20.2	7.32	16.7
(WY)	1993	1992	1990	1992	1992	1992	1995	1995	1995	1993	1995	1997

01405030 LAWRENCE BROOK AT WESTONS MILLS, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	29089.2		24792.2			
ANNUAL MEAN	79.5		67.9		53.6	
(†)	5.0		5.14			
HIGHEST ANNUAL MEAN					68.7	1993
LOWEST ANNUAL MEAN					30.6	1995
HIGHEST DAILY MEAN	1320	Aug 1	1250	Oct 19	2200	Sep 21 1989
LOWEST DAILY MEAN	1.5	Jun 28	8.1	Sep 7	.00	Aug 19 1995
ANNUAL SEVEN-DAY MINIMUM	15	Jun 23	9.6	Sep 17	.00	Aug 19 1995
INSTANTANEOUS PEAK FLOW			3020	Oct 19	4850a	Sep 21 1989
INSTANTANEOUS PEAK STAGE			18.52	Oct 19	19.20	Sep 21 1989
INSTANTANEOUS LOW FLOW			.05	Many days	.00	Sep 29 1989
10 PERCENT EXCEEDS	147		123		104	
50 PERCENT EXCEEDS	42		39		32	
90 PERCENT EXCEEDS	22		13		9.7	

a From rating curve extended above 1,000 ft^3/s.
e Estimated.
† Diversion from Lawrence Brook, in cubic feet per second, by City of New Brunswick for municipal supply.



01405030 LAWRENCE BROOK AT WESTONS MILLS, NJ, DAILY MEAN DISCHARGE

01405302 MATCHAPONIX BROOK AT MUNDY AVENUE AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'22", long 74°22'55", Middlesex County, Hydrologic Unit 02030105, at bridge on Mundy Avenue in Spotswood, 0.2 mi upstream from mouth, 0.5 mi east of DeVoe Lake dam, and 3.4 mi southeast of Tanners Corners.

DRAINAGE AREA.--44.1 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
06...	1100	E50	266	6.6	10.0	772	9.9	87	<1.0	20	10	63
FEB 1997												
04...	1100	E80	261	5.9	5.0	776	10.7	82	<1.0	<20	<10	54
MAR												
17...	1100	E60	244	6.0	4.0	772	11.9	90	E1.9	<20	<10	56
MAY												
28...	1100	E90	208	5.9	14.0	771	8.6	82	<1.0	80	60	50
JUL												
16...	1100	E25	377	6.6	23.5	760	6.0	71	<1.0	330	110	84

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
06...	19	3.8	20	4.2	10	42	33	.2	12	158	159	<1
FEB 1997												
04...	15	3.9	18	3.2	2.9	43	29	.1	9.9	140	138	3
MAR												
17...	16	3.8	20	3.1	3.4	41	33	.2	8.7	140	141	9
MAY												
28...	14	3.3	15	3.0	5.3	36	23	.1	9.1	120	120	4
JUL												
16...	27	4.0	33	6.1	16	44	49	.2	10	253	225	2

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
06...	.008	4.2	.09	.08	.3	.39	4.5	4.6	.01	<.01	2.5	.3
FEB 1997												
04...	.116	3.1	.39	.40	.7	--	3.8	--	.04	.02	1.6	.8
MAR												
17...	.007	2.9	.11	.11	.3	.32	3.2	3.2	.07	<.01	2.3	.4
MAY												
28...	.006	2.7	.08	.10	.4	.33	3.1	3.1	<.01	<.01	2.6	.6
JUL												
16...	.014	9.8	<.03	<.03	.5	--	10	--	.02	<.01	3.0	<.2

01405302 MATCHAPONIX BROOK AT MUNDY AVENUE AT SPOTSWOOD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
28...	1100	10	<1	<10	50	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
28...	830	<1	180	<.1	7	<1	40

01405340 MANALAPAN BROOK AT FEDERAL ROAD NEAR MANALAPAN, NJ

LOCATION.--Lat 40°17'46", long 74°23'53", Middlesex County, Hydrologic Unit 02030105, at bridge on Federal Road, 2.6 mi north of Manalapan, 3.1 mi southwest of Matchaponix, 3.3 mi downstream from Still House Brook, and 4.1 mi northeast of Applegarth.

DRAINAGE AREA.--20.9 mi^2.

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
07...	1100	E20	149	6.4	11.5	767	9.6	87	E1.7	50	10	34
FEB 1997												
06...	1100	E60	113	6.2	4.5	763	11.9	92	E1.1	20	160	26
MAR												
19...	1100	E25	156	6.4	5.0	766	11.9	93	<1.0	<20	<10	34
MAY												
29...	1100	E20	138	6.3	14.5	770	9.4	91	2.1	70	40	32
JUL												
17...	1100	E6.5	178	7.0	24.0	758	8.1	97	2.1	430	340	38

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
07...	8.0	3.5	11	2.8	8.0	18	24	.2	12	94	88	16
FEB 1997												
06...	6.2	2.6	7.9	2.2	4.8	17	15	.1	7.2	64	65	13
MAR												
19...	7.9	3.4	13	2.4	4.8	20	25	.2	8.5	92	89	3
MAY												
29...	7.6	3.2	9.7	2.3	6.3	17	20	.1	9.4	93	78	4
JUL												
17...	8.8	3.9	15	3.0	13	15	33	.2	6.2	114	97	3

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
07...	E.006	.93	.05	.04	.3	.30	1.2	1.2	.06	<.01	2.4	.4
FEB 1997												
06...	.009	.93	<.03	<.03	.4	.23	1.3	1.2	.11	<.01	2.2	1.7
MAR												
19...	.003	1.2	.04	.04	.2	.19	1.4	1.4	.03	<.01	1.8	.4
MAY												
29...	.016	.92	.08	.10	.4	.25	1.3	1.2	.07	<.01	3.4	--
JUL												
17...	.008	.83	<.03	<.03	.3	.37	1.1	1.2	.05	<.01	4.2	.2

01405340 MANALAPAN BROOK AT FEDERAL ROAD NEAR MANALAPAN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 1997								
29...	1100	20	<1	<10	20	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY 1997							
29...	2700	<1	100	<.1	6	<1	20

01405400 MANALAPAN BROOK AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'22", long 74°23'27", Middlesex County, Hydrologic Unit 02030105, on right bank of DeVoe Lake Dam in Spotswood, 0.1 mi upstream from Cedar Brook, and 0.6 mi upstream from confluence with Matchaponix Brook.

DRAINAGE AREA.--40.7 mi^2.

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

REVISED RECORDS.--WSP 1722: 1957-60.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is sea level (levels by Duhernal Water System). January 1957 to September 1966 at datum 17.72 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge given herein includes flow through sluice gate when open. Gate open Oct. 19-22, Feb. 5-14, Feb. 17-Mar. 4, 8-18, Apr. 3-8, and July 24-29. Some regulation by Lake Manalapan, Helmetta Pond, and DeVoe Lake. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	e52	e148	78	75	e30	211	101	58	26	33	21
2	38	e49	e286	86	78	e30	269	95	71	30	29	21
3	35	e49	e241	104	75	e30	e170	83	78	28	27	32
4	31	e49	e98	87	100	e42	e87	81	81	26	27	30
5	29	e49	e130	61	e165	40	e40	83	63	25	26	27
6	29	e49	e258	61	e185	82	e49	77	58	25	41	21
7	29	e49	e207	61	e100	39	e52	75	57	27	31	19
8	47	e64	e309	68	e49	e38	e48	76	47	26	30	18
9	151	e47	e229	102	e36	e30	71	103	30	26	28	17
10	169	e67	e106	98	e31	e40	67	83	29	38	26	30
11	127	e58	e102	61	e30	51	36	79	29	28	24	39
12	106	e49	e152	62	e30	e34	74	75	29	27	24	34
13	77	e47	e139	66	e30	e30	134	68	43	26	30	23
14	32	e47	e274	65	e45	e44	117	48	113	25	30	21
15	27	e44	e303	63	112	e39	90	47	76	25	29	19
16	25	e41	e161	127	90	e64	84	47	57	25	28	19
17	25	e41	e89	191	e69	e86	78	46	55	25	28	18
18	25	e41	e115	113	e30	e94	94	44	47	25	29	18
19	e122	e44	129	55	e30	81	189	45	31	25	29	19
20	e356	e41	112	35	e30	37	135	44	29	25	33	18
21	e478	e39	107	50	e37	51	90	44	28	25	84	17
22	e200	e39	106	74	e30	58	74	44	27	29	78	17
23	e106	e39	106	44	e30	54	76	43	29	28	60	17
24	89	e39	98	82	e30	51	102	31	28	e80	55	18
25	78	e67	104	229	e30	52	70	66	28	e180	46	19
26	74	e126	119	319	e30	79	66	237	27	e206	27	19
27	72	e139	116	181	e49	73	64	227	27	e70	23	19
28	e61	e85	90	122	e30	69	105	84	27	e30	22	19
29	e55	e64	67	165	---	68	155	58	27	e31	25	35
30	e52	e64	86	123	---	70	104	54	26	25	24	44
31	e49	---	84	75	---	122	---	60	---	33	22	---
TOTAL	2840	1678	4671	3108	1656	1708	3001	2348	1355	1270	1048	688
MEAN	91.6	55.9	151	100	59.1	55.1	100	75.7	45.2	41.0	33.8	22.9
MAX	478	139	309	319	185	122	269	237	113	206	84	44
MIN	25	39	67	35	30	30	36	31	26	25	22	17
CFSM	2.25	1.37	3.70	2.46	1.45	1.35	2.46	1.86	1.11	1.01	.83	.56
IN.	2.60	1.53	4.27	2.84	1.51	1.56	2.74	2.15	1.24	1.16	.96	.63

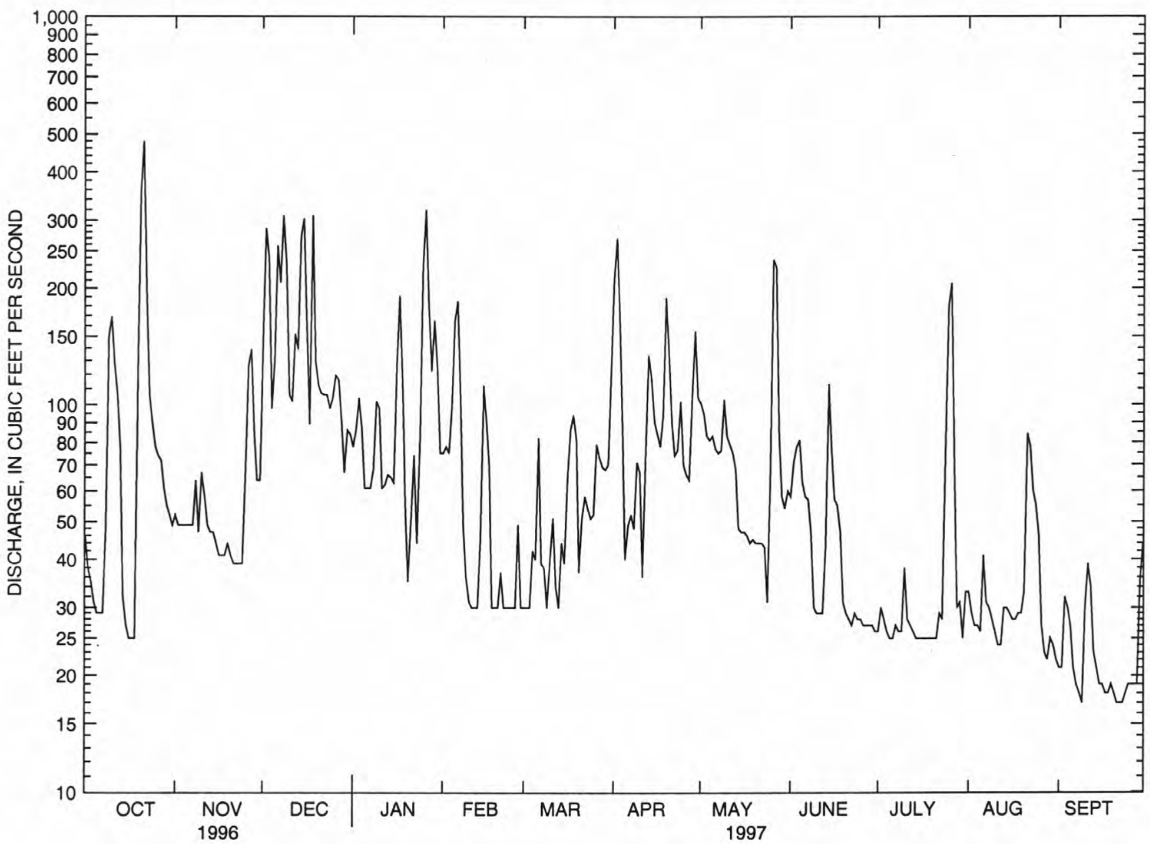
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	41.4	57.9	76.5	79.6	78.1	91.1	85.5	67.0	46.8	44.4	43.9	41.2
MAX	95.2	154	156	186	139	164	154	148	109	141	128	138
(WY)	1990	1978	1984	1978	1979	1958	1983	1984	1968	1975	1990	1989
MIN	13.7	21.7	27.4	21.1	29.8	37.1	31.1	26.5	17.4	4.40	5.56	11.6
(WY)	1983	1966	1981	1981	1992	1985	1985	1977	1966	1966	1966	1965

01405400 MANALAPAN BROOK AT SPOTSWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1957 - 1997	
ANNUAL TOTAL	28526		25371			
ANNUAL MEAN	77.9		69.5		63.1	
HIGHEST ANNUAL MEAN					101	1973
LOWEST ANNUAL MEAN					34.3	1981
HIGHEST DAILY MEAN	779	Jan 20	478	Oct 21	1390	May 30 1968
LOWEST DAILY MEAN	15	Sep 5	17	Sep 9	.00	Jun 16 1957
ANNUAL SEVEN-DAY MINIMUM	23	Aug 25	18	Sep 17	2.0	Jul 22 1966
INSTANTANEOUS PEAK FLOW			577a	Oct 21	1700a	Sep 20 1989
INSTANTANEOUS PEAK STAGE			18.90	Oct 21	20.50	Sep 20 1989
INSTANTANEOUS LOW FLOW			17	Sep 9	.00	Jan 15 1991
ANNUAL RUNOFF (CFSM)	1.91		1.71		1.55	
ANNUAL RUNOFF (INCHES)	26.07		23.19		21.05	
10 PERCENT EXCEEDS	152		132		119	
50 PERCENT EXCEEDS	56		49		46	
90 PERCENT EXCEEDS	27		25		19	

a Sluice gate open.
e Estimated.



01405400 MANALAPAN BROOK AT SPOTSWOOD, NJ, DAILY MEAN DISCHARGE

RESERVOIRS IN RARITAN RIVER BASIN

01396790 SPRUCE RUN RESERVOIR.--Lat 40°38'37", long 74°55'26", Hunterdon County, Hydrologic Unit 02030105, at dam on Spruce Run, 0.5 mi north of Clinton, and 0.6 mi upstream from mouth. DRAINAGE AREA, 41.3 mi^2. PERIOD OF RECORD, November 1963 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway; dam completed in October 1963 with crest of spillway at elevation 273.00 ft. Usable capacity, 11,000,000,000 gal. Dead storage 300,000 gal. Reservoir used for water supply and recreation. Outflow mostly regulated by gates. Water is released to maintain minimum flow on the South Branch Raritan River and, at times, for municipal supply. Records given herein represent usable capacity.

COOPERATION.--Records provided by New Jersey Water Supply Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 11,820,000,000 gal, Jan. 24, 1979, elevation, 274.72 ft; minimum observed, 3,100,000,000 gal, Oct. 18, 1983, elevation, 246.68 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 11,400,000,000 gal, Dec. 2, elevation, 273.85 ft; minimum observed, 6,450,000,000 gal, Oct. 1, elevation, 260.37 ft.

REVISED RECORDS.--WDR NJ-84-1: (M). WDR NJ-85-1: 1984.

01397050 ROUND VALLEY RESERVOIR.--Lat 40°36'39", long 74°50'42", Hunterdon County, Hydrologic Unit 02030105, at main dam on Prescott Brook, 1.8 mi south of Lebanon, 3.2 mi upstream from mouth, and 4.5 mi west of Whitehouse. DRAINAGE AREA, 5.7 mi^2. PERIOD OF RECORD, March 1966 to current year. Nonrecording gage read daily. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam at main dam on Prescott Brook and two dams on South Branch Rockaway River at Lebanon; storage began in March 1966. Capacity at spillway level, 55,000,000,000 gal, elevation, 385.00 ft. Reservoir is used primarily for storage and is filled by pumping from South Branch Raritan River at Hamden Pumping Station (see following page). Outflow is controlled by operation of gates in pipe in dams. Water is released into South Branch Rockaway Creek and Prescott Brook.

COOPERATION.--Records provided by New Jersey Water Supply Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 55,400,000,000 gal, June 15, 1975, elevation, 385.63 ft; minimum observed (after first filling), 37,100,000,000 gal, Feb. 9, 1981, elevation, 361.30 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 55,200,000,000 gal, May 4 and 5, elevation, 385.16 ft; minimum observed, 53,180,000,000 gal, Oct. 8, elevation, 382.75 ft.

REVISED RECORDS.--WDR NJ-85-1: 1984.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01396790 SPRUCE RUN RESERVOIR			01397050 ROUND VALLEY RESERVOIR		
Sept. 30.........	270.26	9,870	--	382.86	53,260	--
Oct. 31.........	272.00	10,590	+35.9	383.34	53,640	+19.0
Nov. 30.........	273.07	11,040	+23.2	383.35	53,650	+.5
Dec. 31.........	273.05	11,030	-.5	384.12	54,310	+32.9
CAL YR 1996			+9.2			+12.8
Jan. 31.........	272.69	10,880	-7.5	384.29	54,400	+4.5
Feb. 28.........	273.00	11,000	+6.6	384.43	54,500	+5.5
Mar. 31.........	273.06	11,060	+3.0	384.87	54,900	+20.0
Apr. 30.........	273.01	11,000	-3.1	385.03	55,000	+5.2
May 31.........	272.97	11,000	0	384.40	54,500	-25.0
June 30.........	271.38	10,300	-36.1	384.46	54,560	+3.1
July 31.........	268.10	9,080	-60.9	384.73	54,730	+8.5
Aug. 31.........	265.20	8,010	-53.4	384.69	54,700	-1.5
Sept. 30.........	260.37	6,450	-80.5	384.46	54,560	-7.2
WTR YR 1997			-14.5			+5.5

† Elevation at 0900 of the last day of each month.

DIVERSIONS IN RARITAN RIVER BASIN

01396920 Water is diverted 4.0 mi upstream from the gaging station on South Branch Raritan River at Stanton (see station 01397000), at the Hamden Pumping Station, for storage in Round Valley Reservoir. Water can also be released from Round Valley Reservoir into the South Branch Raritan River at Hamden and are noted as negative discharge. Records provided by New Jersey Water Supply Authority. REVISED RECORDS.--WDR NJ-85-1: 1984.

01400509 Elizabethtown Water Company diverts water from the Raritan and Millstone Rivers just upstream from the mouth of the Millstone River at Manville. Records given herein represent the total diversion from both rivers. Records provided by the Elizabethtown Water Company. REVISION.--The mean diversion for water year 1991 has been revised to 146 ft^3/s superceding the figure published in WDR NJ-91-1.

01400836 Water is diverted from Carnegie Lake (Millstone River) at Princeton to the Delaware and Raritan Canal at the aqueduct 4.1 mi downstream from the gaging station on the Delaware and Raritan Canal at Port Mercer (station 01460440). Negative discharge indicates flow from Canal to Carnegie Lake. Records provided by New Jersey Water Supply Authority. REVISED RECORDS.--WDR NJ-85-1: 1984.

01402910 Water is diverted from the Raritan River just below the Millstone River to the Delaware and Raritan Canal at Ten Mile Lock for municipal supply. Negative discharge indicates flow from Canal to Millstone River. Records provided by the New Jersey Water Supply Authority. REVISED RECORDS.--WDR NJ-85-1: 1984.

01460570 Elizabethtown Water Company diverts water from the Delaware and Raritan Canal 1200 ft downstream from Ten Mile Lock at Franklin for municipal supply. Records provided by the Elizabethtown Water Company.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

MONTH	01396920 Hamden pumping station	01400509 Raritan and Millstone Rivers	01400836 Carnegie Lake	01402910 Ten Mile Lock diversion	01460570 Delaware and Raritan Canal
October	0	168	0	-70.3	0.04
November	0	165	0	-44.0	.08
December	0	163	0	-84.9	0
CAL YR 1996	0	173	0	-45.5	2.48
January	0	169	0	-45.1	.09
February	0	165	0	-28.4	0
March	0	165	0	-32.3	0
April	0	172	0	-33.1	0
May	0	173	0	-20.9	0
June	0	196	0	-21.3	3.04
July	0	199	0	-9.2	29.3
August	0	170	0	-6.2	30.7
September	0	160	0	-8.4	28.1
WTR YR 1997	0	172	0	-33.7	7.61

01407500 SWIMMING RIVER NEAR RED BANK, NJ

LOCATION.--Lat 40°19'10", long 74°06'55", Monmouth County, Hydrologic Unit 02030104, on left bank 50 ft upstream from spillway at Swimming River Reservoir, 3.3 mi southwest of Red Bank, and 4.8 mi upstream from mouth.

DRAINAGE AREA.--49.2 mi^2.

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

REVISED RECORDS.--WSP 891: 1939. WDR NJ-83-1: Drainage area. WDR NJ-90-1: 1989.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 30.00 ft above sea level. Prior to Jan. 19, 1962, at site 800 ft upstream at datum 17.67 ft lower. Jan. 19 to Mar. 30, 1962, nonrecording gage, 700 ft upstream at datum 13.87 ft lower.

REMARKS.--Records good for days of no flow, good above 200 ft^3/s, and fair below 200 ft^3/s. Records given herein represent flow over spillway and flow or leakage through blowoff gates. Diversion above station for municipal supply. Flow regulated by Swimming River Reservoir. Several measurements of water temperature were made during the year.

COOPERATION.--Water-stage recorder inspected by and record of diversion furnished by New Jersey-American Water Co.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in July 1919 reached a stage of 7.84 ft (site and datum then in use), from floodmark, discharge about 11,800 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	38	49	44	66	57	517	65	43	.00	2.9	.00
2	9.9	44	455	44	54	65	272	71	107	.00	1.3	.00
3	9.1	36	146	48	47	63	121	90	161	.00	.36	.00
4	6.6	32	70	46	45	104	91	94	74	.00	.01	.00
5	4.6	32	51	47	423	86	75	59	50	.00	.07	.00
6	3.8	34	515	41	211	89	78	62	41	.00	.25	.00
7	3.2	35	327	36	101	56	77	66	38	.00	.17	.00
8	29	40	706	32	88	53	56	51	36	.00	.01	.00
9	446	77	163	39	88	48	54	106	31	.00	.00	.00
10	64	53	91	67	76	96	53	83	27	.00	.00	.00
11	20	35	76	53	69	83	53	56	22	.00	.00	.00
12	14	30	77	34	68	60	72	46	19	.00	.00	.00
13	12	31	78	31	64	49	157	44	58	.00	.00	.00
14	9.7	33	369	35	172	76	75	46	133	.00	.00	.00
15	8.0	32	236	35	211	158	58	43	44	.00	.00	.00
16	7.1	31	106	188	111	74	55	36	32	.00	.00	.00
17	7.8	29	105	122	84	59	60	31	27	.00	.00	.00
18	8.2	31	87	52	70	56	181	32	27	.00	.00	.00
19	888	39	111	42	62	54	180	37	31	.00	.00	.00
20	639	36	109	38	58	57	89	39	21	.00	.00	.00
21	134	31	71	36	61	56	69	37	17	.00	1.3	.00
22	77	29	63	38	57	52	63	31	12	.00	3.2	.00
23	62	28	65	62	51	45	60	24	11	.00	3.1	.00
24	50	25	64	45	49	42	77	22	9.5	.03	2.4	.00
25	43	26	83	365	49	43	72	148	8.0	96	1.6	.00
26	40	212	65	123	51	65	55	413	5.6	74	.85	.00
27	41	118	70	61	55	60	48	83	4.2	35	.33	.00
28	43	45	63	138	44	48	215	55	2.2	21	.05	.00
29	41	37	63	109	---	66	130	44	.78	15	.02	.00
30	38	35	57	63	---	106	72	43	.12	9.2	.00	.00
31	35	---	49	58	---	311	---	45	---	5.5	.00	---
TOTAL	2806.0	1334	4640	2172	2585	2337	3235	2102	1092.40	255.73	17.92	0.00
MEAN	90.5	44.5	150	70.1	92.3	75.4	108	67.8	36.4	8.25	.58	.000
MAX	888	212	706	365	423	311	517	413	161	96	3.2	.00
MIN	3.2	25	49	31	44	42	48	22	.12	.00	.00	.00
(†)	34.9	31.1	30.9	31.8	29.2	36.3	28.9	29.7	33.6	55.3	42.1	34.7
MEAN*	125	75.5	181	102	122	112	137	97.5	70.0	63.5	42.7	34.7

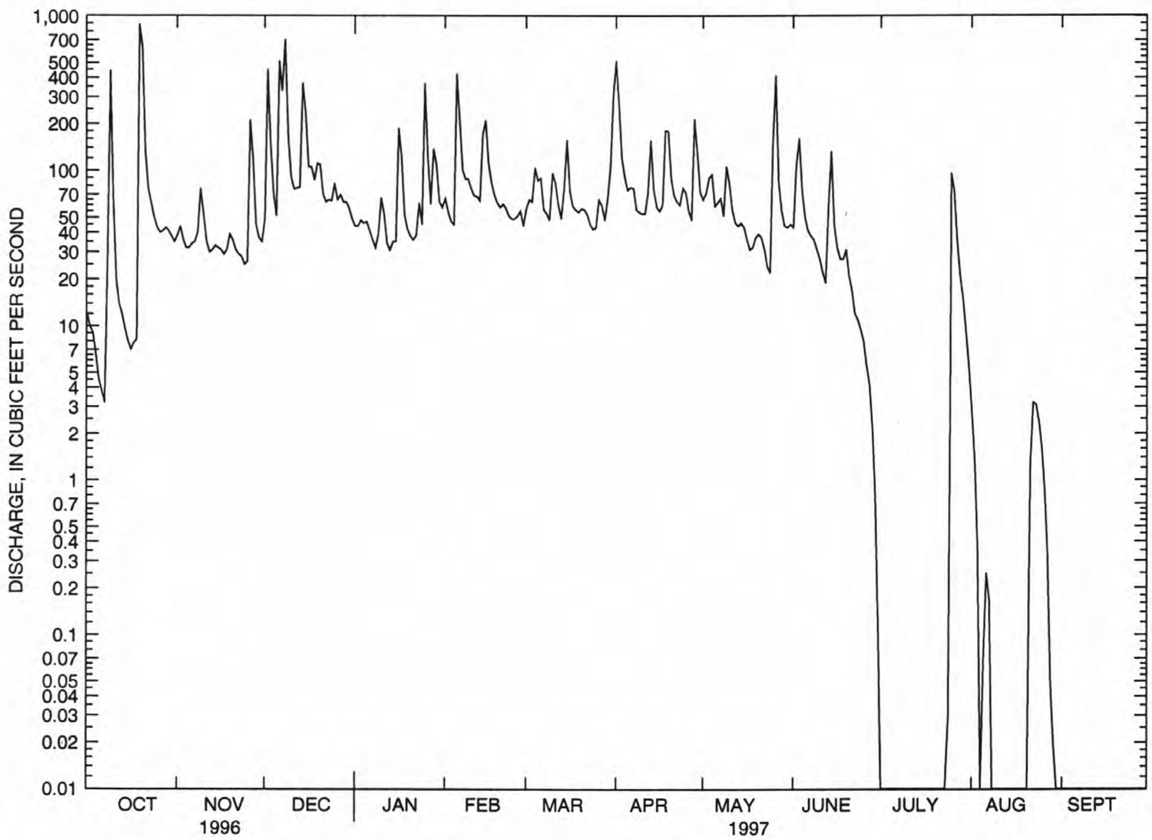
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	39.4	55.1	68.5	79.5	90.2	103	91.5	68.8	46.8	40.0	38.3	37.8
MAX	163	208	196	248	201	216	209	183	135	187	128	210
(WY)	1944	1973	1978	1978	1979	1994	1980	1984	1972	1938	1955	1938
MIN	.000	.000	.000	.000	1.19	18.1	2.93	4.07	.000	.000	.000	.000
(WY)	1971	1981	1981	1981	1989	1985	1962	1985	1985	1966	1957	1980

01407500 SWIMMING RIVER NEAR RED BANK, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	25358.94		22577.05			
ANNUAL MEAN	69.3		61.9		63.0	
ANNUAL MEAN*	103		97.7		81.0	
HIGHEST ANNUAL MEAN					123	1928
LOWEST ANNUAL MEAN					9.76	1985
HIGHEST DAILY MEAN	962	Jan 19	888	Oct 19	3050	Oct 27 1943
LOWEST DAILY MEAN	.00	Jun 28	.00	Jul 1	.00	Jun 22 1923
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 1	.00	Jul 1	.00	Jul 16 1955
INSTANTANEOUS PEAK FLOW			2650a	Oct 19	8910a	Oct 27 1943
INSTANTANEOUS PEAK STAGE			6.58	Oct 19	8.96	Oct 27 1943
INSTANTANEOUS LOW FLOW			.00	Many days	.00	Many days
ANNUAL RUNOFF (CFSM)	1.41		1.26		1.28	
ANNUAL RUNOFF (INCHES)	19.17		17.07		17.41	
10 PERCENT EXCEEDS	138		119		121	
50 PERCENT EXCEEDS	43		43		45	
90 PERCENT EXCEEDS	4.0		.00		.40	

a From rating curve extended above 1,000 ft^3/s on basis of weir formula, site and datum then in use.
† Diversion and change in contents, in cubic feet per second, from Swimming River Reservoir.
* Adjusted for diversion and change in contents.



—— 01407500 SWIMMING RIVER NEAR RED BANK, NJ, DAILY MEAN DISCHARGE

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°11'56", long 74°04'14", Monmouth County, Hydrologic Unit 02030104, on left bank 100 ft upstream from bridge on Remsen Mill Road, 0.3 mi downstream from Robins Swamp Brook, and 1.7 mi west of Neptune City.

DRAINAGE AREA.--9.96 mi^2.

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 7.05 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversion above station by New Jersey-American Water Co. for municipal supply (records given herein) and by farmers for irrigation. Subsequent to November 1962, entire flow from 0.34 mi^2 of drainage area controlled by Glendola Reservoir (capacity 1,000 million gal) on Robins Swamp Brook, 0.6 mi southwest of gage. Water pumped into Glendola Reservoir from Manasquan River or Reservoir subsequent to July 1990 (see station 01408029). Several measurements of water temperature were made during the year.

COOPERATION.--Water-stage recorder inspected by and records of diversion provided by New Jersey-American Water Co.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e9.9	13	15	12	14	e13	e103	6.8	4.6	2.9	3.4	5.0
2	e8.2	13	113	12	12	e14	e56	8.3	32	3.1	3.1	4.6
3	e8.6	11	39	12	11	e15	e26	9.3	39	2.4	2.8	4.9
4	e6.5	11	18	11	11	e24	e20	8.9	13	1.9	3.4	3.9
5	e4.6	11	16	10	91	e26	e17	5.3	9.1	2.2	4.3	3.9
6	e3.9	11	102	9.7	38	e23	e16	6.3	3.7	3.0	4.0	3.5
7	e7.4	12	78	8.9	17	e12	e15	5.5	3.4	2.8	4.0	3.4
8	42	14	140	8.3	15	e11	e13	4.1	4.1	2.6	3.9	3.6
9	108	29	46	9.8	15	e10	e12	14	2.9	2.6	2.8	4.1
10	29	15	26	18	13	e23	e11	9.2	2.7	3.2	3.7	3.9
11	15	13	18	13	12	e15	e11	5.8	2.7	3.4	3.0	4.4
12	12	12	18	10	12	e12	e12	5.7	2.7	2.4	2.9	18
13	11	12	20	8.6	11	e11	e31	6.1	13	3.0	4.4	13
14	10	11	70	8.0	48	e17	e15	5.7	7.5	2.8	2.1	3.3
15	9.8	11	44	7.6	47	e43	e13	5.6	3.0	2.9	2.7	3.9
16	9.2	11	21	50	19	e15	e11	5.0	3.7	2.9	5.6	3.9
17	8.7	11	28	25	15	e14	e12	4.3	3.3	2.4	7.9	3.3
18	8.4	12	21	13	14	e11	e48	4.5	2.9	2.3	12	3.3
19	173	14	31	11	13	e11	e38	4.9	3.0	2.4	4.1	2.5
20	126	12	26	11	11	e11	e20	4.6	2.6	2.3	5.4	3.0
21	29	12	16	12	11	e10	e16	6.0	2.8	2.5	85	3.2
22	17	12	14	12	11	e10	e15	5.2	3.0	5.2	7.1	3.5
23	15	11	13	15	11	e8.8	e14	4.8	2.7	3.2	3.9	2.7
24	13	11	14	12	9.9	e8.6	e18	4.6	3.2	135	3.9	3.0
25	13	11	17	38	10	e8.2	e14	45	3.2	160	3.2	2.9
26	12	39	13	19	9.3	e18	e12	62	3.1	17	3.5	2.8
27	12	22	17	13	12	e12	e11	12	2.8	6.2	4.3	2.7
28	13	15	15	28	12	e11	e50	7.8	3.2	3.3	3.4	7.0
29	13	13	13	18	---	e14	e17	5.5	3.2	4.0	4.4	59
30	12	12	13	13	---	e37	9.0	4.7	2.9	3.7	4.2	2.8
31	11	---	12	12	---	e55	---	4.4	---	3.5	3.8	---
TOTAL	771.2	417	1047	460.9	525.2	523.6	676.0	291.9	189.0	397.1	212.2	189.0
MEAN	24.9	13.9	33.8	14.9	18.8	16.9	22.5	9.42	6.30	12.8	6.85	6.30
MAX	173	39	140	50	91	55	103	62	39	160	85	59
MIN	3.9	11	12	7.6	9.3	8.2	9.0	4.1	2.6	1.9	2.1	2.5
(†)	3.7	2.5	1.5	8.4	10.1	5.1	10.3	13.7	9.7	5.7	6.8	5.4

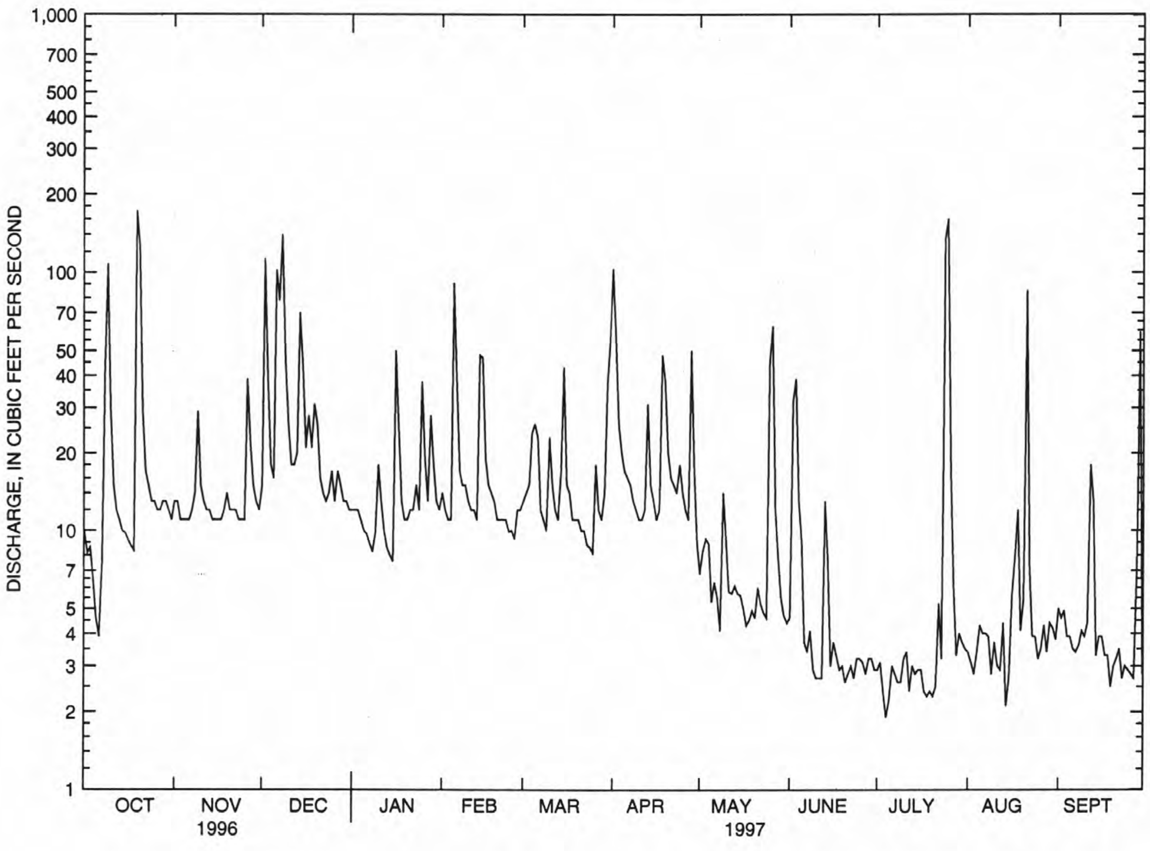
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	10.3	13.2	17.4	17.6	15.6	21.7	20.1	16.0	9.13	9.98	11.3	8.78
MAX	34.0	31.7	44.2	41.1	32.9	56.3	48.3	46.8	21.9	30.1	29.2	22.6
(WY)	1990	1978	1970	1978	1979	1993	1983	1989	1975	1984	1992	1989
MIN	2.81	1.73	4.11	3.57	3.79	6.53	6.39	3.51	2.13	3.47	3.11	1.28
(WY)	1982	1982	1981	1981	1974	1986	1985	1986	1986	1985	1995	1988

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1967 - 1997	
ANNUAL TOTAL	6171.2		5700.1			
ANNUAL MEAN	16.9		15.6		14.3	
(†)	7.2		6.9			
HIGHEST ANNUAL MEAN					24.9	1984
LOWEST ANNUAL MEAN					6.80	1995
HIGHEST DAILY MEAN	173	Oct 19	173	Oct 19	560	Dec 26 1969
LOWEST DAILY MEAN	1.6	Jun 15	1.9	Jul 4	.00	Sep 20 1981
ANNUAL SEVEN-DAY MINIMUM	2.3	Jul 5	2.5	Jul 3	.70	Sep 26 1988
INSTANTANEOUS PEAK FLOW			430	Oct 19	1170	Aug 18 1992
INSTANTANEOUS PEAK STAGE			5.43	Oct 19	6.59	Aug 18 1992
INSTANTANEOUS LOW FLOW			.00	Aug 28	.00	Oct 22 1995
10 PERCENT EXCEEDS	31		31		28	
50 PERCENT EXCEEDS	11		11		8.2	
90 PERCENT EXCEEDS	3.3		2.9		2.5	

† Diversion, equivalent in cubic feet per second, from Shark River by New Jersey-American Water Company, for municipal supply.
e Estimated.



—— 01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ, DAILY MEAN DISCHARGE

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°12'13", long 74°03'58", Monmouth County, Hydrologic Unit 02030104, on left bank 60 ft downstream from dam on Jumping Brook Reservoir, 0.8 mi upstream from mouth, and 1.4 mi west of Neptune City. Water-quality samples collected at bridge on Corlies Avenue, 600 ft downstream from gaging station.

DRAINAGE AREA.--6.46 mi^2.

PERIOD OF RECORD.--October 1966 to current year. Records for water years 1976-83 are unpublished but are available in the files of New Jersey District Office.

REVISED RECORDS.--WDR-84-1: drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 13.76 ft above sea level.

REMARKS.--Records good except those above 300 ft^3/s, which are fair. Diversion above station by New Jersey-American Water Co. for municipal supply (records given herein) and by farmers for irrigation. Several measurements of water temperature, other than those published, were made during the year.

COOPERATION.--Water-stage recorder inspected by and records of diversion provided by New Jersey-American Water Co.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	6.0	8.3	6.3	9.1	8.1	68	7.6	4.9	1.9	3.5	6.5
2	4.7	6.0	79	6.6	7.0	7.6	25	8.6	33	2.1	3.5	4.6
3	4.8	5.1	13	6.8	6.4	11	12	11	30	1.6	3.3	4.1
4	4.5	4.7	8.2	6.3	6.4	22	9.9	8.3	8.2	1.1	2.7	3.1
5	4.2	4.7	7.0	6.1	60	13	8.2	6.2	5.6	1.1	4.4	3.1
6	3.9	4.9	69	5.9	17	16	8.1	7.5	4.6	1.1	4.7	3.0
7	4.2	5.5	45	5.5	10	8.2	8.6	6.7	3.9	1.0	3.3	3.0
8	43	6.9	86	5.3	9.8	6.9	7.0	5.6	3.6	.84	2.6	2.8
9	87	23	16	7.7	10	6.4	6.9	16	3.4	.89	2.9	3.0
10	14	8.0	11	14	8.4	19	6.3	7.5	2.7	1.2	2.7	2.8
11	7.9	5.8	9.9	8.0	7.6	9.3	6.0	5.9	2.3	.99	2.2	4.5
12	6.0	5.1	10	6.3	7.4	7.1	11	5.5	2.3	.85	2.5	17
13	5.3	4.9	11	5.6	6.9	6.3	22	5.2	12	.98	6.1	14
14	5.0	4.8	37	5.3	35	16	8.3	5.0	9.6	.86	4.3	5.3
15	4.4	4.6	18	5.2	24	26	6.7	4.3	3.5	.84	2.8	3.9
16	4.3	4.5	11	35	12	8.9	6.2	4.0	2.9	1.3	7.4	3.4
17	4.2	4.5	15	13	9.2	7.2	6.9	4.0	2.4	1.1	6.2	3.0
18	4.1	4.6	11	7.2	8.2	7.1	30	4.1	2.8	.68	11	2.7
19	184	6.8	19	5.8	7.6	6.8	21	4.2	2.4	.75	5.2	2.6
20	49	5.0	16	5.5	7.0	7.0	9.5	4.2	2.0	.84	6.8	2.7
21	13	4.5	9.0	5.5	6.8	6.5	7.9	3.4	2.2	.77	100	2.7
22	9.5	4.3	8.1	6.1	7.0	6.2	7.4	3.2	2.0	5.5	9.0	2.4
23	7.6	4.2	8.1	9.5	6.2	5.7	6.8	3.2	1.5	3.2	5.0	2.3
24	6.6	4.1	8.7	6.6	6.0	5.8	10	2.9	1.8	318	4.0	2.5
25	6.1	4.1	12	22	5.8	5.4	7.5	40	1.6	114	3.5	2.3
26	5.8	26	7.6	9.7	5.9	15	6.5	42	1.7	13	2.9	2.2
27	5.5	10	13	7.0	7.6	7.9	5.9	7.0	1.9	8.7	3.0	2.4
28	6.6	5.9	8.5	19	6.1	6.2	43	4.8	2.4	6.2	3.3	5.7
29	6.1	5.1	7.6	11	---	7.6	13	3.6	2.2	5.1	3.7	67
30	5.5	4.8	7.2	7.6	---	9.8	7.8	3.9	2.0	4.5	4.7	7.8
31	5.2	---	6.9	7.2	---	46	---	3.7	---	3.0	3.6	---
TOTAL	526.6	198.4	597.1	278.6	320.4	342.0	403.4	249.1	161.4	503.99	230.8	192.4
MEAN	17.0	6.61	19.3	8.99	11.4	11.0	13.4	8.04	5.38	16.3	7.45	6.41
MAX	184	26	86	35	60	46	68	42	33	318	100	67
MIN	3.9	4.1	6.9	5.2	5.8	5.4	5.9	2.9	1.5	.68	2.2	2.2
(†)	0	0	0	0	0	0	0	0	13.8	12.4	0	0

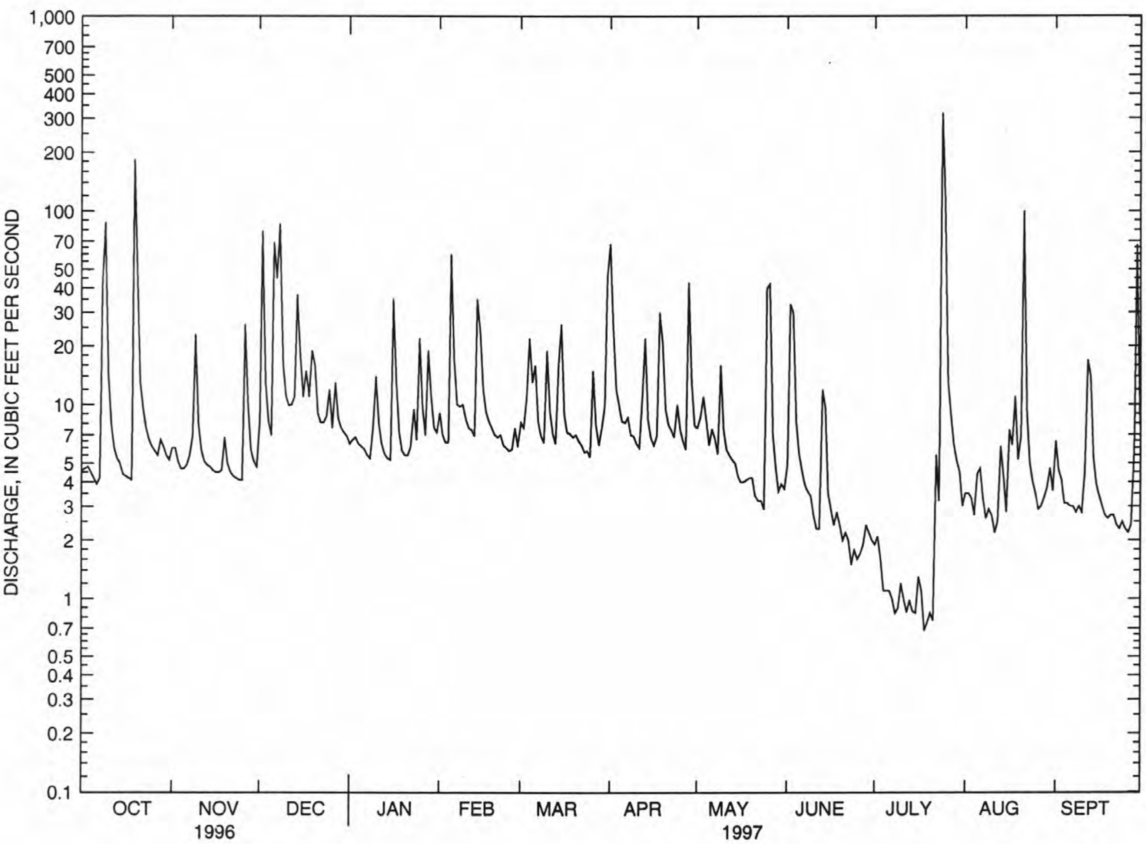
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.17	8.95	10.8	12.4	11.3	13.9	14.1	12.0	6.95	7.13	7.67	6.65
MAX	34.5	47.3	30.5	55.5	62.1	47.1	66.5	53.8	23.7	21.5	19.0	24.2
(WY)	1990	1978	1970	1979	1979	1984	1980	1989	1972	1989	1992	1971
MIN	1.97	1.89	2.78	1.94	3.53	3.86	3.29	2.08	2.11	2.44	1.52	1.25
(WY)	1982	1982	1981	1981	1968	1985	1985	1977	1986	1988	1982	1982

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1967 - 1997	
ANNUAL TOTAL	3994.24		4004.19			
ANNUAL MEAN	10.9		11.0		9.91	
(†)	.12		2.2			
HIGHEST ANNUAL MEAN					20.4	1979
LOWEST ANNUAL MEAN					4.05	1981
HIGHEST DAILY MEAN	184	Oct 19	318	Jul 24	954	Jan 21 1979
LOWEST DAILY MEAN	.94	Jun 28	.68	Jul 18	.12	Sep 15 1981
ANNUAL SEVEN-DAY MINIMUM	1.5	Aug 30	.90	Jul 15	.51	Oct 7 1966
INSTANTANEOUS PEAK FLOW			735	Jul 24	1830a	Sep 12 1971
INSTANTANEOUS PEAK STAGE			7.16	Jul 24	7.43	Aug 18 1992
INSTANTANEOUS LOW FLOW			.18	Jul 11	.00	Jun 7 1971
10 PERCENT EXCEEDS	20		18		18	
50 PERCENT EXCEEDS	6.1		6.1		4.9	
90 PERCENT EXCEEDS	2.5		2.3		1.9	

a From rating curve extended above 150 ft^3/s.
† Diversion, in cubic feet per second, from Jumping Brook by New Jersey American Water Company, for municipal supply.



——— 01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ, DAILY MEAN DISCHARGE

01408000 MANASQUAN RIVER AT SQUANKUM, NJ

LOCATION.--Lat 40°09'47", Long 74°09'21", Monmouth County, Hydrologic Unit 02040301, on right bank 50 ft upstream from northbound bridge on State Highway 547 (Squankum Park Road) in Squankum, and 0.4 mi downstream from Marsh Bog Brook.

DRAINAGE AREA.--44.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1931 to current year. Monthly discharge only for July 1931, published in WSP 1302.

REVISED RECORDS.--WDR NJ-83-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 18.82 ft above sea level. Prior to Aug. 13, 1940, water stage recorder at site 80 ft upstream at same datum.

REMARKS.--Records good except for daily discharges above 300 ft^3/s, which are fair. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0215	*1,480	*8.79	Dec. 8	1130	732	6.21

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

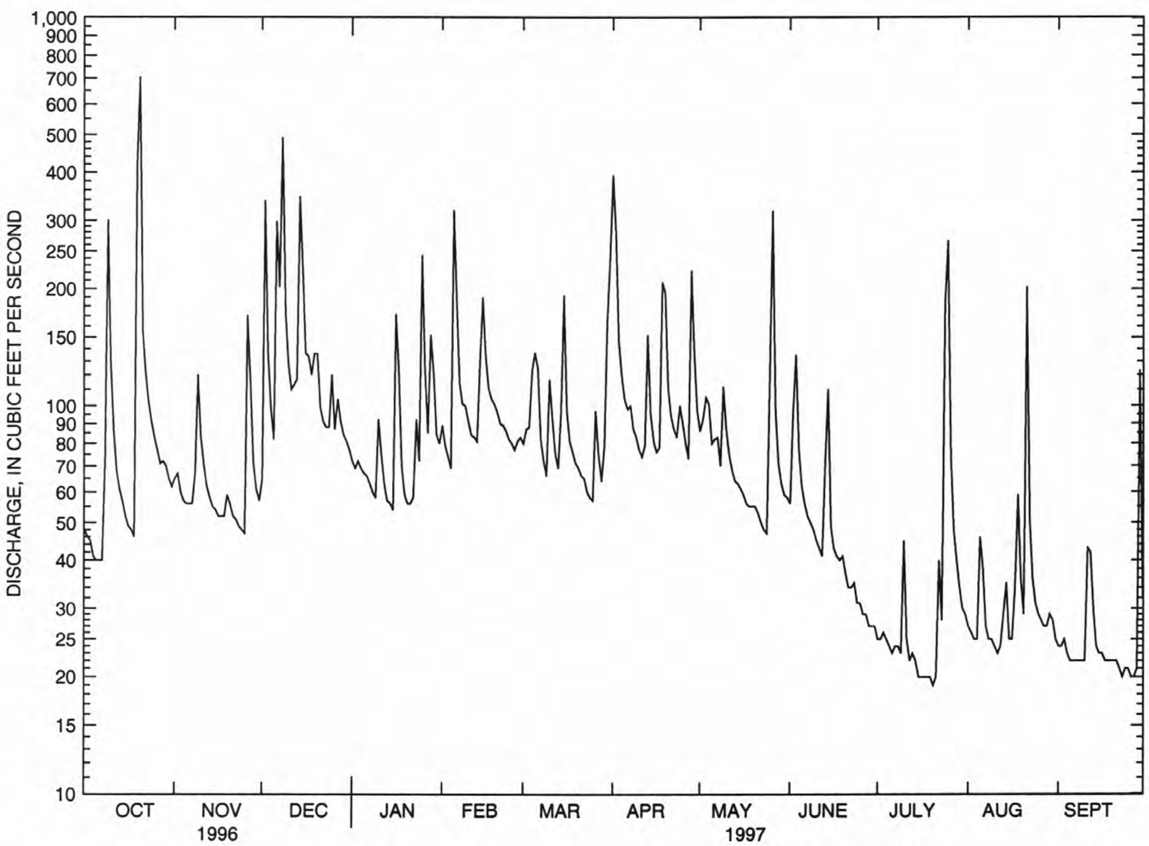
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	65	65	72	89	80	393	86	56	25	27	24
2	46	67	338	69	79	87	278	92	96	25	26	24
3	45	60	137	72	74	88	147	105	135	26	25	25
4	41	57	98	69	69	123	120	101	77	25	25	23
5	40	56	82	67	319	137	104	80	62	24	46	22
6	40	56	299	66	187	125	98	82	56	23	38	22
7	40	56	202	63	114	82	100	83	52	24	27	22
8	74	67	492	60	101	72	87	70	50	24	25	22
9	301	120	173	58	100	66	83	112	48	23	25	22
10	128	83	127	92	91	117	77	87	45	45	24	22
11	86	70	110	75	84	92	74	75	43	25	23	43
12	68	62	113	63	83	75	79	68	41	22	24	42
13	61	58	117	57	81	69	152	64	71	23	29	30
14	57	55	346	56	128	96	95	63	110	22	35	24
15	52	54	225	54	190	193	81	61	49	20	25	23
16	49	52	136	172	134	97	76	59	43	20	25	23
17	48	52	134	123	111	81	78	56	41	20	34	22
18	46	52	120	70	104	76	208	55	40	20	59	22
19	421	59	136	59	101	71	195	55	41	20	36	22
20	705	56	136	56	96	69	111	55	37	19	29	22
21	156	52	99	56	90	66	94	53	34	20	202	22
22	123	51	91	58	89	65	87	50	34	40	51	21
23	103	49	88	92	86	60	83	48	35	28	36	20
24	91	48	88	72	82	58	100	47	31	184	31	21
25	83	47	120	244	80	57	90	116	31	266	29	21
26	77	171	87	123	77	97	80	318	29	74	28	20
27	71	115	104	85	81	75	73	97	29	48	27	20
28	72	71	91	152	83	64	223	71	27	40	27	21
29	70	61	84	121	---	79	137	63	27	34	29	123
30	65	57	81	84	---	163	97	59	27	30	28	32
31	62	---	77	80	---	242	---	58	---	29	25	---
TOTAL	3369	1979	4596	2640	3003	2922	3700	2489	1497	1268	1120	822
MEAN	109	66.0	148	85.2	107	94.3	123	80.3	49.9	40.9	36.1	27.4
MAX	705	171	492	244	319	242	393	318	135	266	202	123
MIN	40	47	65	54	69	57	73	47	27	19	23	20
CFSM	2.47	1.50	3.37	1.94	2.44	2.14	2.80	1.82	1.13	.93	.82	.62
IN.	2.85	1.67	3.89	2.23	2.54	2.47	3.13	2.10	1.27	1.07	.95	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	51.5	70.1	82.4	90.1	96.1	112	100	78.6	57.3	52.5	51.6	51.5
MAX	130	231	212	218	214	221	218	177	126	200	108	183
(WY)	1972	1978	1978	1979	1979	1984	1983	1989	1968	1938	1948	1938
MIN	22.1	22.3	26.4	30.7	37.8	47.2	38.6	38.8	26.6	19.9	16.7	16.7
(WY)	1964	1966	1966	1981	1992	1985	1995	1955	1957	1966	1932	1932

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1932 - 1997	
ANNUAL TOTAL	34278		29405			
ANNUAL MEAN	93.7		80.6		74.4	
HIGHEST ANNUAL MEAN					131	1978
LOWEST ANNUAL MEAN					40.2	1995
HIGHEST DAILY MEAN	808	Jan 20	705	Oct 20	1720	Nov 8 1977
LOWEST DAILY MEAN	31	Sep 4	19	Jul 20	12	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	33	Aug 31	20	Jul 15	13	Sep 7 1995
INSTANTANEOUS PEAK FLOW			1480	Oct 20	2940	Sep 21 1938
INSTANTANEOUS PEAK STAGE			8.79	Oct 20	12.45	Sep 21 1938
INSTANTANEOUS LOW FLOW			18	Jul 18	8.1	Aug 6 1981
ANNUAL RUNOFF (CFSM)	2.13		1.83		1.69	
ANNUAL RUNOFF (INCHES)	28.98		24.86		22.99	
10 PERCENT EXCEEDS	156		136		130	
50 PERCENT EXCEEDS	71		66		54	
90 PERCENT EXCEEDS	43		24		26	



01408000 MANASQUAN RIVER AT SQUANKUM, NJ, DAILY MEAN DISCHARGE

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-1981, 1991 to current year.

PERIOD OF DAILY RECORD
SPECIFIC CONDUCTANCE: July 1969 to September 1974.
pH: July 1969 to September 1974.
WATER TEMPERATURE: July 1969 to September 1974.
DISSOLVED OXYGEN: August 1969 to September 1974.

REMARKS.--For the definitions of field and splitter blank samples, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
29...	1130	64	193	7.1	12.0	762	9.3	86	E1.7	700	100	59
JAN 1997												
30...	1100	83	186	7.2	2.0	773	12.5	90	<1.0	50	<10	52
APR												
15...	1100	75	176	7.2	9.5	768	10.5	91	<1.0	120	30	57
JUN												
05...	1100	62	178	7.2	12.5	762	9.3	88	<1.0	130	40	56
JUL												
30...	1100	30	226	7.3	17.5	765	7.8	82	E1.7	790	390	76

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
29...	18	3.3	8.7	3.2	25	27	19	.1	17	118	113	11
JAN 1997												
30...	16	3.0	10	2.7	18	28	19	.1	13	116	106	10
APR												
15...	18	3.1	9.1	2.7	20	27	19	<.1	12	108	106	3
JUN												
05...	18	2.9	8.1	2.6	25	26	18	.2	13	109	106	5
JUL												
30...	25	3.4	9.8	3.3	36	31	22	.2	15	154	134	2

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
29...	.006	.47	<.03	.04	.3	.17	.77	.64	.10	.02	4.4	2.4
JAN 1997												
30...	.005	.79	.08	.10	.2	.27	.99	1.1	.04	<.01	1.7	.4
APR												
15...	<.003	.67	<.03	<.03	.2	.17	.90	.84	.04	.02	2.2	.5
JUN												
05...	.005	.57	<.03	<.03	.3	.28	.91	.86	.04	<.01	3.3	.5
JUL												
30...	.005	.53	.04	.03	.2	.22	.75	.75	<.01	<.01	1.6	.3

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT 1996										
29...	1130	ENVIRONMENTAL	18	<1	<10	40	<1	1.0	<1	--
JUN 1997										
05...	*1059*	*SPLITTER BLANK*	--	--	--	--	--	--	--	*<1*
05...	1100	ENVIRONMENTAL	<10	<1	<10	50	<1	<1.0	<1	--
05...	*1100*	*FIELD BLANK*	--	--	--	--	--	--	--	*<1*

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 1996											
29...	4700	1	--	80	<.1	--	6	--	<1	20	--
JUN 1997											
05...	--	--	*<1*	--	--	*<.1*	--	*<1*	--	--	*<.5*
05...	2400	<1	--	50	<.1	--	5	--	<1	20	--
05...	--	--	*<1*	--	--	*<.1*	--	*<1*	--	--	*<.5*

01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ

LOCATION.--Lat 40°08'48", long 74°07'23", Monmouth County, Hydrologic Unit 02040301, on left bank just downstream from pumping station of Manasquan Water Supply System, 1400 ft upstream from Hospital Road near Allenwood, 1.2 mi downstream from Mill Run, and 7.9 mi from mouth.

DRAINAGE AREA.--63.3 mi^2.

PERIOD OF RECORD.--June 1990 to current year.

REVISED RECORDS.--WDR NJ-92-1: 1991 Diversion.

GAGE.--Water-stage recorder and concrete control. Datum of gage is sea level (New Jersey Water Supply Authority benchmark).

REMARKS.--Records good. Diversion by New Jersey-American Water Company from Manasquan Reservoir since 1990 and by Manasquan Water Supply System at gage to Manasquan Reservoir for municipal supply since March 1990. Records of diversions provided by New Jersey Water Supply Authority. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	84	34	79	109	68	606	111	59	17	16	16
2	39	93	544	79	97	86	703	118	124	17	17	16
3	37	82	282	81	86	83	313	121	237	19	16	17
4	32	77	130	77	80	132	186	133	117	18	15	17
5	30	75	100	75	489	171	142	96	78	15	34	16
6	30	76	464	74	376	167	119	95	62	15	29	16
7	31	79	408	67	162	164	121	101	55	17	16	16
8	82	88	972	63	128	112	110	80	51	19	14	16
9	531	155	318	64	124	85	96	141	48	16	15	16
10	203	59	183	113	108	87	89	114	50	30	14	17
11	108	59	142	94	98	174	77	89	38	16	14	25
12	74	60	152	74	94	106	75	78	35	15	16	36
13	62	55	150	64	89	85	185	72	56	16	33	34
14	56	52	474	60	217	78	164	65	142	15	32	25
15	49	49	441	57	319	249	102	58	52	12	15	16
16	44	47	200	232	180	202	85	54	40	14	15	15
17	43	46	190	221	126	113	83	50	35	18	21	15
18	41	47	172	113	106	98	235	48	35	17	48	14
19	461	59	192	106	98	85	344	49	36	13	31	15
20	1500	68	204	113	89	79	158	49	31	14	28	15
21	295	69	128	111	83	78	115	46	27	15	342	15
22	168	54	108	111	86	74	100	42	26	26	53	15
23	119	43	106	135	79	70	90	38	27	14	37	15
24	101	42	118	99	73	64	118	37	22	163	27	16
25	88	41	176	268	68	60	113	117	22	391	22	15
26	80	217	118	89	67	68	90	558	19	46	18	16
27	74	181	131	79	81	138	80	148	18	32	16	16
28	74	71	115	201	77	87	326	86	15	38	15	17
29	77	52	102	183	---	75	253	69	16	28	18	161
30	68	24	96	107	---	191	137	62	16	20	17	33
31	79	---	88	96	---	145	---	65	---	16	14	---
TOTAL	4708	2204	7038	3385	3789	3474	5415	2990	1589	1122	1018	692
MEAN	152	73.5	227	109	135	112	181	96.5	53.0	36.2	32.8	23.1
MAX	1500	217	972	268	489	249	703	558	237	391	342	161
MIN	30	24	34	57	67	60	75	37	15	12	14	14
α	24.6	26.1	24.6	28.7	22.7	21.7	22.6	22.4	21.7	32.9	25.6	25.2
†	19.5	17.4	18.3	18.1	18.4	16.8	18.1	17.6	16.7	23.9	19.4	18.0

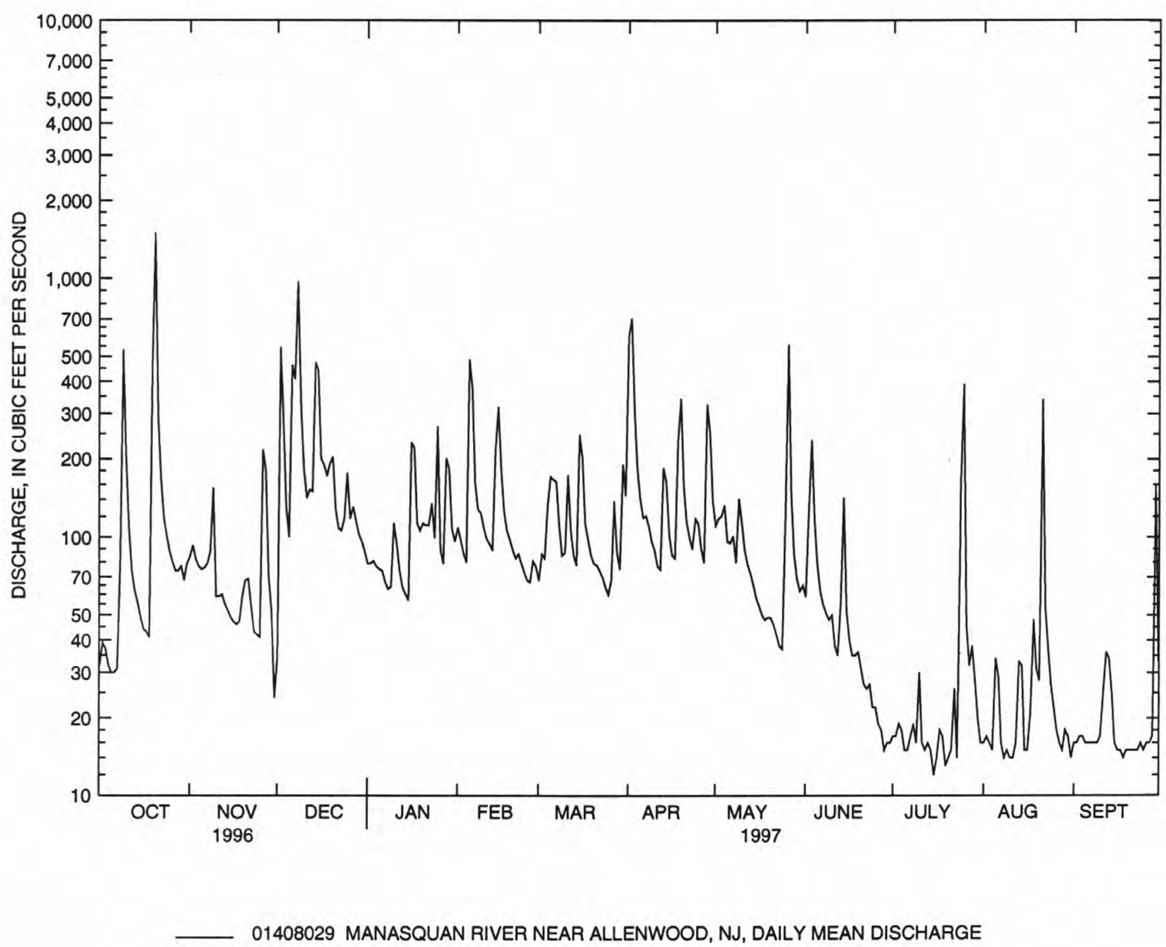
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	55.9	62.8	111	132	90.2	160	116	63.0	43.7	40.1	67.7	42.8
MAX	152	129	227	218	144	319	181	96.5	81.0	66.4	131	88.8
(WY)	1997	1996	1997	1996	1994	1993	1997	1997	1992	1990	1990	1996
MIN	19.2	22.2	48.5	57.1	35.8	44.5	28.0	31.2	21.5	24.9	29.3	21.7
(WY)	1995	1992	1992	1995	1992	1992	1992	1992	1991	1994	1995	1995

01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	44151		37424			
ANNUAL MEAN	121		103		81.2	
α	24.3		24.9			
HIGHEST ANNUAL MEAN					103	1997
LOWEST ANNUAL MEAN					39.4	1995
HIGHEST DAILY MEAN	1550	Jan 20	1500	Oct 20	1930	Dec 12 1992
LOWEST DAILY MEAN	15	Sep 3	12	Jul 15	12	Jun 23 1990
ANNUAL SEVEN-DAY MINIMUM	18	Aug 31	15	Jul 14	14	Oct 8 1995
INSTANTANEOUS PEAK FLOW			2410	Oct 20	2560	Dec 12 1992
INSTANTANEOUS PEAK STAGE			15.60	Oct 20	15.84	Dec 12 1992
INSTANTANEOUS LOW FLOW			4.6	Jul 18	.00a	Jun 24 1993
10 PERCENT EXCEEDS	253		200		162	
50 PERCENT EXCEEDS	78		75		46	
90 PERCENT EXCEEDS	32		16		16	

a Result of pumping to Manasquan Reservoir.
α Diversion from Manasquan River by New Jersey Water Supply Authority, equivalent in cubic feet per second. These figures include water pumped to Glendola Reservoir for New Jersey-American Water Company.
† Water pumped to New Jersey-American Company Glendola Reservoir for municipal supply, equivalent in cubic feet per second.



RESERVOIRS IN MANASQUAN RIVER BASIN

01407965 MANASQUAN RESERVOIR.--Lat 40°10'48", long 74°11'40", Monmouth County, Hydrologic Unit 02040301, at dam on Timber Swamp Brook, 1.6 mi southwest of Farmingdale, and 1.2 mi upstream from the Manasquan River. DRAINAGE AREA, 3.18 mi^2 (revised). PERIOD OF RECORD, March 1990 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by an earthfill dam 4,840 ft long, utilizing a soil-bentonite cut-off wall to control water seepage; dam completed in July 1990 with nominal crest elevation 112.0 ft, but filling began earlier. Usable capacity 4,669,700,000 gal (revised) at elevation 103.0 ft, which represents the normal and service spillway elevation; outflow is regulated through an inlet/outlet tower and the reservoir is filled by pumping from the Manasquan River Intake Pumping Station and the Reservoir Pumping Station through 5.25 mi of 66-in. pipeline (see station 01408029). Water is used for municipal supply.

COOPERATION.--Records provided by New Jersey Water Supply Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 4,694,000,000 gal, Mar. 26, 1993, elevation, 103.1 ft; minimum (after first filling), 3,531,000,000 gal, Feb. 26, 1992, elevation 97.7 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents 4,670,000,000 gal, Apr. 3, elevation, 103.0 ft; minimum, 3,860,000,000 gal, Sept. 28, elevation, 99.3 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01407965 MANASQUAN RESERVOIR		
Sept. 30	102.08	4460	--
Oct. 31	102.15	4470	+0.5
Nov. 30	101.64	4360	-5.7
Dec. 31	102.32	4510	+7.5
CAL YR 1996			+12.3
Jan. 31	102.34	4504	-.3
Feb. 29	102.75	4596	+5.1
Mar. 31	102.85	4620	+1.2
Apr. 30	102.91	4645	+1.3
May 31	102.53	4549	-4.8
June 30	102.31	4504	-2.3
July 31	101.16	4243	-13.0
Aug. 31	100.46	4093	-7.5
Sept. 30	99.76	3945	-7.6
WTR YR 1997			+2.2

† Elevation at 2400 of the last day of each month.

DIVERSIONS IN MANASQUAN RIVER BASIN

0140802880 New Jersey Water Supply Authority diverts water from the Manasquan Reservoir System, for municipal supply. Figures include water pumped to Glendola Reservoir for New Jersey American Water Company.

0140802890 New Jersey Water Supply Authority diverts water from the Manasquan River system to the Glendola Reservoir of New Jersey American Water Company in the Shark River Basin, for municipal supply.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

MONTH	0140802880 Manasquan Reservoir System	0140802890 Glendola Reservoir NJ American Water Company
October	23.6	19.5
November	22.2	17.4
December	24.6	18.3
CAL YR 1996	--	18.1
January	26.6	18.1
February	24.3	18.4
March	22.7	16.8
April	22.0	18.1
May	21.8	17.6
June	23.7	16.7
July	26.5	23.9
August	26.8	19.4
September	24.2	18.0
WTR YR 1997	24.1	18.5

01408120 NORTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ

LOCATION.--Lat 40°05'30", long 74°09'10", Ocean County, Hydrologic Unit 02040301, on upstream right bank at bridge on State Route 549, 1.0 mi upstream from confluence with South Branch Metedeconk River, and 2.3 mi east of Lakewood.

DRAINAGE AREA.--34.9 mi^2.

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 3.89 ft above sea level. Prior to Nov. 17, 1977, gage located on upstream left side of bridge. Nov. 17, 1977 to Dec. 19, 1984, gage located on the downstream side of bridge.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0715	*661	*7.79	Dec. 15	0815	264	6.24
Dec. 8	1530	362	6.76	Apr. 1	2330	279	6.37

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	49	52	62	65	53	234	75	41	21	23	32
2	35	52	158	61	62	61	268	64	68	21	22	30
3	34	50	194	61	58	62	188	63	127	22	21	28
4	31	48	130	60	54	97	131	69	86	21	20	26
5	30	46	102	59	141	94	86	66	56	20	27	25
6	29	46	129	58	194	97	68	58	45	19	29	24
7	29	47	182	55	151	85	70	59	41	20	23	24
8	51	54	311	53	111	66	61	52	39	45	21	24
9	148	73	255	54	81	56	56	71	37	25	20	24
10	133	72	177	71	70	78	53	71	35	21	19	24
11	93	65	124	64	62	83	51	60	33	20	19	35
12	69	54	102	57	59	71	55	51	32	20	18	46
13	50	48	98	50	58	58	97	47	37	18	66	71
14	42	46	158	47	90	61	88	45	52	18	131	32
15	39	44	248	46	137	115	69	44	42	17	36	27
16	36	43	170	86	127	105	56	42	34	17	26	25
17	36	42	136	e105	98	81	54	40	31	17	27	25
18	35	42	112	e75	71	61	98	39	31	17	45	24
19	157	47	108	e60	61	55	168	40	32	17	48	24
20	551	46	112	e55	57	53	136	40	30	16	36	25
21	265	44	95	e45	55	52	96	39	28	16	e296	24
22	151	42	80	e50	55	51	66	36	27	30	137	e23
23	102	42	74	64	53	48	59	35	31	30	56	e23
24	74	41	73	61	51	46	67	34	26	74	37	23
25	61	41	85	93	49	45	71	69	25	144	33	23
26	56	64	80	105	48	72	62	216	24	111	30	23
27	53	87	86	98	54	78	54	171	23	57	29	22
28	53	79	83	97	52	60	113	105	22	35	28	23
29	55	67	76	101	---	54	153	54	21	124	30	122
30	52	50	70	88	---	63	115	44	21	43	35	68
31	50	---	66	69	---	116	---	42	---	26	31	---
TOTAL	2641	1571	3926	2110	2224	2177	2943	1941	1177	1102	1419	969
MEAN	85.2	52.4	127	68.1	79.4	70.2	98.1	62.6	39.2	35.5	45.8	32.3
MAX	551	87	311	105	194	116	268	216	127	144	296	122
MIN	29	41	52	45	48	45	51	34	21	16	18	22
CFSM	2.44	1.50	3.63	1.95	2.28	2.01	2.81	1.79	1.12	1.02	1.31	.93
IN.	2.82	1.67	4.18	2.25	2.37	2.32	3.14	2.07	1.25	1.17	1.51	1.03

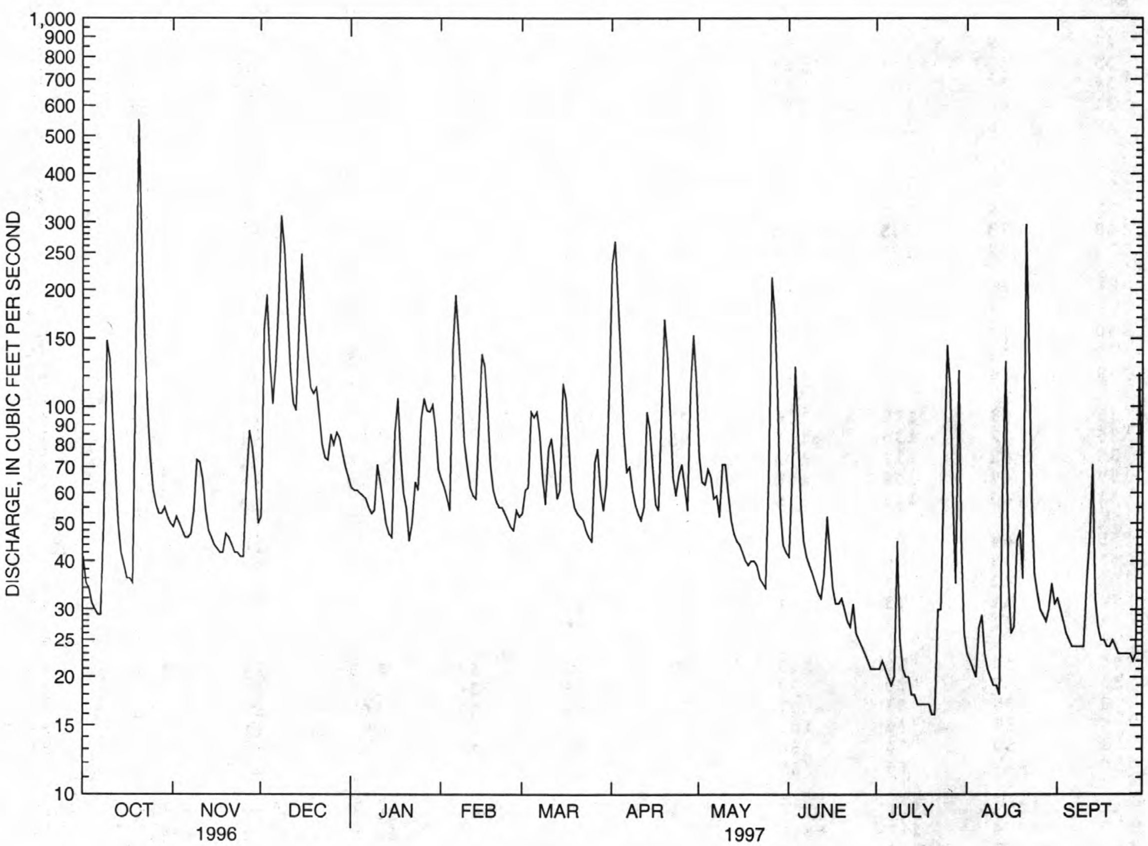
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	45.2	59.8	73.1	75.6	69.6	82.4	82.8	64.1	47.2	44.0	43.3	38.9
MAX	92.6	141	129	153	153	160	153	139	89.6	107	88.8	80.9
(WY)	1990	1973	1978	1979	1979	1984	1984	1989	1984	1984	1990	1989
MIN	24.4	26.1	32.2	25.2	33.0	38.8	32.9	27.1	26.0	21.7	15.2	17.8
(WY)	1982	1982	1989	1981	1992	1981	1995	1977	1986	1988	1981	1988

01408120 NORTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1973 - 1997	
ANNUAL TOTAL	26903		24200			
ANNUAL MEAN	73.5		66.3		60.5	
HIGHEST ANNUAL MEAN					91.5	1984
LOWEST ANNUAL MEAN					34.7	1981
HIGHEST DAILY MEAN	551	Oct 20	551	Oct 20	838	Feb 25 1979
LOWEST DAILY MEAN	22	Sep 3	16	Jul 20	10	Sep 12 1995
ANNUAL SEVEN-DAY MINIMUM	23	Aug 31	17	Jul 15	11	Sep 2 1995
INSTANTANEOUS PEAK FLOW			661	Oct 20	1370a	Nov 8 1977
INSTANTANEOUS PEAK STAGE			7.79	Oct 20	9.28	Nov 8 1977
INSTANTANEOUS LOW FLOW			16	Jul 20	10	Sep 8 1995
ANNUAL RUNOFF (CFSM)	2.11		1.90		1.73	
ANNUAL RUNOFF (INCHES)	28.68		25.79		23.54	
10 PERCENT EXCEEDS	133		127		110	
50 PERCENT EXCEEDS	57		54		46	
90 PERCENT EXCEEDS	34		23		22	

a From rating curve extended above 600 ft^3/s.
e Estimated.



01408120 NORTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ, DAILY MEAN DISCHARGE

01408150 SOUTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ

LOCATION.--Lat 40°05'09", long 74°11'09", Ocean County, Hydrologic Unit 02040301, on right side of dam at Lake Shenandoah, 1.5 mi downstream from Lake Carasaljo, 0.8 mi east of Lakewood, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--27.5 mi^2.

PERIOD OF RECORD.--June 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage above a concrete dam. Datum of gage is 23.0 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Regulation from Lakes Carasaljo, Manetta, and Shenandoah.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 21	0015	*401	*2.97	May 26	1945	227	2.57
Dec. 9	2230	203	2.50	Aug. 21	1730	298	2.75
Apr. 2	1315	206	2.51				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e45	49	92	e55	57	63	174	103	39	35	48	35
2	e40	52	106	e55	71	67	198	87	53	32	12	35
3	e40	51	98	e55	83	67	183	75	83	23	12	34
4	e35	49	111	e55	75	22	125	54	100	25	17	33
5	e30	48	120	e55	114	16	78	60	75	26	26	32
6	e30	47	102	e55	130	72	80	64	44	28	40	31
7	e30	47	120	e55	163	109	78	63	44	30	48	31
8	e45	49	173	e50	118	50	74	62	44	44	41	31
9	e90	56	203	e50	112	65	71	66	44	38	24	31
10	e105	61	166	e60	98	97	69	69	42	35	21	32
11	e105	62	94	e65	58	91	65	68	30	32	18	42
12	e85	58	106	e60	67	89	50	64	33	31	20	62
13	e60	53	125	e55	99	81	62	60	42	30	43	70
14	e45	49	104	e55	84	61	93	58	49	30	85	48
15	e40	47	140	e50	93	74	91	56	53	30	48	26
16	e15	47	129	e65	134	103	83	47	49	30	27	28
17	e10	46	133	e80	101	113	69	34	44	30	41	30
18	e25	45	126	e90	57	95	74	44	41	30	57	31
19	e90	48	87	e90	53	87	120	53	41	28	46	31
20	253	47	e80	e90	82	77	113	50	40	27	37	29
21	330	45	e70	e75	151	61	117	49	38	25	202	30
22	e190	44	e65	e65	82	51	89	46	38	32	94	27
23	e120	44	e65	e56	69	52	66	44	39	35	32	27
24	e80	44	e65	65	65	54	67	44	38	93	33	28
25	e55	44	e65	95	81	61	69	63	37	120	33	26
26	e45	55	e70	92	72	83	69	154	36	116	33	26
27	e45	66	e70	105	64	79	66	184	35	90	33	26
28	e45	70	e70	154	62	77	82	99	35	24	33	26
29	e50	71	e65	80	---	76	105	91	35	67	33	92
30	e50	71	e60	79	---	74	110	72	35	91	34	87
31	e50	---	e60	109	---	104	---	39	---	65	34	---
TOTAL	2278	1565	3140	2220	2495	2271	2790	2122	1356	1372	1305	1117
MEAN	73.5	52.2	101	71.6	89.1	73.3	93.0	68.5	45.2	44.3	42.1	37.2
MAX	330	71	203	154	163	113	198	184	100	120	202	92
MIN	10	44	60	50	53	16	50	34	30	23	12	26
CFSM	2.67	1.90	3.68	2.60	3.24	2.66	3.38	2.49	1.64	1.61	1.53	1.35
IN.	3.08	2.12	4.25	3.00	3.38	3.07	3.77	2.87	1.83	1.86	1.77	1.51

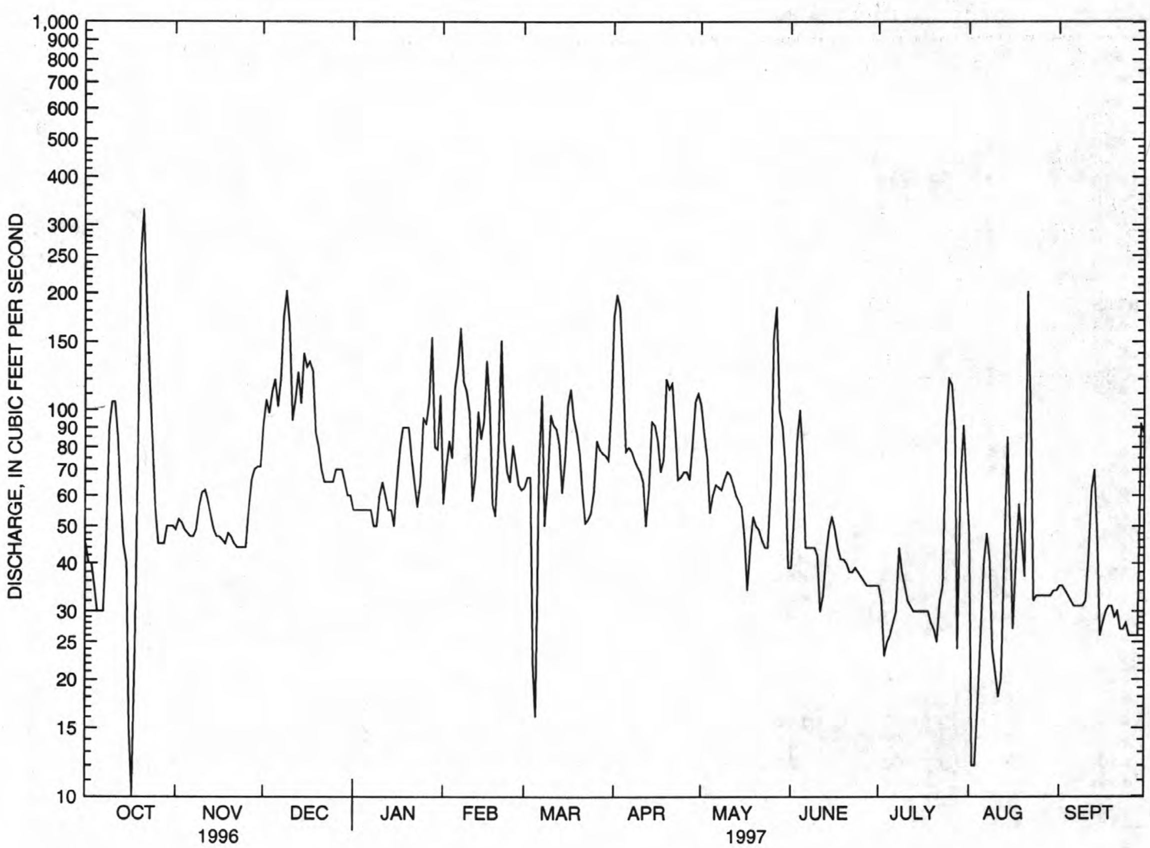
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	45.3	50.3	64.5	69.0	65.9	78.7	68.0	53.5	41.7	43.1	53.5	42.4
MAX	73.5	72.9	101	99.4	89.1	120	93.0	68.5	65.0	68.7	76.8	61.4
(WY)	1997	1996	1997	1996	1997	1994	1997	1997	1996	1996	1992	1993
MIN	28.5	37.8	38.7	50.5	43.7	41.3	31.6	36.1	26.7	28.3	30.6	23.6
(WY)	1995	1995	1996	1995	1995	1995	1995	1995	1994	1992	1995	1995

01408150 SOUTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1992 - 1997	
ANNUAL TOTAL	25030.0		24031			
ANNUAL MEAN	68.4		65.8		56.3	
HIGHEST ANNUAL MEAN					65.8	1997
LOWEST ANNUAL MEAN					36.4	1995
HIGHEST DAILY MEAN	359	Jan 21	330	Oct 21	514	Dec 12 1992
LOWEST DAILY MEAN	5.2	Sep 4	10	Oct 17	5.2	Sep 4 1996
ANNUAL SEVEN-DAY MINIMUM	20	Aug 30	27	Sep 22	13	Aug 29 1995
INSTANTANEOUS PEAK FLOW			401	Oct 21	652	Dec 12 1992
INSTANTANEOUS PEAK STAGE			2.97	Oct 21	3.38	Dec 12 1992
INSTANTANEOUS LOW FLOW			10	Oct 17	4.5	Sep 4 1996
ANNUAL RUNOFF (CFSM)	2.49		2.39		2.05	
ANNUAL RUNOFF (INCHES)	33.86		32.51		27.80	
10 PERCENT EXCEEDS	115		110		99	
50 PERCENT EXCEEDS	60		57		44	
90 PERCENT EXCEEDS	28		30		24	

e Estimated.



—— 01408150 SOUTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ, DAILY MEAN DISCHARGE

01408168 BARNEGAT BAY AT MANTOLOKING, NJ

LOCATION.--Lat 40°42'24", long 74°03'25", Ocean County, Hydrologic Unit 02040301, at east end of Downer Avenue in Mantoloking and 0.1 mi south of bridge on State Route 528.

PERIOD OF RECORD.--Tidal crest-stage gage 1979-85, 1993. June 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level. Gage-height record converted to elevation above or below (-) sea level for publication.

REMARKS.--No gage-height or doubtful record, Jan. 13-24 and Mar. 7-11. Summaries for months with short periods of no gage-height record have been estimated with little or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation known, 4.93 ft, Oct. 11, 1992, from crest-stage gage; minimum recorded, -0.42 ft, Oct. 8, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 3.71 ft, Oct. 19; minimum recorded, -0.42 ft, Oct. 8.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	3.71	3.36	2.91	2.94	2.37	2.86	2.91	2.74	2.52	2.52	3.42	2.85
high tide	Date	19	9	8	25	5	26	25	3	6	3	21	29
Minimum	Elevation	-.42	.25	.10	-.06	-.08	.23	.36	.23	.47	.61	.50	.38
low tide	Date	8	27	21	30	25	4	9	22	2	24	12	24
Mean high tide		1.89	1.68	1.78	---	1.36	1.50	1.77	1.55	1.72	1.59	1.75	1.68
Mean water level		1.62	1.39	1.49	---	1.12	1.20	1.49	1.29	1.46	1.37	1.50	1.45
Mean low tide		1.33	1.13	1.24	---	.86	.94	1.23	1.05	1.20	1.11	1.24	1.21

01408200 BARNEGAT BAY AT BAY SHORE, NJ

LOCATION.--Lat 39°56'56", long 74°06'52", Ocean County, Hydrologic Unit 02040301, at west end of bridge on State Route 37 over Barnegat Bay at Bay Shore, 2.2 mi west of Seaside Heights, and 4.5 mi east of Toms River.

PERIOD OF RECORD.--Tidal crest-stage gage 1965-86, 1992. August 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level. Gage-height record converted to elevation above or below (-) sea level for publication.

REMARKS.--No gage-height or doubtful record, Jan. 1-8, 12-25, and July 28 to Aug. 1. Summaries for months with short periods of no gage-height record have been estimated with little or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

COOPERATION.--Record of stage collected in cooperation with the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation known, 4.27 ft, Oct. 30, 1991, from crest-stage gage; minimum recorded, -0.10 ft, Mar. 29, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 3.67 ft, Oct. 19; minimum recorded, 0.32 ft, Mar. 7, but lower elevation could have occurred during the period of missing record.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	3.67	2.94	2.89	2.80	2.39	2.32	2.86	2.54	2.54	2.36	3.28	2.75
high tide	Date	19	8	8	25	5	26	25	3	5	3	21	29
Minimum	Elevation	.58	.37	.35	e.40	.35	.32	.54	.42	.87	.71	.70	.63
low tide	Date	4	27	21	30	20,25	7	9	22	11	12	12	24
Mean high tide		1.91	1.66	1.82	---	1.39	1.44	1.80	1.53	1.79	1.63	1.78	1.71
Mean water level		1.63	1.37	1.52	---	1.14	1.18	1.52	1.28	1.54	1.39	1.54	1.49
Mean low tide		1.32	1.06	1.22	---	.89	.93	1.25	1.05	1.29	1.18	1.31	1.28

e Estimated.

01408500 TOMS RIVER NEAR TOMS RIVER, NJ

LOCATION.--Lat 39°59'10", long 74°13'29", Ocean County, Hydrologic Unit 02040301, on left bank 500 ft downstream from bridge on State Route 527 (Oak Ridge Parkway), 1.9 mi downstream from Union Branch, and 2.6 mi northwest of community of Toms River.

DRAINAGE AREA.--123 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October and November 1928, published in WSP 1302.

REVISED RECORDS.--WSP 1702: 1938. WDR NJ-76-1: 1975(M). WDR NJ-77-1: 1976.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 8.10 ft above sea level.

REMARKS.--Records good. Diversions by Ciba-Geigy Inc. since July 1966, 800 ft. upstream; the effluent is returned by pipeline directly into the Atlantic Ocean, thus bypassing station. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 21	1500	*1,000	*8.91	Apr. 3	0645	618	7.10
Dec. 9	1630	679	7.44	Apr. 21	0415	483	6.29
Dec. 16	1430	619	7.11	May 28	0930	524	6.54
Feb. 7	2245	496	6.37				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	208	223	265	307	204	406	400	213	106	136	113
2	151	205	258	253	279	225	536	338	224	106	132	110
3	140	202	293	249	267	240	605	286	265	106	115	104
4	130	202	370	241	254	275	535	271	278	105	106	99
5	127	199	393	237	308	293	452	273	277	101	107	95
6	123	195	390	238	364	318	377	274	242	98	112	93
7	121	191	387	228	457	303	324	254	210	97	108	94
8	144	195	519	219	480	284	288	240	192	118	101	92
9	236	216	645	221	417	273	266	249	179	115	97	91
10	259	230	653	235	349	270	246	250	171	103	94	92
11	331	246	560	255	306	269	232	258	163	102	91	102
12	355	245	467	260	280	283	233	244	155	101	89	116
13	280	223	417	244	264	294	266	224	154	94	102	145
14	218	206	478	229	279	268	274	211	181	90	146	122
15	186	194	538	222	318	287	287	203	194	88	132	109
16	169	185	607	246	365	305	273	194	188	86	113	102
17	160	180	584	280	408	335	247	185	164	85	104	97
18	151	178	518	278	382	311	267	179	154	84	115	95
19	271	187	449	310	326	270	337	176	150	82	131	94
20	470	183	417	273	286	247	430	174	146	79	132	93
21	889	180	390	233	263	233	471	172	138	79	357	95
22	770	177	362	222	250	225	403	167	138	101	296	92
23	572	170	331	241	240	215	328	161	167	116	284	91
24	454	166	306	252	234	206	303	156	149	153	224	90
25	357	178	303	281	226	182	285	176	137	263	171	91
26	292	204	299	307	221	215	292	333	130	313	143	90
27	255	219	316	353	222	233	280	409	123	356	128	88
28	237	235	315	383	231	251	309	509	116	323	119	88
29	224	259	307	369	---	263	346	429	112	214	117	152
30	217	249	295	349	---	263	396	302	109	186	116	148
31	212	---	279	337	---	297	---	235	---	154	111	---
TOTAL	8668	6107	12669	8310	8583	8137	10294	7932	5219	4204	4329	3083
MEAN	280	204	409	268	307	262	343	256	174	136	140	103
MAX	889	259	653	383	480	335	605	509	278	356	357	152
MIN	121	166	223	219	221	182	232	156	109	79	89	88
CFSM	2.27	1.66	3.32	2.18	2.49	2.13	2.79	2.08	1.41	1.10	1.14	.84
IN.	2.62	1.85	3.83	2.51	2.60	2.46	3.11	2.40	1.58	1.27	1.31	.93

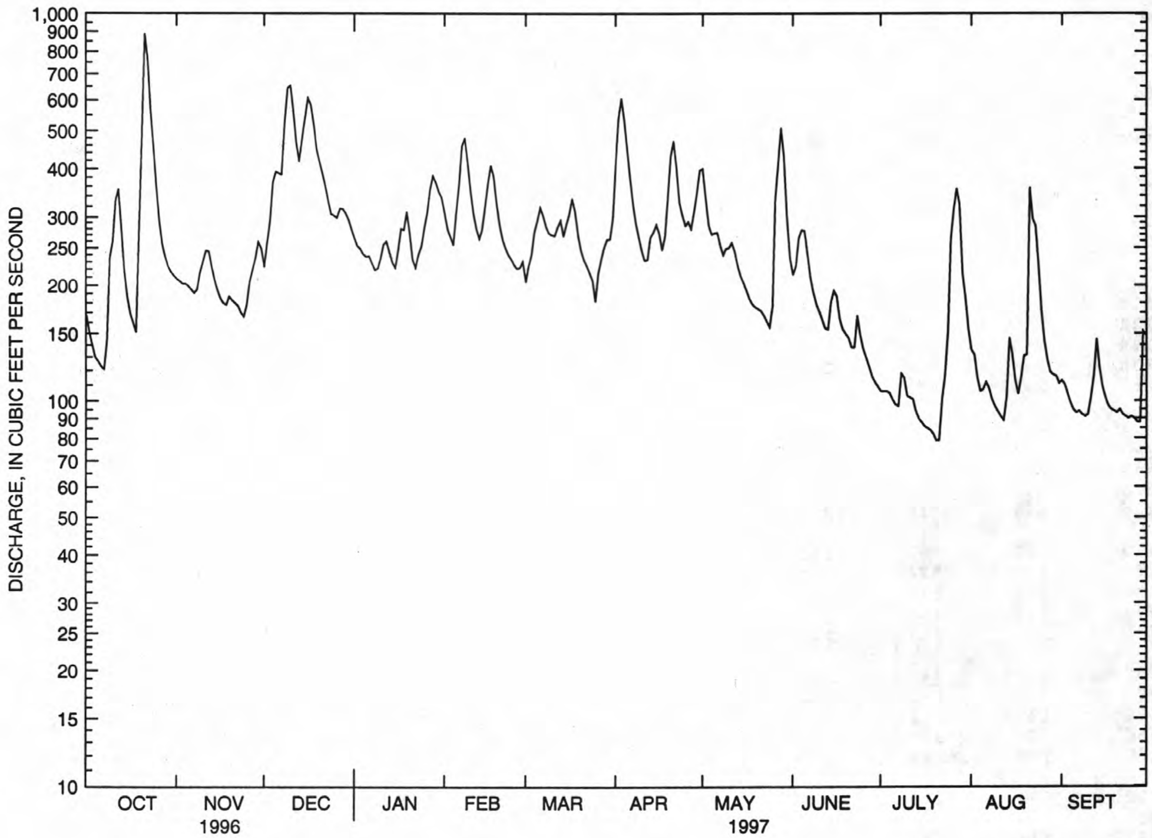
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	157	199	225	244	251	291	282	242	185	157	161	151
MAX	325	475	447	506	455	541	573	461	463	439	359	414
(WY)	1972	1973	1973	1978	1973	1958	1984	1958	1968	1938	1990	1971
MIN	83.3	85.5	96.1	104	128	143	120	118	96.8	77.3	57.9	63.0
(WY)	1942	1966	1966	1981	1992	1985	1985	1992	1977	1988	1966	1995

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1929 - 1997	
ANNUAL TOTAL	95378		87535			
ANNUAL MEAN	261		240		212	
HIGHEST ANNUAL MEAN					335	1978
LOWEST ANNUAL MEAN					128	1995
HIGHEST DAILY MEAN	889	Oct 21	889	Oct 21	1910	Sep 23 1938
LOWEST DAILY MEAN	112	Sep 5	79	Jul 20	43	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	116	Sep 1	83	Jul 15	44	Sep 10 1995
INSTANTANEOUS PEAK FLOW			1000	Oct 21	2000a	Sep 23 1938
INSTANTANEOUS PEAK STAGE			8.91	Oct 21	12.50b	Sep 23 1938
INSTANTANEOUS LOW FLOW			70	Jul 15	42	Sep 11 1995
ANNUAL RUNOFF (CFSM)	2.12		1.95		1.72	
ANNUAL RUNOFF (INCHES)	28.85		26.47		23.41	
10 PERCENT EXCEEDS	429		391		354	
50 PERCENT EXCEEDS	231		231		184	
90 PERCENT EXCEEDS	148		101		97	

a From rating curve extended above 1,500 ft^3/s.
b From floodmark.



01408500 TOMS RIVER NEAR TOMS RIVER, NJ, DAILY MEAN DISCHARGE

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.
SPECIFIC CONDUCTANCE: November 1974 to September 1981.
WATER TEMPERATURE: November 1963 to May 1966, November 1974 to September 1981.

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)
NOV 1996										
07...	1125	191	82	5.7	11.5	765	8.8	80	E1.6	8
JAN 1997										
16...	1040	246	97	5.7	2.5	746	--	--	2.2	11
MAR										
24...	1022	207	86	5.7	6.5	772	11.1	89	E1.8	2
MAY										
28...	1034	524	66	4.7	14.0	772	7.7	74	<1.0	540
AUG										
04...	1100	107	100	6.0	21.0	759	7.6	86	<1.0	33

DATE	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
NOV 1996										
07...	10	11	2.5	1.2	8.4	1.2	2.0	9.8	13	<.1
JAN 1997										
16...	30	11	2.6	1.2	9.6	1.3	2.2	11	15	<.1
MAR										
24...	<10	12	2.5	1.3	8.5	1.2	2.1	11	13	<.1
MAY										
28...	220	9	2.0	.91	5.5	.8	<1.0	7.6	8.7	<.1
AUG										
04...	40	14	3.0	1.5	10	1.6	2.6	11	15	<.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV 1996									
07...	5.7	28	45	15	<.003	.49	.16	.18	.4
JAN 1997									
16...	5.2	66	50	5	.005	.53	.15	.15	.4
MAR									
24...	3.5	56	45	--	.003	.47	.17	.14	.4
MAY									
28...	3.1	55	--	4	.008	.10	<.03	<.03	.5
AUG									
04...	4.8	75	52	5	.011	.77	.24	.23	.5

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN DISSOLVED (MG/L AS N) (00602)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
NOV 1996									
07...	.29	.89	.78	<.01	<.01	6.6	.8	--	--
JAN 1997									
16...	.32	.93	.85	.01	<.01	4.4	.7	--	--
MAR									
24...	.31	.87	.78	<.01	<.01	4.4	.3	3	1.6
MAY									
28...	.23	.57	.34	.01	<.01	14	.4	--	--
AUG									
04...	.38	1.2	1.2	<.01	<.01	5.7	.7	--	--

DATE	TIME	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
MAY 1997								
28...	1034	40	<1	<10	20	<1	<1.0	1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
MAY 1997							
28...	1200	2	30	<.1	1	<1	10

01409110 BARNEGAT BAY AT WARETOWN, NJ

LOCATION.--Lat 39°47'29", long 74°10'58", Ocean County, Hydrologic Unit 02040301, on the pier of the Waretown Fishing Station at the end of Bryant Road on west side of Barnegat Bay, 0.7 mi east of Waretown, and 3.2 mi south of Forked River.

PERIOD OF RECORD.--August 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level. Gage-height record converted to elevation above or below (-) sea level for publication.

REMARKS.--No gage-height or doubtful record, Oct. 10-17, 24-28, 31 to Nov. 6, 12 to Dec. 7, and Jan. 15-22. Summaries for months with short periods of no gage-height record have been estimated with little or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 3.63 ft, Oct. 19, 1996; minimum recorded, -0.64 ft, Mar. 4, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 3.63 ft, Oct. 19; minimum recorded, -0.07 ft, Mar. 7, but lower elevation could have occurred during the periods of missing record.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	3.63	2.52	2.99	2.74	2.36	2.17	2.75	2.09	2.57	2.48	3.20	2.71
high tide	Date	19	9	13	25	5	4	24	27	2	24	20	28
Minimum	Elevation	e.70	e.30	.14	e.20	.12	-.07	.52	.51	1.03	.71	.72	.68
low tide	Date	16	3	21	18	19	7	16	17	11	16	11	24
Mean high tide		---	---	---	---	1.40	1.46	1.84	1.51	1.84	1.65	1.74	1.77
Mean water level		---	---	---	---	1.18	1.22	1.60	1.27	1.62	1.42	1.54	1.54
Mean low tide		---	---	---	---	.94	.99	1.33	1.02	1.38	1.18	1.33	1.31

e Estimated.

01409135 BARNEGAT BAY AT LOVELADIES, NJ

LOCATION.--Lat 39°43'24", long 74°08'06", Ocean County, Hydrologic Unit 02040301, on the bulkhead at Mathew's Point Park on the east shore of Barnegat Bay in Loveladies on Long Beach Island, 2.0 mi north of Harvey Cedars, and 3.0 mi south of Barnegat Inlet.

PERIOD OF RECORD.--August 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level. Gage-height record converted to elevation above or below (-) sea level for publication.

REMARKS.--No gage-height or doubtful record, Jan. 18-21. Summaries for months with short periods of no gage-height record have been estimated with little or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 4.07 ft, Oct. 19, 1996; minimum recorded, -0.34 ft, Mar. 5.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 4.07 ft, Oct. 19; minimum recorded, 0.34 ft, Mar. 8.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	4.07	3.05	3.64	3.15	2.86	3.13	3.22	2.68	3.18	3.16	3.52	3.19
high tide	Date	19	9	14	25	5	6	1	26	2	25	21	29
Minimum	Elevation	1.14	.72	.42	.44	.44	.34	.64	.73	1.43	1.22	1.15	1.21
low tide	Date	16	5	21	18	19	8	16	17	30	8	11	24
Mean high tide		2.42	2.16	2.34	1.84	1.91	1.97	2.37	2.08	2.43	2.23	2.37	2.38
Mean water level		2.10	1.84	2.00	1.54	1.56	1.63	2.03	1.76	2.13	1.94	2.06	2.08
Mean low tide		1.80	1.56	1.70	1.23	1.25	1.33	1.71	1.45	1.85	1.67	1.79	1.80

01409375 MULLICA RIVER NEAR ATCO, NJ

LOCATION.--Lat 39°47'08", long 74°51'38", Camden County, Hydrologic Unit 02040301, at bridge on Jackson-Medford Road, and 1.8 mi northeast of CONRAIL railroad tracks and Atco Street in Atco.

DRAINAGE AREA.--3.22 mi^2.

PERIOD OF RECORD.--Water years 1977-78, 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
21...	1143	2.5	131	7.0	4.5	754	11.6	91	20	4.9
FEB 1997										
20...	1107	4.9	208	6.8	8.0	768	11.1	93	23	6.1
MAY										
08...	1107	4.9	134	6.8	12.5	763	9.2	86	23	5.7
SEP										
02...	1141	1.4	107	6.6	26.0	763	7.5	92	13	3.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
21...	1.9	10	22	77	0.67	0.02	<0.2	--	<0.01	<0.01
FEB 1997										
20...	2.0	12	44	112	0.86	<0.015	<0.2	--	<0.01	<0.01
MAY										
08...	2.1	9.2	22	69	0.59	<0.01	0.3	0.84	0.01	<0.01
SEP										
02...	1.4	6.1	19	59	0.091	<0.01	0.4	0.52	<0.01	0.02

01409383 MULLICA RIVER AT JACKSON ROAD NEAR INDIAN MILLS, NJ

LOCATION.--Lat 39°46'40", long 74°48'01", Burlington County, Hydrologic Unit 02040301, at bridge on Jackson Road (State Route 534), 0.5 mi downstream from Alquatka Branch, 3.2 mi west of Indian Mills, and approximately 3.3 mi east of Jackson.

DRAINAGE AREA.--16.8 mi^2.

PERIOD OF RECORD.--Water years 1977-78, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1155	13	55	4.7	4.5	756	8.8	69	3	0.69
JAN 1997										
22...	1155	20	79	4.5	1.0	766	9.0	63	6	1.3
MAR										
13...	1155	32	72	4.8	4.5	775	10.1	77	6	1.2
JUN										
10...	0917	10	55	4.6	13.0	764	6.2	59	4	0.78
AUG										
05...	0920	1.9	59	4.5	17.5	755	5.0	53	5	1.2
SEP										
09...	0927	0.56	52	4.8	16.0	750	5.0	51	4	0.90

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
20...	0.40	3.0	9.2	27	<0.05	0.06	0.2	--	0.01	<0.01
JAN 1997										
22...	0.78	7.3	10	43	0.052	0.07	0.2	0.25	<0.01	<0.01
MAR										
13...	0.63	6.4	9.3	35	0.075	<0.015	0.2	0.27	<0.01	<0.01
JUN										
10...	0.42	2.6	9.8	48	<0.05	<0.01	0.4	--	<0.01	<0.01
AUG										
05...	0.61	4.3	10	53	<0.05	0.06	0.8	--	0.01	<0.01
SEP										
09...	0.46	3.4	9.3	46	<0.05	<0.01	0.5	--	<0.01	<0.01

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ

LOCATION.--Lat 39°44'25", long 74°43'37", Burlington County, Hydrologic Unit 02040301, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi upstream from Wesickaman Creek.

DRAINAGE AREA.--26.7 mi^2.

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
30...	1130	36	50	4.5	13.0	751	8.8	85	<1.0	<20	<10	4
JAN 1997												
23...	1230	57	64	4.5	3.0	760	12.1	90	<1.0	<20	<10	6
MAR												
20...	1200	84	56	4.5	6.5	757	11.6	95	<1.2	<20	<10	5
JUN												
03...	1130	72	43	4.8	17.0	762	8.7	90	<1.1	<20	<10	5
JUL												
15...	1130	13	37	5.0	29.0	760	5.9	77	E1.3	20	10	6

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
30...	.91	.50	4.7	.9	--	3.4	6.2	<.1	4.9	32	--	5
JAN 1997												
23...	1.3	.75	4.1	.9	<1.0	6.4	7.5	<.1	4.4	36	--	1
MAR												
20...	1.1	.59	4.4	.8	--	6.2	7.7	<.1	2.2	37	--	5
JUN												
03...	1.0	.57	3.6	.6	<1.0	4.2	6.2	<.1	3.0	34	--	<1
JUL												
15...	1.3	.66	2.8	.7	1.9	4.3	4.5	<.1	4.8	42	21	4

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
30...	.003	.071	<.03	<.03	.3	.23	.37	.30	<.01	<.01	9.6	2.8
JAN 1997												
23...	.005	.21	<.03	<.03	.1	.16	.34	.37	<.01	<.01	4.6	.3
MAR												
20...	.004	.12	<.03	<.03	.2	.13	.28	.25	<.01	<.01	5.3	.2
JUN												
03...	.006	.15	<.03	<.03	.4	.27	.54	.41	<.01	<.01	8.2	2.1
JUL												
15...	.010	.11	<.03	<.03	.8	.34	.91	.46	<.01	<.01	11	>4

01409400 MULLICA RIVER NEAR BATSTO, NJ

LOCATION.--Lat 39°40'28", long 74°39'55", Atlantic County, Hydrologic Unit 02040301, on right bank 2.4 mi upstream from Sleeper Branch, and 2.5 mi north of Batsto.

DRAINAGE AREA.--46.7 mi^2.

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

REVISED RECORDS.--WRD-NJ 1969: 1958(M), 1960(M), 1967-68(M), WDR NJ-83-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 11.93 ft above sea level.

REMARKS.--Records good. Some regulation from upstream cranberry bogs and Atsion Lake. Diversions from Sleeper Branch enter river upstream from gage and substantially increase the discharge at the gage. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

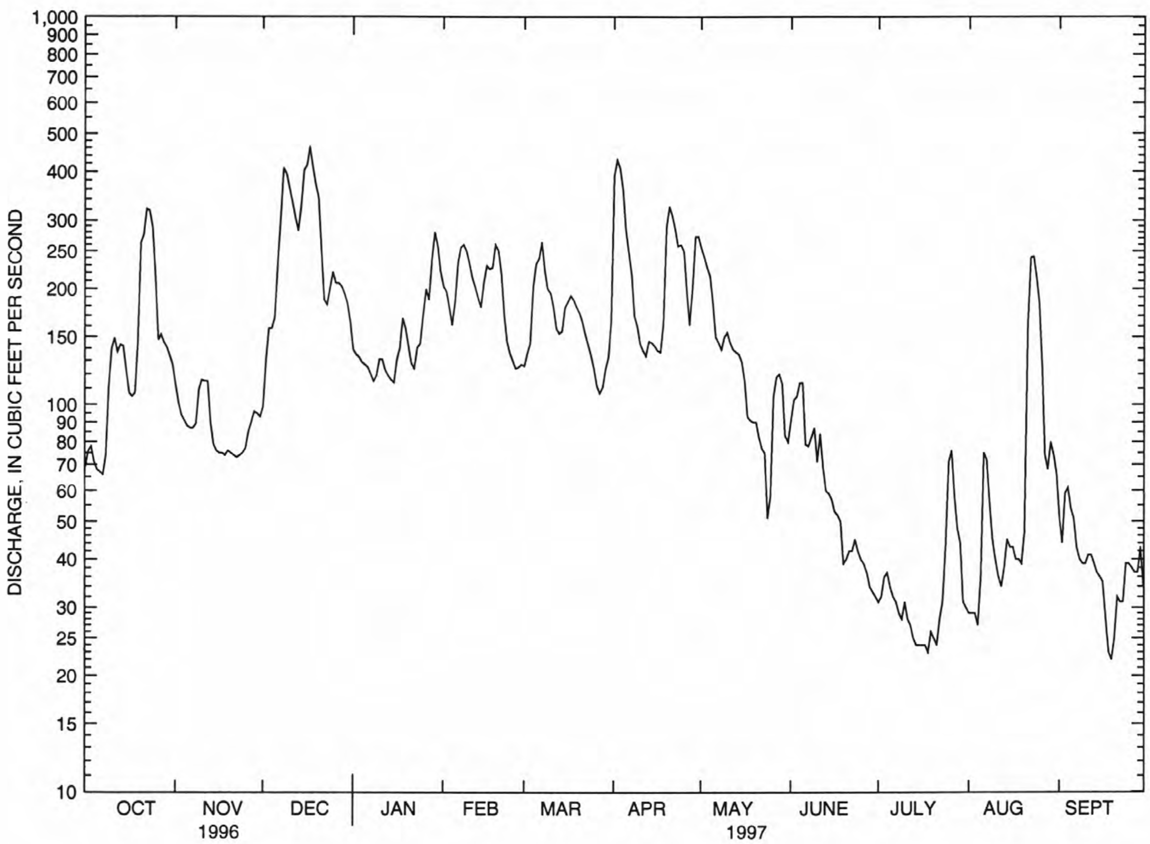
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	113	99	139	203	126	390	256	91	31	29	51
2	76	101	131	135	197	136	428	242	103	32	29	44
3	78	94	158	133	179	144	409	227	105	36	29	59
4	71	91	158	129	161	202	362	216	114	37	27	61
5	68	88	168	127	185	232	285	184	114	34	36	54
6	67	87	233	125	234	239	248	150	79	32	75	51
7	66	87	304	120	256	264	218	145	78	31	72	43
8	74	89	409	115	260	223	170	139	82	29	56	40
9	112	109	394	119	251	200	160	150	87	28	45	39
10	140	116	362	131	232	195	144	154	71	31	40	39
11	149	115	333	131	213	179	138	145	84	28	36	41
12	137	115	305	123	202	158	134	139	69	27	34	41
13	143	90	282	119	189	153	146	137	60	25	38	39
14	142	79	328	116	179	155	145	135	59	24	45	37
15	122	76	404	114	208	179	142	129	57	24	43	36
16	107	75	415	131	230	185	138	115	53	24	43	35
17	105	75	464	140	225	192	137	93	52	24	40	28
18	107	74	411	168	227	187	163	91	50	23	40	23
19	146	76	371	158	260	179	288	90	39	26	39	22
20	263	75	343	142	251	173	326	90	40	25	47	25
21	275	74	252	128	218	164	309	82	42	24	160	32
22	321	73	187	124	172	152	285	77	42	28	241	31
23	318	74	182	141	146	143	258	75	45	31	242	31
24	287	75	201	144	136	134	260	51	42	44	214	39
25	213	77	221	171	130	124	250	58	40	71	183	39
26	147	85	207	200	124	112	197	105	39	76	125	38
27	152	90	207	187	125	107	161	118	37	58	74	37
28	145	96	203	238	127	111	201	120	34	48	68	37
29	141	95	194	280	---	124	273	113	33	44	80	43
30	134	93	183	259	---	133	273	83	32	31	74	34
31	127	---	164	222	---	166	---	80	---	30	66	---
TOTAL	4502	2657	8273	4709	5520	5171	7038	3989	1873	1056	2370	1169
MEAN	145	88.6	267	152	197	167	235	129	62.4	34.1	76.5	39.0
MAX	321	116	464	280	260	264	428	256	114	76	242	61
MIN	66	73	99	114	124	107	134	51	32	23	27	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	69.3	88.9	122	140	140	160	153	122	77.2	72.4	76.7	61.0
MAX	192	305	305	311	292	312	358	273	159	177	253	223
(WY)	1976	1973	1973	1978	1979	1994	1983	1989	1979	1989	1958	1975
MIN	24.1	22.0	29.8	29.3	64.4	59.1	50.3	53.3	32.3	21.9	19.8	17.6
(WY)	1966	1966	1966	1981	1992	1985	1985	1992	1977	1977	1995	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1957 - 1997	
ANNUAL TOTAL	53343		48327			
ANNUAL MEAN	146		132		107	
HIGHEST ANNUAL MEAN					168	1973
LOWEST ANNUAL MEAN					50.4	1966
HIGHEST DAILY MEAN	464	Dec 17	464	Dec 17	1630	Feb 26 1979
LOWEST DAILY MEAN	50	Sep 16	22	Sep 19	5.1	Sep 16 1995
ANNUAL SEVEN-DAY MINIMUM	53	Sep 10	24	Jul 13	6.4	Sep 10 1995
INSTANTANEOUS PEAK FLOW			473	Dec 17	1840	Feb 26 1979
INSTANTANEOUS PEAK STAGE			3.74	Dec 17	6.14	Feb 26 1979
INSTANTANEOUS LOW FLOW			22	Sep 19	4.9	Sep 16 1995
10 PERCENT EXCEEDS	232		258		202	
50 PERCENT EXCEEDS	131		120		86	
90 PERCENT EXCEEDS	73		34		32	

01409400 MULLICA RIVER NEAR BATSTO, NJ--Continued



01409400 MULLICA RIVER NEAR BATSTO, NJ, DAILY MEAN DISCHARGE

0140940050 MULLICA RIVER AT CONSTABLE BRIDGE, NEAR BATSTO, NJ

LOCATION.--Lat 39°39'33", long 74°39'33", Burlington County, Hydrologic Unit 02040301, at Constable Bridge on unnamed road, 1.0 mi upstream from Sleeper Branch, 1.2 mi northwest of Batsto, and 1.6 mi northeast of Nescochague Lake.

DRAINAGE AREA.--47.0 mi^2.

PERIOD OF RECORD.--Water years 1995 to current year.

REMARKS.--Diversions from Sleeper Branch enter river upstream from site and substantially increase the discharge at the site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1110	72	42	5.8	5.5	756	10.5	84	6	1.1
JAN 1997										
22...	1045	117	63	4.9	0.5	766	12.2	84	8	1.7
MAR										
13...	1120	170	54	4.8	5.0	774	10.5	81	7	1.4
JUN										
10...	1440	75	45	5.5	19.0	764	8.0	86	6	1.2
AUG										
05...	1230	34	39	5.8	23.0	758	7.5	88	6	1.2
SEP										
09...	1200	44	40	4.5	19.5	762	7.8	85	5	1.1

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
20...	0.67	4.2	7.1	28	0.14	0.02	<0.2	--	<0.01	<0.01
JAN 1997										
22...	1.0	7.3	9.0	39	0.24	0.04	<0.2	--	<0.01	<0.01
MAR										
13...	0.77	6.3	7.8	33	0.13	<0.015	<0.2	--	<0.01	<0.01
JUN										
10...	0.69	3.7	7.5	41	0.076	0.02	0.4	0.51	<0.01	<0.01
AUG										
05...	0.69	4.2	5.8	35	0.088	0.04	0.5	0.55	<0.01	<0.01
SEP										
09...	0.59	4.3	6.4	37	<0.05	<0.01	0.3	--	<0.01	<0.01

01409401 HAYS MILL CREEK AT ATCO, NJ

LOCATION.--Lat 39°45'32", long 74°53'02", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30, at outlet of Atco Lake in Atco, and 3.3 mi southeast of Berlin.

DRAINAGE AREA.--3.80 mi^2.

PERIOD OF RECORD.--Water years 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
21...	1037	3.0	107	6.9	4.5	754	11.8	92	22	4.8
FEB 1997										
20...	0950	4.8	183	6.7	8.0	768	11.1	93	25	5.9
MAY										
08...	0923	6.0	123	6.8	14.5	762	8.8	86	24	5.5
SEP										
02...	1002	1.5	98	6.9	25.0	763	7.1	86	19	4.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
21...	2.5	7.8	17	59	1.3	<0.015	0.3	1.6	<0.01	<0.01
FEB 1997										
20...	2.4	8.8	37	102	1.4	<0.015	<0.2	--	<0.01	<0.01
MAY										
08...	2.5	6.9	20	70	0.80	<0.01	0.2	1.0	<0.01	<0.01
SEP										
02...	2.1	4.6	16	62	<0.05	<0.01	0.4	--	<0.01	<0.01

01409402 HAYS MILL CREEK NEAR CHESILHURST, NJ

LOCATION.--Lat 39°45'02", long 74°50'28", Camden County, Hydrologic Unit 02040301, at bridge on Tremont Avenue in Wharton State Forest, 2 mi northeast of Chesilhurst, and 0.3 mi northeast of Burnt Mill Road.

DRAINAGE AREA.--7.13 mi^2.

PERIOD OF RECORD.--Water years 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
21...	1255	9.8	100	6.6	7.0	754	10.4	87	17	3.6
FEB 1997										
20...	1120	15	132	6.3	8.5	769	9.9	84	18	4.3
MAY										
08...	1252	15	105	5.3	12.5	763	9.6	90	18	4.1
SEP										
02...	1332	6.7	96	6.6	19.5	763	8.0	87	16	3.3

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
21...	1.9	6.5	16	59	1.5	<0.015	<0.2	--	<0.01	<0.01
FEB 1997										
20...	1.8	8.1	25	73	1.5	<0.015	<0.2	--	<0.01	<0.01
MAY										
08...	1.9	6.4	17	54	1.1	<0.01	<0.2	--	<0.01	<0.01
SEP										
02...	1.7	4.2	15	62	1.0	<0.01	0.3	1.3	<0.01	<0.01

0140940370 SLEEPER BRANCH NEAR ATSION, NJ

LOCATION.--Lat 39°43'42", long 74°46'12", Camden County, Hydrologic Unit 02040301, at bridge on Burnt House Road, 500 ft downstream from Saltars Ditch, and 2.3 mi west of Atsion.

DRAINAGE AREA.--16.1 mi^2.

PERIOD OF RECORD.--Water years 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
21...	1330	18	64	6.1	5.0	757	11.8	93	10	2.1
FEB 1997										
20...	1215	31	83	5.0	8.0	772	10.3	86	11	2.3
MAY										
08...	1215	30	63	5.6	12.5	766	9.9	92	10	2.1
SEP										
02...	1145	14	60	6.2	19.0	764	7.8	84	10	2.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
21...	1.2	4.5	10	43	0.72	<0.015	<0.2	--	<0.01	<0.01
FEB 1997										
20...	1.2	6.4	14	50	0.80	<0.015	<0.2	--	<0.01	<0.01
MAY										
08...	1.2	4.8	11	46	0.37	<0.01	0.2	0.62	<0.01	<0.01
SEP										
02...	1.2	2.9	11	51	0.46	<0.01	0.3	0.74	0.016	0.037

0140940480 CLARK BRANCH NEAR ATSION, NJ

LOCATION.--Lat 39°42'53", long 74°46'25", Camden County, Hydrologic Unit 02040301, at railroad bridge, 0.2 mi downstream from Price Branch tributary, and 2.8 mi west of Atsion.

DRAINAGE AREA.--6.42 mi^2.

PERIOD OF RECORD.--Water years 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
21...	1100	3.2	54	4.8	3.0	759	8.7	65	9	1.7
FEB 1997										
20...	1030	10	75	4.6	6.5	771	9.2	74	14	3.1
MAY										
08...	1030	8.2	61	4.8	10.5	766	7.0	62	12	2.4
SEP										
02...	1040	0.75	65	3.6	18.5	765	5.1	54	13	2.7

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996									
21...	1.1	7.1	7.6	36	<0.05	<0.015	<0.2	<0.01	<0.01
FEB 1997									
20...	1.6	11	8.5	40	0.60	<0.015	<0.2	<0.01	<0.01
MAY									
08...	1.4	8.8	8.0	34	<0.05	<0.01	<0.2	<0.01	<0.01
SEP									
02...	1.5	9.3	7.5	69	<0.05	<0.01	0.5	0.01	<0.01

01409408 PUMP BRANCH NEAR WATERFORD WORKS, NJ

LOCATION.--Lat 39°41'59", long 74°50'40", Camden County, Hydrologic Unit 02040301, at bridge on Old White Horse Pike, 0.5 mi downstream from lake at Camp Ha-Lu-Wa-Sa, and 1.6 mi south of Waterford Works.

DRAINAGE AREA.--9.78 mi^2.

PERIOD OF RECORD.--Water years 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
21...	0942	10	82	6.5	5.5	756	10.6	85	17	3.1
FEB 1997										
20...	1000	16	133	6.9	8.0	768	9.7	81	19	3.8
MAY										
08...	1035	18	88	6.6	13.5	774	8.6	81	18	3.5
SEP										
02...	0955	9.3	74	6.4	23.5	764	5.5	65	15	2.6

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
21...	2.3	4.3	13	52	1.4	<0.015	<0.2	--	<0.01	<0.01
FEB 1997										
20...	2.4	6.0	27	78	1.7	<0.015	<0.2	--	<0.01	<0.01
MAY										
08...	2.3	5.0	14	50	1.0	<0.01	0.4	1.4	<0.01	<0.01
SEP										
02...	2.1	2.6	12	55	0.46	<0.01	0.7	1.2	0.02	0.01

0140940950 BLUE ANCHOR BROOK AT ELM, NJ

LOCATION.--Lat 39°40'11", long 74°50'06", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30 at Elm, at outlet of Winslow Lake, and 1.4 mi upstream from confluence with Pump Branch.

DRAINAGE AREA.--4.86 mi^2.

PERIOD OF RECORD.--Water years 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1996										
21...	1310	3.0	77	6.8	5.0	756	12.5	99	13	2.8
FEB 1997										
20...	1020	6.2	92	6.8	8.0	770	11.2	94	14	3.3
MAY										
08...	0915	6.0	75	7.2	13.5	774	10.1	95	16	3.7
SEP										
02...	1107	2.6	62	7.0	26.0	764	7.5	92	10	2.1

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	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)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 1996										
21...	1.5	6.6	11	45	0.43	0.04	0.3	0.73	<0.01	<0.01
FEB 1997										
20...	1.5	7.8	13	51	0.95	0.03	<0.2	--	<0.01	<0.01
MAY										
08...	1.8	5.6	10	44	0.066	<0.01	0.3	0.39	<0.01	<0.01
SEP										
02...	1.3	3.0	9.5	51	<0.05	<0.01	0.7	--	0.03	0.01

0140940970 ALBERTSON BRANCH NEAR ELM, NJ

LOCATION.--Lat 39°41'34", long 74°48'24", Camden County, Hydrologic Unit 02040301, at bridge on Fleming Pike, 0.4 mi downstream from confluence of Blue Anchor Brook and Pump Branch, and 1.6 mi northeast of Elm.

DRAINAGE AREA.--17.1 mi^2.

PERIOD OF RECORD.--Water years 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
21...	1050	16	79	6.3	4.5	758	11.0	85	16	3.0
FEB 1997										
20...	1200	29	114	6.3	8.0	770	10.2	85	17	3.6
MAY										
08...	1150	30	79	6.6	13.5	774	10.0	94	17	3.4
SEP										
02...	1222	18	67	6.8	22.0	764	7.3	83	14	2.6

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
21...	2.0	6.4	12	44	1.1	<0.015	<0.2	--	0.02	<0.01
FEB 1997										
20...	2.0	7.7	19	61	1.4	<0.015	<0.2	--	<0.01	<0.01
MAY										
08...	2.1	5.8	12	46	0.70	<0.01	<0.2	--	<0.01	<0.01
SEP										
02...	1.9	3.3	10	50	0.32	<0.01	0.3	0.66	<0.01	<0.01

0140941070 GREAT SWAMP BRANCH BELOW U.S. RT. 206, NEAR HAMMONTON, NJ

LOCATION.--Lat 39°41'04", long 74°45'48", Atlantic County, Hydrologic Unit 02040301, 1.0 mi north of Hammonton Municipal Airport, 2.3 mi upstream from mouth, 2.5 mi south of Parkdale, and 3.9 mi northeast of Hammonton.

DRAINAGE.--8.07 mi^2.

PERIOD OF RECORD.--Water years 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1015	12	128	5.9	6.5	757	8.5	70	35	7.8
JAN 1997										
22...	1000	16	151	6.0	2.5	768	10.1	73	41	9.2
MAR										
13...	1005	21	131	6.4	5.5	775	9.7	76	36	8.5
JUN										
10...	1220	8.6	116	6.4	16.5	764	6.9	70	34	7.8
AUG										
05...	1055	4.2	122	6.4	19.0	755	6.4	70	37	8.5
SEP										
09...	1117	4.2	122	6.2	17.0	761	6.4	66	38	9.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
20...	3.8	21	12	69	2.2	0.04	<0.2	--	<0.01	<0.01
JAN 1997										
22...	4.3	25	13	82	2.9	0.27	0.6	3.5	<0.01	<0.01
MAR										
13...	3.7	22	12	69	2.3	0.03	0.2	2.5	<0.01	<0.01
JUN										
10...	3.6	16	11	75	2.1	0.01	0.4	2.5	<0.01	<0.01
AUG										
05...	3.8	17	11	77	2.7	0.02	0.4	3.1	<0.01	<0.01
SEP										
09...	3.8	17	10	93	3.3	<0.01	0.4	3.7	0.02	<0.01

01409411 NESCOCHAGUE CREEK AT PLEASANT MILLS, NJ

LOCATION.--Lat 39°38'37", long 74°39'48", Atlantic County, Hydrologic Unit 02040301, at bridge on sand road in Pleasant Mills, 0.2 mi upstream from Mullica River, and 0.6 mi west of Batsto.

DRAINAGE AREA.--43.7 mi^2.

PERIOD OF RECORD.--Water years 1977-78, 1995 to current year.

REVISIONS.--WDR NJ-96-1: Drainage area.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	0959	57	68	5.8	6.5	757	10.9	89	15	3.2
JAN 1997										
22...	1255	70	93	5.3	1.0	765	13.5	95	20	4.1
MAR										
13...	0930	89	82	5.4	5.0	774	11.3	87	17	3.6
JUN										
10...	1057	55	66	6.4	16.5	764	9.0	92	15	3.0
AUG										
05...	1345	30	61	6.6	22.5	758	8.0	93	13	2.5
SEP										
09...	1330	35	58	5.9	19.0	762	8.0	86	13	2.6

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
20...	1.8	10	9.1	40	0.66	<0.015	<0.2	--	<0.01	<0.01
JAN 1997										
22...	2.4	13	12	57	1.1	0.05	<0.2	--	<0.01	<0.01
MAR										
13...	1.9	12	10	51	0.69	<0.015	<0.2	--	<0.01	<0.01
JUN										
10...	1.7	7.1	9.0	47	0.40	<0.01	0.2	0.62	0.05	<0.01
AUG										
05...	1.6	5.0	9.5	44	0.20	<0.01	0.3	0.50	<0.01	<0.01
SEP										
09...	1.6	6.4	8.2	44	0.25	<0.01	0.2	0.48	<0.01	<0.01

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ

LOCATION.--Lat 39°38'02", long 74°43'05", Atlantic County, Hydrologic Unit 02040301, at bridge on Chestnut Road in Wescoatville, 1.1 mi southwest of Nesco, 1.7 mi upstream from Norton Branch, and 3.8 mi southwest of Batsto.

DRAINAGE AREA.--9.57 mi^2.

PERIOD OF RECORD.--Water years 1974 to current year.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

REVISIONS.--WDR NJ-83-1: Drainage area.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
23...	1100	E80	126	6.5	14.0	762	7.5	73	2.4	80	40	23
JAN 1997												
15...	1100	E20	128	6.2	2.0	770	11.9	85	<1.0	<20	<10	24
APR												
03...	1200	E105	116	6.4	10.5	764	10.9	97	E1.9	<20	10	22
JUN												
05...	1100	E25	116	6.4	14.0	763	8.7	84	<1.0	50	20	24
JUL												
16...	1130	E5.0	150	6.8	25.0	761	6.5	79	<1.0	490	220	20

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
23...	5.6	2.3	7.0	3.8	8.8	12	13	<.1	6.7	58	61	4
JAN 1997												
15...	5.6	2.4	9.0	3.3	7.8	12	15	<.1	7.6	74	68	1
APR												
03...	5.3	2.2	8.5	3.3	6.1	13	16	.1	4.2	69	63	<1
JUN												
05...	5.6	2.3	8.5	3.5	9.0	12	15	.1	5.5	69	64	<1
JUL												
16...	4.8	1.9	18	4.1	21	8.6	23	<.1	5.0	92	81	2

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
23...	.006	1.2	.06	<.03	.5	.34	1.7	1.5	.17	.06	5.1	.8
JAN 1997												
15...	.003	1.9	<.03	<.03	.2	.22	2.1	2.1	.13	.09	2.8	.4
APR												
03...	.004	1.6	.03	.03	.2	.17	1.8	1.8	.79	.09	4.0	.4
JUN												
05...	.008	1.3	<.03	<.03	.3	.37	1.6	1.7	<.01	.03	4.4	.5
JUL												
16...	.009	.64	<.03	<.03	.4	.48	1.0	1.1	.37	.19	4.7	.4

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1996								
23...	1100	14	<1	<10	40	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT 1996							
23...	560	2	30	<.1	2	<1	20

01409432 BATSTO RIVER AT HAMPTON FURNACE, NJ

LOCATION.--Lat 39°46'15", long 74°40'48", Burlington County, Hydrologic Unit 02040301, 0.1 mi northeast of Hampton Furnace, 0.5 mi upstream from Skit Branch, and 3.8 mi southeast of Indian Mills.

DRAINAGE AREA.--13.7 mi^2.

PERIOD OF RECORD.--Water years 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1337	17	41	5.3	6.5	754	9.9	81	8	1.5
JAN 1997										
24...	1016	31	62	4.8	2.5	771	11.7	85	13	2.6
MAR										
13...	1120	33	64	4.9	5.5	774	10.9	85	14	3.0
JUN										
10...	0935	13	49	5.8	13.5	760	8.6	83	12	2.4
AUG										
05...	1120	8.8	36	5.8	17.0	755	8.2	86	6	1.2
SEP										
09...	1035	7.4	35	5.6	15.0	758	8.6	86	6	1.1

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
20...	1.0	5.4	5.9	34	0.36	<0.015	<0.2	--	<0.01	<0.01
JAN 1997										
24...	1.6	9.7	6.2	41	0.57	<0.015	0.2	0.77	<0.01	<0.01
MAR										
13...	1.6	10	6.3	38	0.74	<0.015	<0.2	--	<0.01	<0.01
JUN										
10...	1.4	5.4	5.7	41	0.50	0.02	0.3	0.84	<0.01	<0.01
AUG										
05...	0.79	3.6	4.0	26	0.58	<0.01	<0.2	--	<0.01	<0.01
SEP										
09...	0.74	3.8	4.3	34	0.54	<0.01	<0.2	--	<0.01	<0.01

01409439 SKIT BRANCH AT HAMPTON FURNACE, NJ

LOCATION.--Lat 39°46'01", long 74°40'40", Burlington County, Hydrologic Unit 02040301, at Hampton Furnace, 0.2 mi upstream from mouth, 2.5 mi south of Hampton Gate, and 3.9 mi southeast of Indian Mills.

DRAINAGE AREA.--10.8 mi^2.

PERIOD OF RECORD.--Water years 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1250	12	29	4.7	5.5	755	10.8	86	2	0.36
JAN 1997										
24...	0924	18	35	4.4	2.0	771	12.4	89	2	0.44
MAR										
13...	1207	22	36	4.5	6.5	774	11.0	88	2	0.40
JUN										
10...	1115	9.0	28	4.6	18.0	760	8.4	89	2	0.33
AUG										
05...	0950	8.0	30	4.6	20.5	755	7.0	79	2	0.40
SEP										
09...	0850	6.5	27	4.7	18.0	760	7.9	84	2	0.35

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996									
20...	0.27	3.5	3.2	11	<0.05	<0.015	<0.2	<0.01	<0.01
JAN 1997									
24...	0.27	3.9	2.8	20	<0.05	<0.015	<0.2	<0.01	<0.01
MAR									
13...	0.25	4.0	2.8	19	<0.05	0.02	<0.2	0.02	<0.01
JUN									
10...	0.25	2.9	3.0	16	<0.05	<0.01	<0.2	<0.01	<0.01
AUG									
05...	0.27	3.7	2.9	17	<0.05	<0.01	<0.2	<0.01	<0.01
SEP									
09...	0.24	3.5	2.9	19	<0.05	<0.01	<0.2	<0.01	<0.01

01409455 SPRINGERS BROOK NEAR HAMPTON FURNACE, NJ

LOCATION.--Lat 39°45'19", long 74°41'47", Burlington County, Hydrologic Unit 02040301, at bridge on Hampton Road, 1.3 mi southwest of Hampton Furnace, 1.7 mi downstream from Bard Branch, and 3.7 mi southeast of Indian Mills.

DRAINGAE AREA.--18.3 mi^2.

PERIOD OF RECORD.--Water years 1977-78, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1445	15	119	6.3	6.0	758	11.0	88	30	6.6
JAN 1997										
24...	1111	23	114	5.2	1.0	771	10.8	75	24	5.2
MAR										
13...	0953	30	109	6.2	4.5	774	10.5	80	25	5.7
JUN										
10...	0740	12	104	6.6	17.0	760	7.4	77	25	5.7
AUG										
05...	1240	4.1	144	6.9	23.0	755	7.7	91	39	9.1
SEP										
09...	1225	1.6	83	6.4	18.5	759	7.7	83	22	5.0

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	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)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 1996										
20...	3.2	15	16	76	0.84	<0.015	<0.2	--	<0.01	<0.01
JAN 1997										
24...	2.7	15	14	64	0.97	0.02	0.3	1.3	<0.01	<0.01
MAR										
13...	2.6	15	15	66	0.54	<0.015	0.3	0.84	<0.01	<0.01
JUN										
10...	2.7	8.4	14	78	0.14	0.03	0.4	0.59	<0.01	<0.01
AUG										
05...	4.0	18	16	102	0.081	<0.01	0.4	0.50	<0.01	<0.01
SEP										
09...	2.3	6.8	11	72	0.081	<0.01	0.4	0.46	<0.01	<0.01

01409470 BATSTO RIVER AT QUAKER BRIDGE, NJ

LOCATION.--Lat 39°42'34", long 74°40'00", Burlington County, Hydrologic Unit 02040301, at Quaker Bridge on sand road, 1.1 mi southeast of Lower Forge, approximately 2.3 mi upstream from Penn Swamp Brook, and 4.7 mi north of Batsto.

DRAINAGE AREA.--55.7 mi^2.

PERIOD OF RECORD.--Water years 1976-78, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1330	72	48	5.6	7.0	757	10.2	85	10	2.0
JAN 1997										
22...	1535	102	63	5.1	3.0	760	11.7	87	13	2.7
MAR										
13...	1320	133	60	4.9	7.0	772	10.5	85	12	2.6
JUN										
10...	1330	63	44	6.0	16.5	760	8.3	85	9	1.9
AUG										
05...	1015	39	33	5.6	18.0	758	7.6	81	6	1.4
SEP										
09...	1000	38	27	4.2	15.5	762	8.1	81	5	0.93

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996										
20...	1.1	6.2	6.9	28	0.28	<0.015	<0.2	--	<0.01	0.01
JAN 1997										
22...	1.5	8.9	8.1	39	0.42	0.02	<0.2	--	<0.01	<0.01
MAR										
13...	1.3	8.8	7.4	37	0.31	<0.015	<0.2	--	<0.01	<0.01
JUN										
10...	1.0	3.9	6.0	37	0.13	0.02	0.2	0.37	<0.01	<0.01
AUG										
05...	0.71	4.1	4.4	25	0.14	<0.01	<0.2	--	<0.01	<0.01
SEP										
09...	0.54	2.8	3.7	26	0.13	<0.01	<0.2	--	<0.01	<0.01

01409500 BATSTO RIVER AT BATSTO, NJ

LOCATION.--Lat 39°38'33", long 74°39'00", Burlington County, Hydrologic Unit 02040301, on right bank 30 ft downstream from bridge on State Highway 542 at Batsto, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--67.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for April to September 1939, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1930, 1933, 1936, 1938. WDR NJ-83-1: Drainage area. WDR-87-1: 1939 (M). WDR-94-1: 1993 (M).

GAGE.--Water-stage recorder. Concrete control since Oct. 12, 1939; prior to Mar. 24, 1939, wooden control at site 50 ft downstream. Datum of gage is 1.4 ft above sea level.

REMARKS.--Records fair. Considerable regulation at times by sluice gates prior to December 1954 and by automatic Bascule and sluice gates since July 1959 at Batsto Lake, 300 ft upstream; the capacity of Batsto Lake is about 60,000,000 gal. Several measurements of water temperature, other than those published, were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	124	116	172	165	109	263	267	104	57	61	80
2	94	117	149	164	156	112	368	234	110	57	59	80
3	89	113	179	158	144	125	396	218	127	58	57	73
4	85	111	220	152	136	164	360	204	126	59	57	70
5	79	108	220	149	156	207	297	193	122	55	62	66
6	79	107	227	145	193	218	253	184	111	58	87	64
7	77	108	240	140	246	195	222	169	102	59	90	63
8	86	116	309	134	243	181	195	161	96	58	79	61
9	137	131	399	128	214	156	173	159	93	56	74	60
10	151	133	400	128	185	153	159	154	90	60	69	61
11	159	138	344	132	169	151	149	152	88	56	66	61
12	166	127	292	131	152	151	143	145	84	55	64	61
13	157	117	252	128	132	140	149	121	83	53	66	59
14	139	112	278	125	139	141	151	133	84	51	75	57
15	121	110	377	121	156	142	151	125	83	50	72	56
16	107	107	479	132	191	159	145	120	80	49	68	56
17	102	106	443	149	209	176	143	114	77	46	64	56
18	106	106	369	169	190	181	153	109	76	49	66	56
19	167	108	320	159	164	175	197	105	76	50	67	55
20	221	103	288	133	153	164	297	103	74	49	76	56
21	391	101	265	114	150	157	331	102	73	47	191	60
22	440	100	243	106	138	151	298	99	71	50	154	55
23	364	99	219	111	127	142	257	97	69	54	203	53
24	293	97	206	118	121	137	240	92	67	68	215	52
25	241	96	199	146	113	129	234	98	66	86	176	52
26	203	103	192	149	107	138	226	129	64	94	140	51
27	176	108	191	179	105	142	203	140	62	95	109	51
28	163	115	187	191	104	144	215	134	61	86	92	50
29	149	113	192	181	---	141	244	125	60	77	87	64
30	139	110	187	188	---	143	283	114	57	69	85	57
31	130	---	182	178	---	183	---	106	---	64	81	---
TOTAL	5111	3344	8164	4510	4458	4807	6895	4406	2536	1875	2912	1796
MEAN	165	111	263	145	159	155	230	142	84.5	60.5	93.9	59.9
MAX	440	138	479	191	246	218	396	267	127	95	215	80
MIN	77	96	116	106	104	109	143	92	57	46	57	50
CFSM	2.43	1.64	3.88	2.15	2.35	2.29	3.39	2.10	1.25	.89	1.39	.88
IN.	2.80	1.83	4.48	2.47	2.45	2.64	3.78	2.42	1.39	1.03	1.60	.99

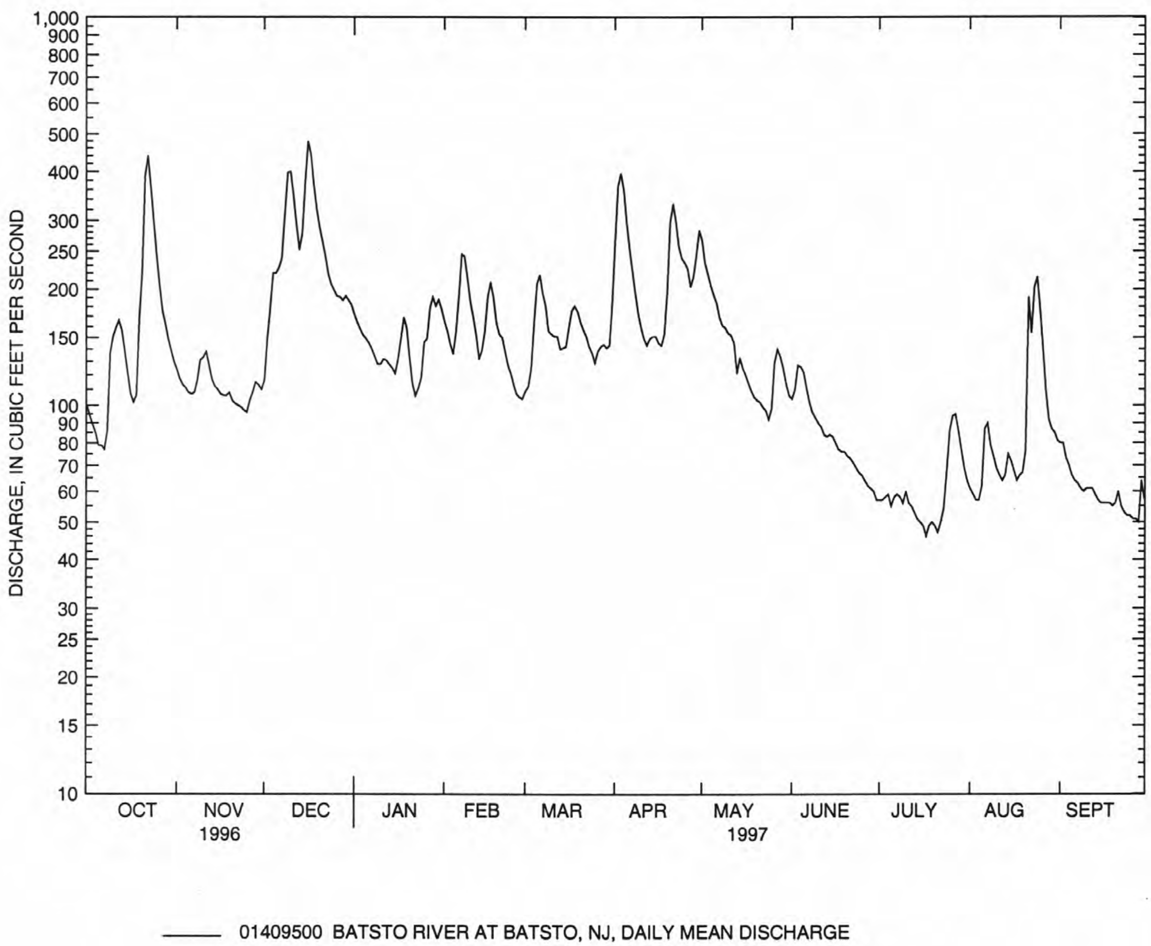
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	88.2	112	126	141	148	170	157	142	103	92.5	103	91.5
MAX	241	307	302	280	361	353	322	279	242	257	332	242
(WY)	1959	1973	1973	1949	1939	1958	1970	1958	1948	1938	1958	1960
MIN	43.9	43.4	48.4	55.6	75.9	79.5	71.8	65.1	50.9	40.6	42.0	40.5
(WY)	1966	1966	1966	1966	1931	1981	1985	1977	1977	1977	1957	1995

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1928 - 1997	
ANNUAL TOTAL	54042		50814			
ANNUAL MEAN	148		139		122	
HIGHEST ANNUAL MEAN					193	1958
LOWEST ANNUAL MEAN					66.2	1966
HIGHEST DAILY MEAN	479	Dec 16	479	Dec 16	2000	Aug 20 1939
LOWEST DAILY MEAN	60	Sep 4	46	Jul 17	5.7	Oct 4 1959
ANNUAL SEVEN-DAY MINIMUM	63	Sep 4	49	Jul 15	35	Sep 5 1995
INSTANTANEOUS PEAK FLOW			558	Dec 16	---	
INSTANTANEOUS PEAK STAGE			4.24	Dec 16	8.70a	Aug 20 1939
INSTANTANEOUS LOW FLOW			37	Sep 28	---	
ANNUAL RUNOFF (CFSM)	2.18		2.05		1.80	
ANNUAL RUNOFF (INCHES)	29.65		27.88		24.46	
10 PERCENT EXCEEDS	226		240		205	
50 PERCENT EXCEEDS	127		126		102	
90 PERCENT EXCEEDS	87		58		57	

a From floodmark.



01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1925, 1956, 1962-63, 1976 to current year.

REMARKS.--For the definition of a field blank sample, refer to “Quality-control data” in the “Explanation of Records” section.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
24...	1130	334	65	4.6	14.0	760	7.6	74	E1.8	20	<100	7
JAN 1997												
29...	1230	176	53	4.5	2.5	776	11.5	83	<1.0	<20	<10	10
MAR												
19...	1200	176	54	4.7	7.0	767	11.5	94	<1.2	<20	<10	10
JUN												
04...	1130	159	38	5.7	15.0	762	8.5	84	<1.0	50	10	8
JUL												
30...	1130	70	57	5.1	23.5	768	7.3	85	<1.4	<20	<10	12

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
24...	1.6	.84	3.8	1.4	--	7.1	6.8	<.1	4.6	36	--	<1
JAN 1997												
29...	2.0	1.1	3.3	.90	<1.0	8.0	6.7	<.1	4.4	34	--	<1
MAR												
19...	2.1	1.1	3.4	.90	1.2	8.0	6.8	<.1	2.9	37	27	<1
JUN												
04...	1.7	.92	2.9	.71	3.0	3.9	5.6	<.1	4.1	38	22	1
JUL												
30...	2.7	1.3	3.3	.97	1.8	11	6.6	<.1	4.3	41	31	1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
24...	.004	.062	<.03	<.03	.4	.38	.46	.44	.03	.02	12	.5
JAN 1997												
29...	<.003	.33	.04	<.03	.2	.17	.52	.50	<.01	<.01	4.4	.4
MAR												
19...	<.003	.26	<.03	<.03	.2	.13	.42	.39	<.01	<.01	4.4	.3
JUN												
04...	.005	.093	<.03	<.03	.3	.28	.44	.37	<.01	<.01	6.8	2.3
JUL												
30...	.003	<.05	<.03	<.03	.2	.17	--	--	<.01	<.01	2.7	.4

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
JUN 1997										
04...	1130	ENVIRONMENTAL	20	<1	<10	10	<1	<1.0	<1	--
04...	*1130*	*FIELD BLANK*	--	--	--	--	--	--	--	*<1*

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUN 1997											
04...	1900	<1	--	10	<.1	--	<1	--	<1	<10	--
04...	--	--	*<1*	--	--	*<.1*	--	*<1*	--	--	*<.5*

01409510 BATSTO RIVER AT PLEASANT MILLS, NJ

LOCATION.--Lat 39°37'55", long 74°38'40", Burlington County, Hydrologic Unit 02040301, on right bank, 0.4 mi upstream from Mullica River, 0.5 mi southeast of Pleasant Mills, and 0.9 mi downstream from highway bridge on State Highway 542 at Batsto.

DRAINAGE AREA.--73.6 mi^2.

PERIOD OF RECORD.--July 1958 to current year. Annual maximum only published for 1958 to 1965.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 8.6 ft below sea level. Gage-height record converted to elevation above or below (-) sea level for publication.

REMARKS.--No gage-height or doubtful record, Jan. 17-22, and Feb. 10. Summaries for months with short periods of no gage-height record have been estimated with little or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 7.2 ft, Mar. 7, 1962; minimum recorded (1966-95), -0.67 ft, Jan. 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 4.88 ft, Aug. 21; minimum recorded, 0.33 ft, Feb. 28.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	4.50	3.42	4.51	3.84	3.80	3.54	4.10	3.36	4.27	3.73	4.88	3.89
high tide	Date	19	19	13	10	9	4	25	26	2	24	21	28
Minimum	Elevation	.92	.63	.99	.80	.33	.41	.80	.58	.67	.67	.83	.79
low tide	Date	4,17	5	1	16	28	3	16	13	23	17	2	24
Mean high tide		3.16	2.74	3.19	---	2.44	2.51	3.08	2.80	3.11	2.91	3.05	2.96
Mean water level		2.35	1.80	2.50	---	1.61	1.66	2.25	1.82	2.09	1.84	2.13	1.97
Mean low tide		1.45	.83	1.73	---	.86	.83	1.34	.91	.97	.90	1.24	1.01

01409750 WEST BRANCH WADING RIVER ABOVE TULPEHOCKEN CREEK, NEAR JENKINS, NJ

LOCATION.--Lat 39°42'56", long 74°33'41", Burlington County, Hydrologic Unit 02040301, 0.3 mi upstream from Tulpehocken Creek, 2.0 mi northwest of Jenkins, and 3.2 mi north of Maxwell.

DRAINAGE AREA.--50.6 mi^2.

PERIOD OF RECORD.--Water years 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1005	40	38	4.6	6.5	758	10.6	87	3	0.59
JAN 1997										
22...	1055	51	43	4.4	3.0	766	12.2	90	4	0.74
MAR										
13...	1015	91	43	4.5	5.5	775	10.8	84	3	0.65
JUN										
10...	1047	53	38	4.4	16.5	764	8.1	83	3	0.54
AUG										
05...	1035	18	38	4.5	18.0	757	7.9	84	3	0.73
SEP										
09...	1021	27	40	4.5	17.5	761	8.2	86	3	0.61

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996									
20...	0.39	4.6	4.3	20	<0.05	<0.015	<0.2	<0.01	0.01
JAN 1997									
22...	0.47	5.1	4.9	32	<0.05	0.03	<0.2	0.02	<0.01
MAR									
13...	0.40	4.5	4.2	23	<0.05	<0.015	<0.2	<0.01	<0.01
JUN									
10...	0.35	4.4	4.0	24	<0.05	0.04	0.2	<0.01	<0.01
AUG									
05...	0.37	5.7	4.0	23	<0.05	<0.01	0.2	<0.01	<0.01
SEP									
09...	0.34	5.2	4.0	27	<0.05	<0.01	<0.2	<0.01	<0.01

01409780 TULPEHOCKEN CREEK NEAR JENKINS, NJ

LOCATION.--Lat 39°42'51", long 74°33'58", Burlington County, Hydrologic Unit 02040301, at bridge on Maxwell-Friendship Road, 0.2 mi upstream from mouth, 2.3 mi northwest of Jenkins, and 2.8 mi east of Jemima Mount.

DRAINAGE AREA.--21.8 mi^2.

PERIOD OF RECORD.--Water years 1977-78, 1995 to current year.

REVISIONS.--WDR NJ-96-1: Drainage area.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1996										
20...	1120	20	26	4.8	6.5	757	10.0	82	2	0.37
JAN 1997										
22...	1245	26	32	4.6	4.5	764	11.3	87	2	0.45
MAR										
13...	1215	35	34	4.5	7.5	775	10.6	87	2	0.38
JUN										
10...	1217	14	24	5.0	19.5	764	7.2	78	2	0.38
AUG										
05...	1208	12	24	5.2	21.5	757	7.4	84	2	0.49
SEP										
09...	1157	13	24	5.1	18.0	762	7.7	81	2	0.41

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 1996									
20...	0.25	2.5	3.3	30	<0.05	0.02	<0.2	<0.01	0.02
JAN 1997									
22...	0.30	3.4	3.2	28	<0.05	0.04	0.3	<0.01	<0.01
MAR									
13...	0.24	3.1	2.8	25	<0.05	0.02	0.3	<0.01	<0.01
JUN									
10...	0.24	2.0	2.7	38	<0.05	0.02	0.4	<0.01	<0.01
AUG									
05...	0.27	2.8	2.8	24	<0.05	0.05	0.4	<0.01	<0.01
SEP									
09...	0.26	2.1	2.8	37	<0.05	<0.01	0.3	<0.01	<0.01

01410000 OSWEGO RIVER AT HARRISVILLE, NJ

LOCATION.--Lat 39°39'47", long 74°31'26", Burlington County, Hydrologic Unit 02040301, on right bank 50 ft downstream from bridge on State Highway Spur 563 at Harrisville, and 0.3 mi upstream from confluence with West Branch Wading River.

DRAINAGE AREA.--72.5 mi^2.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1955, published as "East Branch Wading River at Harrisville".

REVISED RECORDS.--WDR NJ-83-1: Drainage area.

GAGE.--Water-stage recorder. Concrete control since June 23, 1939. Datum of gage is 4.62 ft above sea level.

REMARKS.--Records good. Figures given herein represent flow over main spillway and through bypass channel. Flow regulated by Harrisville Pond 200 ft above station, capacity, about 30,000,000 gal and by ponds and cranberry bogs 5 to 10 mi upstream. Flow probably reduced by ground-water outflow to nearby surface drainage basins, such as Oyster Creek. Several measurements of water temperature, other than those published, were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	78	72	108	116	97	215	145	75	36	53	73
2	72	78	127	107	117	109	262	129	85	37	50	103
3	65	77	148	105	109	135	287	120	95	38	48	132
4	59	75	137	103	99	187	243	115	98	38	47	102
5	57	73	121	101	157	202	191	105	91	35	67	82
6	57	72	137	99	196	161	150	101	82	34	72	72
7	59	73	154	94	168	136	131	99	77	35	57	67
8	69	79	240	89	150	121	118	95	74	34	49	63
9	112	109	245	87	143	114	104	95	71	33	47	61
10	142	133	204	99	134	164	95	93	67	35	45	61
11	134	124	164	104	122	145	93	87	62	34	43	66
12	109	105	144	100	113	124	92	82	56	34	43	67
13	100	104	161	96	107	103	118	80	55	33	51	64
14	90	103	287	91	123	103	115	79	53	33	68	62
15	85	95	369	88	166	122	106	94	52	32	60	58
16	99	95	357	109	178	119	102	110	49	33	53	56
17	78	90	297	125	159	112	155	107	47	35	47	53
18	71	85	250	117	144	112	158	95	47	33	51	51
19	173	86	225	103	127	127	121	80	48	37	53	50
20	308	77	202	94	117	105	119	81	47	36	60	51
21	350	72	169	90	109	99	112	76	46	35	491	55
22	337	74	143	89	105	94	103	67	44	40	566	51
23	290	69	128	99	101	88	100	62	45	42	458	49
24	228	70	120	101	96	84	114	60	44	78	306	48
25	160	71	118	119	91	80	122	63	42	176	200	48
26	137	84	112	122	88	97	114	121	41	164	146	47
27	119	87	118	114	92	104	105	118	41	107	117	47
28	108	86	115	122	90	101	159	107	40	84	100	48
29	99	82	113	129	---	98	186	95	39	72	93	56
30	88	69	110	122	---	105	166	86	38	63	83	55
31	82	---	109	112	---	133	---	79	---	57	77	---
TOTAL	4019	2575	5396	3238	3517	3681	4256	2926	1751	1613	3701	1898
MEAN	130	85.8	174	104	126	119	142	94.4	58.4	52.0	119	63.3
MAX	350	133	369	129	196	202	287	145	98	176	566	132
MIN	57	69	72	87	88	80	92	60	38	32	43	47
CFSM	1.79	1.18	2.40	1.44	1.73	1.64	1.96	1.30	.81	.72	1.65	.87
IN.	2.06	1.32	2.77	1.66	1.80	1.89	2.18	1.50	.90	.83	1.90	.97

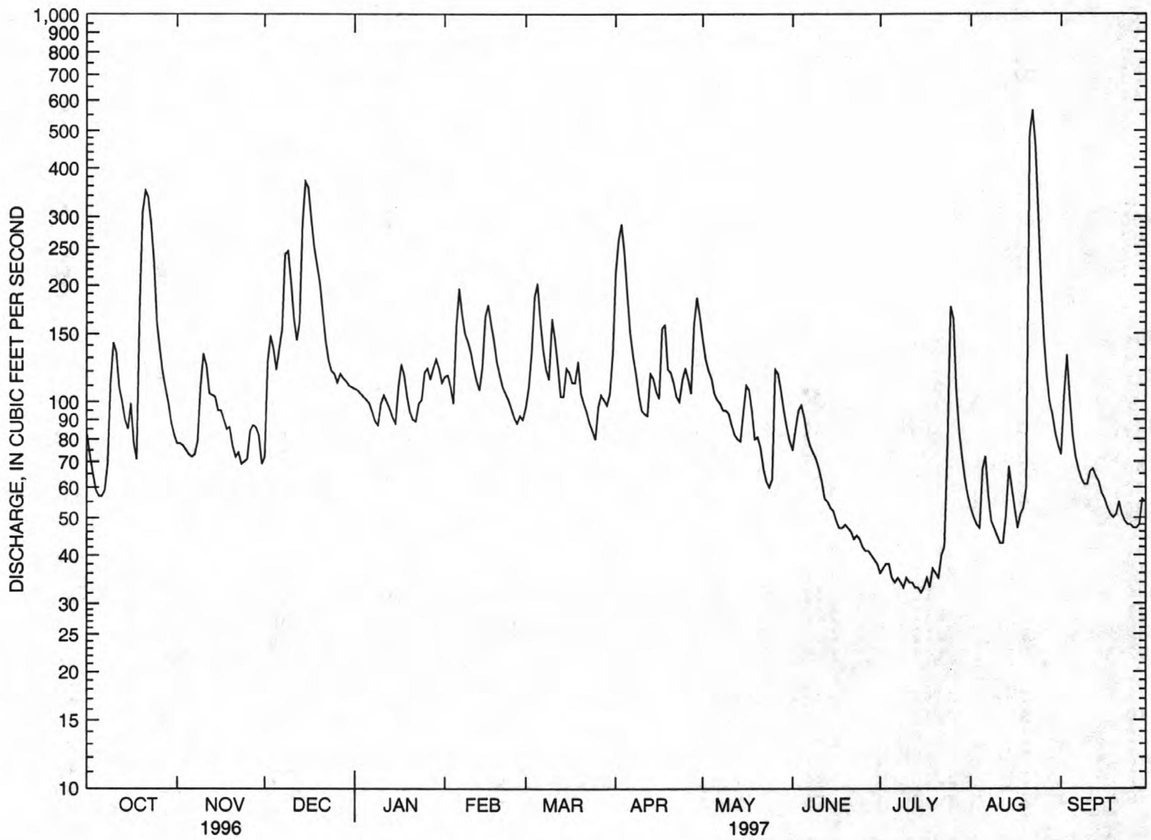
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	64.2	82.0	85.0	101	103	118	114	96.8	70.6	67.3	76.2	61.7
MAX	176	234	200	242	210	224	253	198	155	201	207	163
(WY)	1959	1973	1973	1979	1939	1994	1970	1989	1984	1938	1933	1938
MIN	28.6	30.8	27.1	33.9	53.2	51.9	41.3	43.9	33.7	24.2	23.9	24.4
(WY)	1966	1966	1966	1966	1931	1985	1985	1942	1966	1977	1957	1951

01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1931 - 1997	
ANNUAL TOTAL	39321		38571			
ANNUAL MEAN	107		106		86.5	
HIGHEST ANNUAL MEAN					138	1978
LOWEST ANNUAL MEAN					41.4	1966
HIGHEST DAILY MEAN	369	Dec 15	566	Aug 22	1220	Aug 20 1939
LOWEST DAILY MEAN	45	Sep 10	32	Jul 15	4.0	Jun 23 1967
ANNUAL SEVEN-DAY MINIMUM	47	Sep 5	33	Jul 12	14	Sep 7 1966
INSTANTANEOUS PEAK FLOW			588	Aug 22	1390a	Aug 20 1939
INSTANTANEOUS PEAK STAGE			5.10	Aug 22	9.45b	Aug 20 1939
INSTANTANEOUS LOW FLOW			31	Jul 15	.00c	Oct 26 1932
ANNUAL RUNOFF (CFSM)	1.48		1.46		1.19	
ANNUAL RUNOFF (INCHES)	20.18		19.79		16.21	
10 PERCENT EXCEEDS	173		165		150	
50 PERCENT EXCEEDS	92		95		71	
90 PERCENT EXCEEDS	59		47		37	

a From rating curve extended above 640 ft^3/s.
b From high-water mark in gage house.
c While pond filling.



01410000 OSWEGO RIVER AT HARRISVILLE, NJ, DAILY MEAN DISCHARGE

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ

LOCATION.--Lat 39°37'23", long 74°26'30", Burlington County, Hydrologic Unit 02040301, on left bank upstream from bridge on Stage Road, 0.7 mi west of Lake Absegami, 2.2 mi north of New Gretna, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--8.11 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1969 to 1974. January 1978 to current year.

REVISED RECORDS.--WDR NJ-81-1: 1978-80(P). WDR NJ-92-1: 1978, 1979, 1989, 1991 (P).

GAGE.--Water-stage recorder. Datum of gage is 1.10 ft above sea level.

REMARKS.--Records good. Some regulation by Lake Absegami. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 65 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jul. 25	1015	79	5.25	Aug. 21	0715	*1,130	*7.28

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	15	21	20	21	35	23	19	14	14	28
2	14	17	29	21	19	23	34	22	24	15	14	26
3	13	16	30	21	18	26	29	22	27	15	14	27
4	12	16	22	21	18	39	25	22	25	14	14	26
5	12	16	18	20	32	34	23	21	21	14	17	24
6	12	16	21	20	35	28	23	20	19	14	27	22
7	12	16	25	19	27	25	24	20	18	14	20	22
8	18	17	38	18	24	23	22	19	18	14	15	21
9	36	18	32	19	24	23	21	21	17	14	14	21
10	35	18	24	22	22	27	20	22	17	14	13	21
11	25	16	21	21	21	27	20	20	17	14	13	21
12	19	16	20	19	21	25	21	19	16	14	13	20
13	17	15	29	18	20	22	27	19	19	14	21	19
14	16	15	56	18	26	24	25	19	24	14	43	18
15	16	15	49	17	38	29	22	18	20	14	27	17
16	15	15	35	21	34	27	20	18	17	14	17	17
17	15	15	32	24	27	24	20	17	17	14	15	17
18	16	15	30	20	23	22	22	17	17	14	16	17
19	39	16	34	17	22	22	25	17	17	14	18	17
20	60	15	36	17	22	22	23	17	16	14	20	17
21	41	15	30	17	21	22	21	17	16	14	533	20
22	26	15	26	17	21	21	20	16	15	15	98	18
23	22	14	25	19	20	20	20	16	16	15	62	16
24	20	14	25	19	20	20	24	16	16	31	50	16
25	18	14	27	23	19	20	25	18	15	70	43	16
26	18	16	25	23	19	23	22	47	15	51	39	15
27	17	16	27	20	20	25	20	38	15	29	35	15
28	18	15	27	21	20	22	30	25	15	19	33	16
29	19	14	24	23	---	21	35	20	15	17	34	24
30	18	14	23	20	---	23	27	19	14	16	33	21
31	17	---	22	19	---	27	---	19	---	15	30	---
TOTAL	651	467	877	615	653	757	725	644	537	574	1355	595
MEAN	21.0	15.6	28.3	19.8	23.3	24.4	24.2	20.8	17.9	18.5	43.7	19.8
MAX	60	18	56	24	38	39	35	47	27	70	533	28
MIN	12	14	15	17	18	20	20	16	14	14	13	15
CFSM	2.59	1.92	3.49	2.45	2.88	3.01	2.98	2.56	2.21	2.28	5.39	2.45
IN.	2.99	2.14	4.02	2.82	3.00	3.47	3.33	2.95	2.46	2.63	6.22	2.73

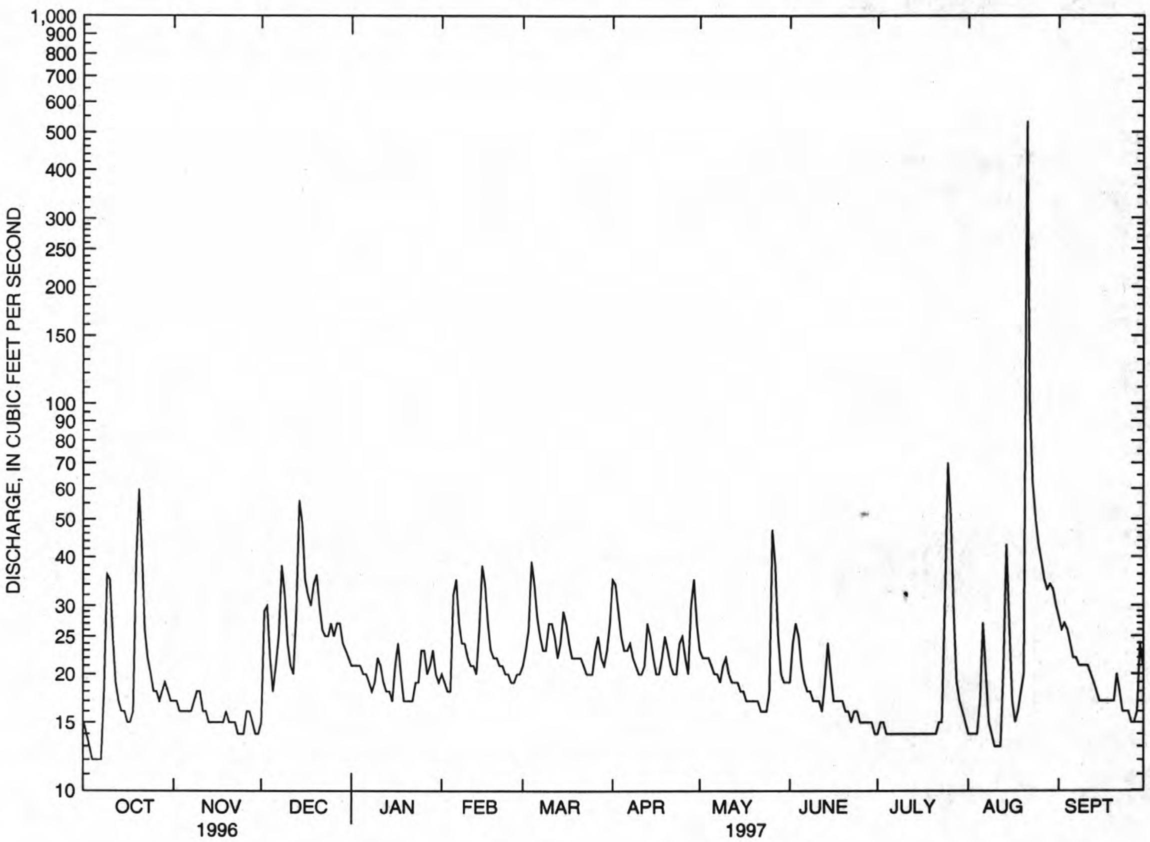
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.0	13.6	15.5	18.2	17.6	20.4	21.7	19.1	15.0	13.8	14.8	12.2
MAX	24.2	23.1	28.3	35.0	29.8	36.8	38.6	30.3	27.2	25.8	43.7	21.0
(WY)	1990	1990	1997	1978	1979	1979	1984	1984	1984	1978	1997	1989
MIN	8.13	8.75	9.78	9.28	11.2	10.5	9.06	8.95	8.11	7.80	6.54	6.77
(WY)	1983	1982	1986	1981	1992	1981	1985	1985	1986	1985	1995	1995

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1978 - 1997	
ANNUAL TOTAL	7465		8450			
ANNUAL MEAN	20.4		23.2		15.8	
HIGHEST ANNUAL MEAN					23.2	1997
LOWEST ANNUAL MEAN					9.60	1985
HIGHEST DAILY MEAN	60	Oct 20	533	Aug 21	533	Aug 21 1997
LOWEST DAILY MEAN	12	Sep 4	12	Oct 4	4.8	Sep 15 1995
ANNUAL SEVEN-DAY MINIMUM	12	Sep 4	13	Oct 1	5.0	Sep 10 1995
INSTANTANEOUS PEAK FLOW			1130	Aug 21	1130a	Aug 21 1997
INSTANTANEOUS PEAK STAGE			7.28	Aug 21	7.28	Aug 21 1997
INSTANTANEOUS LOW FLOW			11	Oct 3	4.7	Sep 15 1995
ANNUAL RUNOFF (CFSM)	2.51		2.85		1.95	
ANNUAL RUNOFF (INCHES)	34.24		38.76		26.54	
10 PERCENT EXCEEDS	29		32		26	
50 PERCENT EXCEEDS	19		20		14	
90 PERCENT EXCEEDS	14		14		8.5	

a From rating curve extended above 200 ft^3/sec.



01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ, DAILY MEAN DISCHARGE

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ--Continued

WATER-QUALITY RECORDS

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)
OCT 1996											
31...	1130	22	44	4.4	11.0	760	8.3	75	<1.0	<20	10
JAN 1997											
22...	1110	19	49	4.2	2.0	769	11.6	83	<1.0	<20	<10
MAR											
26...	1215	25	49	4.4	9.0	758	9.6	83	<1.0	50	10
JUN											
11...	1030	17	43	4.6	16.0	762	6.8	69	<1.1	<20	<10
JUL											
17...	1045	14	36	4.5	20.0	760	5.9	65	E1.4	80	20

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996											
31...	3	.46	.48	3.3	.5	3.8	6.0	<.1	6.8	18	<1
JAN 1997											
22...	3	.49	.53	3.4	.4	4.6	6.1	<.1	7.1	28	<1
MAR											
26...	3	.52	.53	3.5	.5	4.8	6.8	<.1	5.0	41	<1
JUN											
11...	3	.37	.43	3.4	.4	3.4	6.1	<.1	5.3	27	<1
JUL											
17...	2	.35	.36	2.7	.5	2.5	4.9	<.1	10	28	1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996										
31...	<.003	<.050	<.03	<.03	.1	.13	<.01	.02	4.7	.2
JAN 1997										
22...	.004	<.050	<.03	<.03	.05	.08	<.01	<.01	2.9	.2
MAR										
26...	.005	<.050	<.03	<.03	.1	.21	.02	<.01	3.4	.3
JUN										
11...	<.003	<.050	<.03	<.03	.1	.09	<.01	<.01	4.6	.4
JUL										
17...	.005	<.050	<.03	<.03	.1	.11	<.01	<.01	3.4	.3

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ

LOCATION.--Lat 39°44'02", long 74°57'05", Camden County, Hydrologic Unit 02040302, on right bank at downstream side of bridge on Sicklerville-New Freedom Road (Spur 536), 1.5 mi northeast of Sicklerville, and 2.7 mi upstream from New Brooklyn Lake dam.

DRAINAGE AREA.--15.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Low-flow partial-record station, water years 1971-77. March 27, 1996 to current year.

GAGE.--Water-stage recorder installed Mar. 27, 1996.

REMARKS.--Records good.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	1415	99	5.26	Dec. 15	0115	*106	*5.34
Dec. 8	0700	86	5.10				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

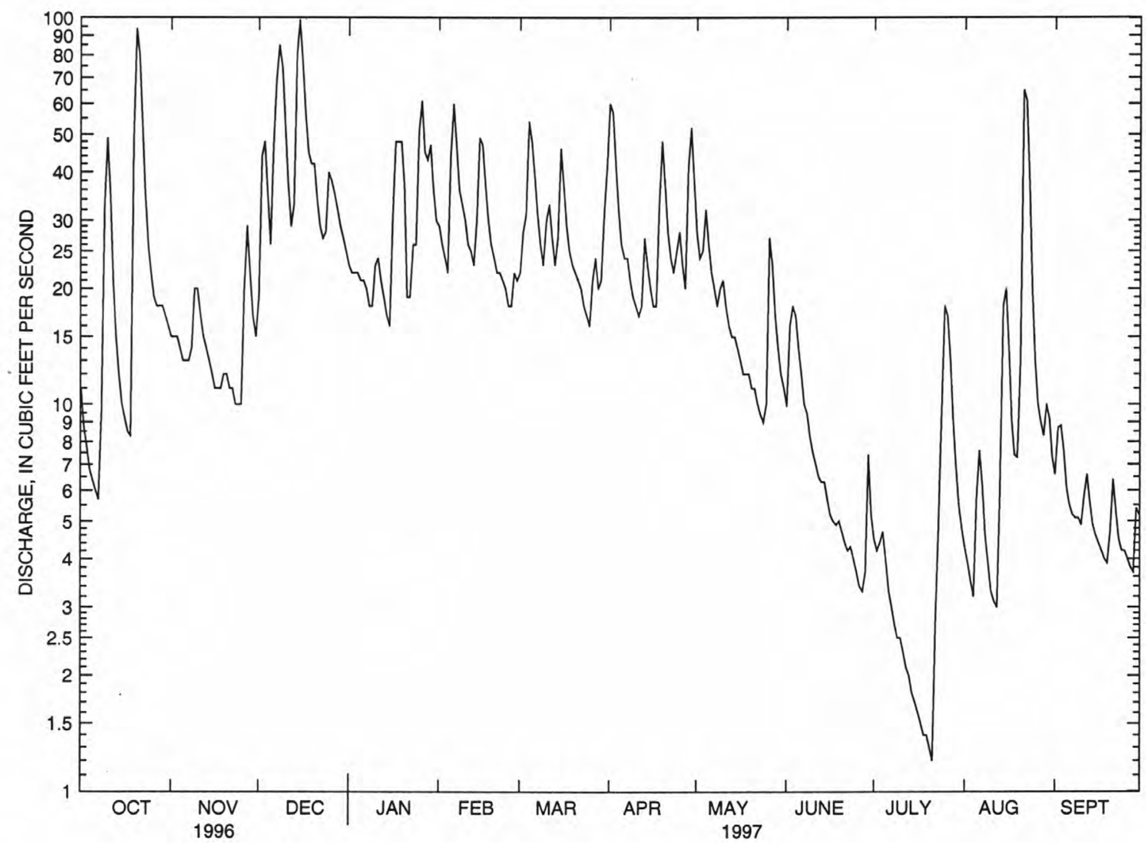
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	15	19	23	29	22	60	28	9.9	4.5	4.3	6.6
2	8.7	15	44	22	26	28	57	24	16	4.2	3.9	8.7
3	7.8	15	48	22	24	31	42	25	18	4.4	3.5	8.8
4	6.8	14	35	22	22	54	32	32	17	4.7	3.2	7.6
5	6.4	13	26	21	44	48	26	26	14	4.0	5.7	6.1
6	6.0	13	47	21	60	39	24	22	12	3.3	7.6	5.5
7	5.7	13	69	20	47	31	24	20	10	3.0	6.2	5.2
8	9.6	14	85	18	36	26	21	18	9.5	2.7	4.6	5.1
9	33	20	74	18	33	23	19	20	8.2	2.5	3.9	5.1
10	49	20	52	23	30	30	18	21	7.5	2.5	3.3	4.9
11	35	17	37	24	26	33	17	18	7.0	2.3	3.1	5.8
12	21	15	29	21	25	27	18	16	6.5	2.1	3.0	6.6
13	15	14	33	19	23	23	27	15	6.3	2.0	6.0	5.6
14	12	13	80	17	30	27	23	15	6.3	1.8	18	4.9
15	10	12	99	16	49	46	20	14	5.7	1.7	20	4.6
16	9.2	11	77	31	47	37	18	13	5.2	1.6	14	4.4
17	8.5	11	57	48	37	29	18	12	5.0	1.5	9.1	4.2
18	8.3	11	45	48	30	25	33	12	4.9	1.4	7.4	4.0
19	49	12	42	48	26	23	48	12	5.0	1.4	7.3	3.9
20	94	12	42	37	24	22	37	11	4.7	1.3	13	4.7
21	80	11	34	19	22	21	28	11	4.4	1.2	65	6.4
22	53	11	29	19	22	20	24	10	4.2	2.7	61	5.3
23	35	10	27	26	21	18	22	9.4	4.3	4.6	38	4.5
24	26	10	28	26	20	17	25	9.0	4.0	9.5	20	4.2
25	22	10	40	51	18	16	28	10	3.7	18	13	4.2
26	19	20	38	61	18	21	23	27	3.4	17	10	4.0
27	18	29	35	45	22	24	20	23	3.3	13	9.0	3.8
28	18	22	32	43	21	20	41	17	3.7	9.0	8.3	3.7
29	18	17	29	47	---	21	52	14	7.4	6.9	10	5.4
30	17	15	27	36	---	31	38	12	5.2	5.5	9.2	5.2
31	16	---	25	30	---	41	---	11	---	4.8	7.3	---
TOTAL	728.0	435	1384	922	832	874	883	527.4	222.3	145.1	397.9	159.0
MEAN	23.5	14.5	44.6	29.7	29.7	28.2	29.4	17.0	7.41	4.68	12.8	5.30
MAX	94	29	99	61	60	54	60	32	18	18	65	8.8
MIN	5.7	10	19	16	18	16	17	9.0	3.3	1.2	3.0	3.7
CFSM	1.56	.96	2.96	1.97	1.97	1.87	1.95	1.13	.49	.31	.85	.35
IN.	1.79	1.07	3.41	2.27	2.05	2.15	2.18	1.30	.55	.36	.98	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.5	14.5	44.6	29.7	29.7	28.2	28.0	18.2	12.3	19.1	15.8	8.77
MAX	23.5	14.5	44.6	29.7	29.7	28.2	29.4	19.4	17.3	33.6	18.7	12.2
(WY)	1997	1997	1997	1997	1997	1997	1997	1996	1996	1996	1996	1996
MIN	23.5	14.5	44.6	29.7	29.7	28.2	26.6	17.0	7.41	4.68	12.8	5.30
(WY)	1997	1997	1997	1997	1997	1997	1996	1997	1997	1997	1997	1997

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	7509.7			
ANNUAL MEAN	20.6		20.6	
HIGHEST ANNUAL MEAN			20.6	1997
LOWEST ANNUAL MEAN			20.6	1997
HIGHEST DAILY MEAN	99	Dec 15	99	Dec 15 1996
LOWEST DAILY MEAN	1.2	Jul 21	1.2	Jul 21 1997
ANNUAL SEVEN-DAY MINIMUM	1.4	Jul 15	1.4	Jul 15 1997
INSTANTANEOUS PEAK FLOW	106	Dec 15	106	Dec 15 1996
INSTANTANEOUS PEAK STAGE	5.34	Dec 15	5.34	Dec 15 1996
INSTANTANEOUS LOW FLOW	1.1	Jul 21	1.1	Jul 21 1997
ANNUAL RUNOFF (CFSM)	1.36		1.36	
ANNUAL RUNOFF (INCHES)	18.50		18.51	
10 PERCENT EXCEEDS	44		44	
50 PERCENT EXCEEDS	18		17	
90 PERCENT EXCEEDS	4.2		4.9	



01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ, DAILY MEAN DISCHARGE

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1996 to current year.
WATER TEMPERATURE: April 1996 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1996 (in situ system, measurements recorded hourly) located on upstream side of bridge

REMARKS.--Continuous records of specific conductance and water temperature were collected as part of the LINJ NAWQA study. Interruptions in the daily record were due to loss of power, Jan. 13-16. On Jan. 27 and June 16, water-column synoptic studies were conducted at this site as part of the NAWQA program. For synoptic data from other sites, see section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: maximum, 212 µS/cm, Feb. 15, 1997; minimum, 48 µS/cm, Oct. 19, 1996, July 21-22, 1997.
WATER TEMPERATURE: maximum, 25.5 °C, July 17-18, 1997; minimum, 0.0 °C, Jan. 17-20, 1997.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: maximum, 212 µS/cm, Feb. 15; minimum, 48 µS/cm, Oct. 19, July 21-22.
WATER TEMPERATURE: maximum, 25.5 °C, July 17-18; minimum, 0.0 °C, Jan. 17-20.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Some samples were collected by USGS personnel for the LINJ NAWQA study.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
OCT 1996											
09...	*1010*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
09...	1100	ENVIRONMENTAL	33	62	5.4	15.0	12.5	749	6.5	63.0	--
19...	0940	ENVIRONMENTAL	41	52	5.5	14.5	14.0	744	--	--	--
NOV											
18...	*1000*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
18...	1040	ENVIRONMENTAL	11	71	6.2	12.0	5.0	760	10.0	81.0	--
18...	1050	ENVIRONMENTAL	11	75	6.3	--	5.5	761	10.3	82	<1.0
DEC											
09...	*1000*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
09...	1100	ENVIRONMENTAL	75	57	4.5	4.0	4.0	752	--	--	--
JAN 1997											
08...	*1028*	*SPLIT REPLICATE*	*13*	*84*	*5.8*	--	--	--	--	--	--
08...	1030	ENVIRONMENTAL	18	84	5.8	0.5	3.5	760	11.1	87.0	--
15...	0950	ENVIRONMENTAL	16	120	6.2	-4.0	1.0	766	12.5	92.5	--
21...	1210	ENVIRONMENTAL	19	102	6.3	--	2.5	771	11.8	85	<1.0
27...	1130	ENVIRONMENTAL	44	79	5.4	3.5	1.0	--	--	--	--
FEB											
11...	1000	ENVIRONMENTAL	26	200	5.9	3.0	2.0	761	11.0	80.1	--
26...	1050	ENVIRONMENTAL	18	100	5.9	8.0	5.5	762	10.1	80.1	--
26...	*1051*	*SPLIT REPLICATE*	--	*100*	*5.9*	--	--	--	--	--	--
MAR											
11...	1020	ENVIRONMENTAL	33	110	6.4	13.0	6.5	754	9.4	77	--
20...	1040	ENVIRONMENTAL	22	87	6.4	--	6.5	756	10.1	83	2.8
24...	0940	ENVIRONMENTAL	17	88	6.7	6.0	6.0	771	10.4	82	--
APR											
08...	1010	ENVIRONMENTAL	22	91	6.2	12.0	11.0	764	8.5	77	--
14...	0930	ENVIRONMENTAL	23	98	5.7	12.0	9.5	761	8.7	76	--
22...	*0937*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
22...	1030	ENVIRONMENTAL	24	83	6.1	14.5	10.0	751	9.0	81	--
30...	0940	ENVIRONMENTAL	39	75	5.9	19.0	12.5	756	7.4	70	--
MAY											
15...	0940	ENVIRONMENTAL	14	84	6.3	18.5	13.5	751	7.9	78	--
28...	1010	ENVIRONMENTAL	18	61	5.8	19.0	12.0	769	8.0	74	--
28...	*1011*	*SPLIT REPLICATE*	--	*61*	*5.7*	--	--	--	--	--	--
29...	1020	ENVIRONMENTAL	14	66	6.3	--	12.0	770	8.6	79	<1.0
JUN											
04...	*1500*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
16...	1040	ENVIRONMENTAL	5.3	75	6.5	18.0	13.5	758	8.4	81	--
23...	0940	ENVIRONMENTAL	4.6	70	6.7	28.0	17.5	760	7.3	76	--
JUL											
08...	1000	ENVIRONMENTAL	2.9	69	6.8	26.0	18.0	762	7.2	76	--
21...	0940	ENVIRONMENTAL	1.4	50	5.6	23.0	16.5	761	6.7	69	--
28...	1010	ENVIRONMENTAL	9.3	110	6.1	28.0	20.0	755	6.8	75	--
29...	1000	ENVIRONMENTAL	7.3	98	6.5	--	19.5	758	7.0	77	<1.0
AUG											
12...	1020	ENVIRONMENTAL	3.1	60	6.0	25.5	18.0	762	7.4	78	--
25...	1100	ENVIRONMENTAL	14	72	5.3	24.0	18.0	762	7.5	80	--
SEP											
09...	1020	ENVIRONMENTAL	5.3	73	5.6	24.0	16.0	759	7.8	80	--

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	BICAR-BONATE WAT.DIS FET FIELD HCO3 (MG/L) (29804)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)
OCT 1996												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	13	3.2	1.2	5.6	1.7	--	4.6	3.4	--	3.8
19...	--	--	12	2.8	1.1	4.3	1.7	--	4.6	3.3	--	3.8
NOV												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	15	3.5	1.4	6.1	1.3	--	17	6.2	--	14
18...	5	10	14	3.4	1.4	6.3	1.6	--	--	6.3	--	--
DEC												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	8	1.8	.87	4.3	1.2	--	--	<1.0	--	--
JAN 1997												
08...	--	--	--	--	--	--	--	--	*6.0*	--	--	*4.9*
08...	--	--	16	3.7	1.6	6.3	1.6	--	6.0	5.2	--	4.9
15...	--	--	18	4.3	1.7	12	1.5	--	6.0	5.9	--	4.9
21...	17	<10	18	4.3	1.8	9.3	1.6	--	--	5.8	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
11...	--	--	19	4.7	1.8	30	1.4	--	4.8	4.4	4	3.9
26...	--	--	17	4.2	1.6	10	<1.3	--	7.6	6.1	--	6.2
26...	--	--	*17*	*4.1*	*1.6*	*10*	*1.3*	*7.0*	*7.6*	*6.0*	*6.0*	*6.2*
MAR												
11...	--	--	16	3.9	1.5	13	1.3	--	5.1	5.2	--	4.2
20...	5	<10	15	3.7	1.5	7.6	1.4	--	--	5.5	--	--
24...	--	--	17	4.0	1.6	8.1	1.5	--	90	6.4	--	7.4
APR												
08...	--	--	15	3.8	1.4	9.3	1.5	--	6.3	6.6	--	5.2
14...	--	--	16	3.8	1.5	10	1.5	--	6.3	6.3	5	5.2
22...	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	14	3.4	1.3	8.2	1.5	--	7.1	5.1	--	5.8
30...	--	--	12	3.0	1.1	7.8	1.3	--	5.9	4.9	--	4.8
MAY												
15...	--	--	16	4.0	1.5	8.0	1.5	--	9.5	8.1	--	7.8
28...	--	--	12	2.9	1.1	5.5	1.2	--	4.6	5.1	--	3.8
28...	--	--	*12*	*2.8*	*1.1*	*5.5*	*1.2*	--	*5.4*	*5.0*	--	*4.4*
29...	33	260	13	3.2	1.2	5.9	1.3	--	--	5.9	--	--
JUN												
04...	--	--	--	*.04*	*<.01*	*<.2*	*<.1*	--	--	*1.4*	--	--
16...	--	--	17	4.3	1.6	6.0	1.4	12	--	11	9.0	--
23...	--	--	44	15	1.6	5.8	1.4	12	--	12	--	10
JUL												
08...	--	--	17	4.2	1.6	5.4	1.5	13	--	12	10	--
21...	--	--	12	3.1	1.1	3.5	1.2	--	11	9.3	--	9.0
28...	--	--	23	5.8	2.1	9.2	1.7	7.0	--	7.7	6.0	--
29...	79	280	21	5.2	2.0	7.9	1.7	--	--	9.8	--	--
AUG												
12...	--	--	15	3.7	1.3	4.2	1.3	--	10	10	--	8.0
25...	--	--	17	4.0	1.7	5.9	1.4	--	5.4	5.9	--	4.4
SEP												
09...	--	--	17	4.3	1.6	5.3	1.5	10	--	11	8.5	--

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT 1996												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	6.6	9.5	<.1	5.8	60	38	--	<.01	.22	.02	.5	.40
19...	5.2	6.8	<.1	5.2	54	31	--	<.01	.30	.02	.7	.40
NOV												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	6.6	11	<.1	6.9	54	48	--	<.01	.62	.04	.2	.20
18...	6.7	11	<.1	7.1	54	44	<1	--	.60	--	.3	.16
DEC												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	5.6	7.5	<.1	3.5	52	--	--	<.01	.10	<.02	.3	.30
JAN 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	8.4	10	.09	5.4	55	43	--	<.01	.58	.02	.3	.20
15...	9.1	21	<.1	6.0	77	62	--	.01	.68	.04	.4	.19
21...	9.7	15	<.1	6.3	62	55	<1	--	.70	--	.3	.25
27...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
11...	9.1	50	<.1	4.2	120	106	--	.03	.58	.02	.3	.16
26...	9.3	16	<.1	4.1	70	--	--	.02	.58	.02	.3	.15
26...	9.4	16	<.1	4.1	67	53	--	.01	.60	.02	.3	<.20
MAR												
11...	8.8	21	<.1	3.0	74	57	--	<.01	.35	<.02	.4	.30
20...	9.0	13	<.1	3.4	53	45	10	--	.47	--	.4	.24
24...	8.8	13	.17	3.1	58	87	--	<.01	.58	<.02	.3	.16
APR												
08...	7.4	15	.11	2.3	72	45	--	<.01	.27	<.02	.3	.30
14...	7.5	17	.11	2.2	70	49	--	<.01	.33	.02	.4	.30
22...	--	--	--	--	--	--	--	--	--	--	--	--
22...	7.6	14	.15	2.4	62	44	--	<.01	.38	.03	.3	.30
30...	5.8	12	.17	2.2	69	38	--	<.01	.19	<.02	.5	.50
MAY												
15...	6.9	13	.12	3.9	68	46	--	<.01	.42	.03	.3	.20
28...	4.4	8.7	.01	4.4	61	33	--	<.01	.33	.03	.5	.50
28...	4.4	8.6	<.1	4.5	63	33	--	<.01	.30	.02	.5	.50
29...	5.0	9.7	<.1	4.9	62	37	1	--	.43	--	.5	.31
JUN												
04...	<.1	<.1	<.1	.01	2	--	--	<.01	<.05	<.02	<.2	<.20
16...	5.8	9.3	<.1	6.8	55	44	--	<.01	.58	<.02	.2	.20
23...	5.4	9.1	<.01	5.9	49	53	--	<.01	.55	<.02	.2	.10
JUL												
08...	4.9	8.4	.05	5.3	67	40	--	<.01	.36	<.02	.3	.30
21...	3.6	5.4	.09	5.7	40	30	--	<.01	.22	<.02	.3	<.20
28...	17	12	<.1	5.3	80	58	--	<.01	.26	.03	.4	.40
29...	13	11	<.1	5.6	74	54	<1	--	.40	--	.5	.40
AUG												
12...	4.1	6.5	.08	5.2	35	34	--	<.01	.51	.02	.2	.10
25...	11	9.4	.16	5.4	68	45	--	<.01	.38	<.02	.4	.40
SEP												
09...	7.4	8.8	.1	5.2	47	43	--	<.01	.73	<.02	<.2	<.20

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1996												
09...	--	--	--	--	--	--	--	--	<.1	<.1	--	--
09...	.72	.62	.04	.04	.03	29	680	20	16	.9	6	.57
19...	1.0	.70	.08	.03	.03	28	590	18	15	1.3	14	1.6
NOV												
18...	--	--	--	--	--	--	--	--	<.1	.1	--	--
18...	.82	.82	.01	.02	.02	28	280	15	5.3	.4	.6	.02
18...	.90	.76	.02	<.01	--	--	--	--	5.6	.4	--	--
DEC												
09...	--	--	--	--	--	--	--	--	.4	<.1	--	--
09...	.40	.40	<.01	<.01	.02	28	450	23	14	.2	5	.95
JAN 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	.88	.78	<.01	<.01	<.01	30	290	21	6.1	.6	4	.17
15...	1.1	.87	<.01	<.01	<.01	28	220	29	4.5	.3	3	.12
21...	1.0	.95	<.01	<.01	--	--	--	--	4.5	.5	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
11...	.88	.74	<.01	<.01	<.01	28	210	24	6.1	.6	5	.36
26...	.88	.73	.01	<.01	.01	25	200	22	5.5	.6	5	.26
26...	.90	--	<.01	<.01	.02	23	220	23	5.5	.7	3.7	--
MAR												
11...	.75	.65	.02	<.01	<.01	25	270	17	8.1	.4	6	.54
20...	.87	.71	.01	<.01	--	--	--	--	6.8	.4	--	--
24...	.88	.74	.04	<.01	<.01	28	200	18	5.7	.9	3	.14
APR												
08...	.57	.57	.06	.02	.01	30	340	15	9.6	.4	2	.14
14...	.73	.63	<.01	<.01	<.01	25	360	16	9.6	.4	5	.32
22...	--	--	--	--	--	--	--	--	.1	.1	--	--
22...	.66	.66	.04	.03	.01	16	330	16	9.5	.5	4	.25
30...	.71	.71	.04	.03	.02	31	490	16	14	--	7	.71
MAY												
15...	.68	.65	.03	<.01	.02	23	370	14	8.6	.6	2	.07
28...	.87	.79	.02	.02	.03	27	670	21	13	.8	19	.91
28...	.82	.76	.02	.02	.03	27	670	22	13	.5	--	--
29...	.90	.74	.03	.01	--	--	--	--	10	.4	--	--
JUN												
04...	--	--	<.01	<.01	<.01	<4.0	<3	<1	--	--	--	--
16...	.74	.73	.04	.04	.03	25	330	13	4.2	.3	3	.04
23...	.77	.66	.10	.01	.02	29	220	14	3.7	.7	1	.01
JUL												
08...	.63	.64	.03	.02	.02	25	170	16	3.6	.5	3	.02
21...	.54	--	.05	.01	.02	12	250	23	2.4	.9	11	.04
28...	.65	.68	.04	.02	.02	37	270	23	8.1	.6	1	.03
29...	.94	.80	<.01	.01	--	--	--	--	6.6	.3	--	--
AUG												
12...	.76	.58	.02	<.01	.02	21	91	10	2.1	.7	4	.03
25...	.81	.73	.03	.02	.02	29	400	25	9.3	.4	4	.15
SEP												
09...	--	--	.05	.01	.01	26	88	4	2.4	.2	2	.03

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
NOV 1996											
18...	1050	--	18	--	--	--	<1	--	<10	30	<1
18...	1050	6.1	--	.2	200	140	--	<1	--	--	--
MAY 1997											
29...	1020	--	60	--	--	--	<1	--	<10	30	<1

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
NOV 1996											
18...	--	<1.0	--	--	<1	--	350	--	<1	--	20
18...	<1	--	2	<5	--	<1	--	2000	--	<10	--
MAY 1997											
29...	--	<1.0	--	--	1	--	790	--	2	--	20

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
NOV 1996										
18...	--	<.1	--	<1	--	<1	--	<10	--	--
18...	6	--	<.01	--	<10	--	<1	--	6	<.1
MAY 1997										
29...	--	<.1	--	1	--	<1	--	10	--	--

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)
NOV 1996										
18...	--	--	--	--	--	--	--	--	--	--
18...	3.7	4	<1	<.1	1	E7.0	3.1	13.0	.2	<.1
MAY 1997										
29...	--	--	--	--	--	--	--	--	--	--

DATE	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
NOV 1996										
18...	--	--	--	--	--	--	--	--	--	--
18...	<.1	<.1	<.1	<.1	<2.0	<.1	<1	<10	.4	.7
MAY 1997										
29...	--	--	--	--	--	--	--	--	--	--

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE NEW JERSEY DEPARTMENT OF HEALTH, PUBLIC HEALTH, AND ENVIRONMENTAL LABORATORIES

DATE	TIME	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
NOV 1996				
18...	1050	<.003	.03	<.03
JAN 1997				
21...	1210	.006	<.03	<.03
MAR				
20...	1040	.006	<.03	<.03
MAY				
29...	1020	.009	<.03	<.03
JUL				
29...	1000	.005	<.03	<.03

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels in "Explanation of Records" section). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels in "Explanation of Records" section). Only pesticides measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)
OCT 1996										
09...	*1030*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.002*	*<.003*	*<.003*	*<.004*
09...	1100	ENVIRONMENTAL	<.002	<.002	.006	E.0016	<.002	<.003	<.003	<.004
19...	0940	ENVIRONMENTAL	<.002	<.002	<.001	<.002	<.002	<.003	<.003	<.004
NOV										
18...	*1020*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.002*	*<.003*	*<.003*	*<.004*
18...	1040	ENVIRONMENTAL	<.002	.005	.021	E.0100	<.002	<.003	<.003	<.004
DEC										
09...	*1030*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.002*	*<.003*	*<.003*	*<.004*
09...	1100	ENVIRONMENTAL	<.002	<.002	.004	<.002	<.002	<.003	<.003	<.004
JAN 1997										
15...	0950	ENVIRONMENTAL	<.002	.005	.022	E.0086	<.002	<.003	E.0031	<.004
FEB										
11...	1000	ENVIRONMENTAL	<.002	E.0035	.017	E.0049	<.002	<.003	<.003	<.004
MAR										
11...	1020	ENVIRONMENTAL	<.002	E.0022	.014	E.0056	<.002	<.003	<.003	<.004
APR										
14...	0930	ENVIRONMENTAL	<.002	E.0030	.018	E.0070	<.002	<.003	<.003	<.004
22...	*1010*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.002*	*<.003*	*<.003*	*<.004*
22...	1030	ENVIRONMENTAL	<.002	<.002	.018	E.0070	<.002	<.003	<.003	<.004
30...	0940	ENVIRONMENTAL	<.002	<.002	.024	E.0069	<.002	<.003	E.0546	<.004
MAY										
15...	0940	ENVIRONMENTAL	<.002	.006	.027	E.0108	<.002	E.0048	E.0080	<.004
28...	1010	ENVIRONMENTAL	<.002	.015	.030	E.0078	<.002	E.0048	<.003	<.004
28...	*1011*	*SPLIT REPLICATE*	*<.002*	*.014*	*.027*	*E.0074*	*<.002*	*E.0045*	*<.003*	*<.004*
JUN										
16...	1040	ENVIRONMENTAL	<.002	.006	.036	E.0076	<.002	<.003	<.003	<.004
23...	0940	ENVIRONMENTAL	<.002	.009	.047	E.0104	<.002	<.003	<.003	<.004
JUL										
08...	1000	ENVIRONMENTAL	<.002	.007	.029	E.0068	E.0030	<.003	E.0263	<.004
AUG										
12...	1020	ENVIRONMENTAL	<.002	.009	.034	E.0086	<.002	<.003	<.003	<.004
SEP										
09...	1020	ENVIRONMENTAL	<.002	.007	.036	E.0106	<.002	E.0030	E.0059	<.004

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
OCT 1996											
09...	*<.004*	*<.002*	*<.002*	*<.004*	*<.005*	*<.002*	*<.004*	*<.003*	*<.004*	*<.018*	*<.004*
09...	<.004	<.002	<.002	<.004	<.005	.008	<.004	<.003	<.004	E.0054	<.004
19...	<.004	<.002	<.002	<.004	<.005	<.002	<.004	<.003	<.004	<.018	<.004
NOV											
18...	*<.004*	*<.002*	*<.002*	*<.004*	*<.005*	*<.002*	*<.004*	*<.003*	*<.004*	*<.018*	*<.004*
18...	<.004	E.0018	<.002	<.004	<.005	.012	<.004	<.003	<.004	E.0085	<.004
DEC											
09...	*<.004*	*<.002*	*<.002*	*<.004*	*<.005*	*<.002*	*<.004*	*<.003*	*<.004*	*<.018*	*<.004*
09...	<.004	<.002	<.002	<.004	<.005	.012	<.004	<.003	<.004	<.018	<.004
JAN 1997											
15...	<.004	<.002	<.002	<.004	<.005	.017	<.004	<.003	<.004	E.0075	<.004
FEB											
11...	<.004	<.002	<.002	<.004	<.005	.027	<.004	<.003	<.004	E.0078	<.004
MAR											
11...	<.004	<.002	<.002	<.004	<.005	.024	<.004	<.003	<.004	E.0084	<.004
APR											
14...	<.004	<.002	<.002	<.004	<.005	.021	<.004	<.003	<.004	E.0110	<.004
22...	*<.004*	*<.002*	*<.002*	*<.004*	*<.005*	*<.002*	*<.004*	*<.003*	*<.004*	*<.018*	*<.004*
22...	<.004	<.002	<.002	<.004	<.005	.027	<.004	<.003	<.004	E.0080	<.004
30...	<.004	<.002	.005	<.004	<.005	.031	<.004	<.003	<.004	E.0091	<.004
MAY											
15...	<.004	<.002	<.002	<.004	<.005	.016	<.004	<.003	<.004	E.0139	<.004
28...	<.004	E.0010	<.002	<.004	<.005	.063	<.004	<.003	<.004	E.0160	<.004
28...	*<.004*	*E.0010*	*<.002*	*<.004*	*<.005*	*.062*	*<.004*	*<.003*	*<.004*	*E.0156*	*<.004*
JUN											
16...	<.004	<.002	E.0017	<.004	<.005	.014	<.004	<.003	<.004	E.0102	<.004
23...	.005	<.002	E.0038	<.004	<.005	.018	<.004	<.003	<.004	.021	<.004
JUL											
08...	<.004	<.002	<.002	<.004	<.005	.048	<.004	<.003	<.004	.023	<.004
AUG											
12...	<.004	<.002	<.002	<.004	<.005	.008	<.004	<.003	<.004	E.0112	<.004
SEP											
09...	<.004	<.002	.007	<.004	<.005	.016	<.004	<.003	<.004	.027	<.004

DATE	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	2,4-D, DIS-SOLVED (UG/L) (39732)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	FLUO-METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)
OCT 1996											
09...	*<.005*	*<.010*	*<.002*	*<.016*	*<.008*	*<.028*	*<.05*	*<.035*	*<.035*	*<.02*	*<.035*
09...	E.0039	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
19...	<.005	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
NOV											
18...	*<.005*	*<.010*	*<.002*	*<.016*	*<.008*	*<.028*	*<.05*	*<.035*	*<.035*	*<.02*	*<.035*
18...	.010	E.0041	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
DEC											
09...	*<.005*	*<.010*	*<.002*	*<.016*	*<.008*	*<.028*	*<.05*	*<.035*	*<.035*	*<.02*	*<.035*
09...	<.005	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
JAN 1997											
15...	.008	E.0050	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
27...	--	--	--	--	--	--	--	--	--	--	--
FEB											
11...	E.0049	E.0053	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
MAR											
11...	.006	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
APR											
14...	.008	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
22...	*<.005*	*<.010*	*<.002*	*<.016*	*<.008*	*<.028*	*<.05*	*<.035*	*<.035*	*<.02*	*<.035*
22...	.006	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
30...	.007	<.010	<.002	<.016	<.008	E.002	<.05	<.035	<.035	<.02	<.035
MAY											
15...	.014	E.0077	<.002	<.016	<.008	<.028	<.05	E.0200	<.035	<.02	<.035
28...	.007	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	.12	<.035
28...	*.007*	*<.010*	*<.002*	*<.016*	*<.008*	*<.028*	*<.05*	*<.035*	*<.035*	*.12*	*<.035*
JUN											
16...	.014	E.0072	<.002	--	--	--	--	--	--	--	--
23...	.016	E.0050	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
JUL											
08...	.014	E.0032	E.0023	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035
AUG											
12...	.018	E.0036	<.002	<.016	<.008	<.028	<.05	E.0400	<.035	<.02	<.035
SEP											
09...	.014	<.010	<.002	<.016	<.008	<.028	<.05	<.035	<.035	<.02	<.035

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the LINJ NAWQA Program. Samples were analyzed for volatile organic compounds (VOCs) on schedule 2020 (listed with minimum reporting levels in "Explanation of Records" section). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	SAMPLE TYPE	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)
OCT 1996										
09...	*0940*	*CANNISTER BLANK*	*<.05*	*<.05*	*<.05*	*<.05*	*<.10*	*<.05*	*<.05*	*<.05*
09...	*0950*	*FIELD BLANK*	*<.05*	*<.05*	*<.05*	*<.05*	*<.10*	*<.05*	*<.05*	*<.05*
09...	1100	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
19...	0940	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
NOV										
18...	1040	ENVIRONMENTAL	<.10	E.010	<.10	<.10	<.20	<.10	<.10	<.10
DEC										
09...	1100	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
JAN 1997										
08...	1030	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
15...	0950	ENVIRONMENTAL	<.05	E.010	<.05	<.05	<.10	<.05	<.05	<.05
27...	1130	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
FEB										
11...	1000	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
MAR										
11...	1020	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
24...	0940	ENVIRONMENTAL	<.05	E.010	<.05	<.05	<.10	<.05	<.05	<.05
APR										
14...	0930	ENVIRONMENTAL	<.10	<.10	<.10	<.20	<.40	<.20	<.20	<.20
MAY										
15...	0940	ENVIRONMENTAL	<.10	<.10	<.10	<.10	<.20	<.10	<.10	<.10
JUN										
23...	0940	ENVIRONMENTAL	<.06	<.06	<.06	<.13	<.09	<.46	<.48	<.25
JUL										
08...	1000	ENVIRONMENTAL	<.03	E.010	<.03	E.010	<.04	<.23	<.24	<.12
AUG										
12...	*1000*	*CANNISTER BLANK*	*<.03*	*<.03*	*<.03*	*<.07*	*<.04*	*<.23*	*<.24*	*<.12*
12...	*1010*	*FIELD BLANK*	*<.03*	*<.03*	*<.03*	*<.07*	*<.04*	*<.23*	*<.24*	*<.12*
12...	1020	ENVIRONMENTAL	<.06	E.010	<.06	<.13	<.09	<.46	<.48	<.25
SEP										
09...	1020	ENVIRONMENTAL	<.03	E.010	<.03	<.07	<.04	<.23	<.24	<.12

DATE	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)
OCT 1996											
09...	*<.20*	*<.05*	*<.05*	*<.05*	*E.007*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*	*<5.0*
09...	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*	*<5.0*
09...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
19...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	E.030	<.10	E.010	<10
NOV											
18...	<.40	<.10	<.10	<.10	E.010	<.10	E.006	<.10	<.10	<.10	<10
DEC											
09...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
JAN 1997											
08...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
15...	<.20	<.05	<.05	<.05	<.05	<.05	<.05	E.010	<.05	<.05	<5.0
27...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
FEB											
11...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
MAR											
11...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
24...	<.20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<5.0
APR											
14...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
30...	<.80	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<20
MAY											
15...	<.40	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<10
JUN											
23...	<.38	<.11	<.09	<.10	<.13	<.11	E.01	<.13	<.08	<.22	<3.3
JUL											
08...	<.19	<.06	<.04	<.05	<.06	<.05	<.05	<.06	<.04	<.11	<1.6
AUG											
12...	*<.19*	*<.06*	*<.04*	*<.05*	*<.06*	*<.05*	*<.05*	*<.06*	*<.04*	*<.11*	*<1.6*
12...	*<.19*	*<.06*	*<.04*	*<.05*	*<.06*	*<.05*	*<.05*	*<.06*	*<.04*	*<.11*	*<1.6*
12...	<.38	<.11	<.09	<.10	<.13	<.11	<.10	<.13	<.08	<.22	<3.3
SEP											
09...	<.19	<.06	<.04	<.05	<.06	<.05	<.05	<.06	<.04	<.11	<1.6

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	ACRO-LEIN TOTAL (UG/L) (34210)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)
OCT 1996										
09...	*<.05*	*<2.0*	*<5.0*	*E.800*	*<.05*	*E.010*	*<.05*	*E.005*	*<.10*	*<.10*
09...	*<.05*	*<2.0*	*<5.0*	*E.900*	*<.05*	*E.010*	*<.05*	*<.05*	*<.10*	*<.10*
09...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
19...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
NOV										
18...	<.10	<4.0	<10	<10	<.10	<.20	E.020	<.10	<.20	<.20
DEC										
09...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
JAN 1997										
08...	<.10	<4.0	<10	E1.60	<.10	<.20	<.10	<.10	<.20	<.20
15...	<.05	<2.0	<5.0	E1.30	E.020	<.10	E.010	<.05	<.10	<.10
27...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
FEB										
11...	<.10	<4.0	<10	E1.00	E.030	<.20	<.10	<.10	<.20	<.20
MAR										
11...	<.10	<4.0	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
24...	<.05	<2.0	<5.0	1.2	<.05	<.10	E.010	<.05	<.10	<.10
APR										
14...	<.10	<4	<10	<10	<.10	<.20	<.10	<.10	<.20	<.20
30...	<.20	<8	<20	<20	<.20	<.40	<.20	<.20	<.40	<.40
MAY										
15...	<.10	<4	<10	<10	E.010	<.20	<.10	<.10	<.20	<.20
JUN										
23...	<.20	<2.9	<.75	E3	<.06	<.10	<.16	<.06	<.36	<.24
JUL										
08...	<.10	<1.4	<.37	<4.9	<.03	<.05	E.030	<.03	<.18	<.12
AUG										
12...	*<.10*	*<1.4*	*<.37*	*<4.9*	*<.04*	*<.05*	*<.08*	*<.03*	*<.18*	*<.12*
12...	*<.10*	*<1.4*	*<.37*	*<4.9*	*<.04*	*<.05*	*<.08*	*<.03*	*<.18*	*<.12*
12...	<.2	<2.9	<.75	<9.8	<.06	<.10	E.010	<.06	<.36	<.24
SEP										
09...	<.1	<1.4	<.37	E1.00	<.03	<.05	<.08	<.03	<.18	<.12

DATE	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
OCT 1996										
09...	*<.20*	*<.05*	*<.20*	*<.10*	*<.10*	*<.05*	*<.05*	*<.05*	*<.10*	*<.05*
09...	*<.20*	*<.05*	*<.20*	*<.10*	*<.10*	*<.05*	*<.05*	*<.05*	*<.10*	*<.05*
09...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	<.10	E.140	<.10
19...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	<.10	<.20	<.10
NOV										
18...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	E.050	.59	<.10
DEC										
09...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	E.040	<.20	<.10
JAN 1997										
08...	<.40	<.10	<.40	E.020	<.20	<.10	<.10	<.10	E.100	<.10
15...	<.20	<.05	<.20	<.10	<.10	<.05	<.05	E.030	.48	<.05
27...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	E.020	E.100	<.10
FEB										
11...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	E.030	.27	<.10
MAR										
11...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	<.10	.37	<.10
24...	E.020	<.05	<.20	<.10	<.10	<.05	<.05	<.05	.29	<.05
APR										
14...	<.40	<.10	<.40	<.20	<.20	<.10	<.10	<.10	E.10	<.10
30...	<.80	<.20	<.80	<.40	<.40	<.20	<.20	<.20	E.10	<.20
MAY										
15...	<.40	<.10	E.080	<.20	<.20	<.10	<.10	<.10	E.10	<.10
JUN										
23...	<.51	<.08	<.19	<.76	<.34	<.06	<.15	E.060	<.22	<.37
JUL										
08...	E.01	<.04	<.10	<.38	<.17	<.03	<.08	<.04	.13	<.19
AUG										
12...	*E.01*	*<.04*	*<.10*	*<.38*	*<.17*	*<.03*	*<.08*	*<.04*	*<.11*	*<.19*
12...	*E.01*	*<.04*	*<.10*	*<.38*	*<.17*	*<.03*	*<.08*	*<.04*	*<.11*	*<.19*
12...	<.51	<.08	<.19	<.76	<.34	<.06	<.15	<.08	<.22	<.37
SEP										
09...	<.25	<.04	<.10	<.38	<.17	<.03	<.08	<.04	E.04	<.19

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	BROMO-FORM TOTAL (UG/L) (32104)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
OCT 1996										
09...	*<.05*	*<.20*	*<.05*	*<.10*	*<.05*	*<5.0*	*<.20*	*<.05*	*<.10*	*E.050*
09...	*<.05*	*<.20*	*<.05*	*<.10*	*<.05*	*<5.0*	*<.20*	*<.05*	*<.10*	*E.050*
09...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	<.10
19...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	<.10
NOV										
18...	<.10	<.40	E.008	<.20	<.10	<10	<.40	E.020	<.20	E.010
DEC										
09...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	<.10
JAN 1997										
08...	<.10	<.40	<.10	<.20	<.10	<10	<.40	E.020	<.20	<.10
15...	<.05	E.010	<.05	E.009	E.008	<5.0	<.20	E.030	<.10	E.010
27...	<.10	<.40	<.10	<.20	<.10	<10	<.40	<.10	<.20	<.10
FEB										
11...	<.10	<.40	<.10	<.20	E.010	<10	<.40	E.010	<.20	<.10
MAR										
11...	<.10	<.40	<.10	<.20	E.010	<10	<.40	E.010	<.20	<.10
24...	<.05	<.20	<.05	<.10	E.003	<5.0	<.20	E.020	<.10	E.010
APR										
14...	<.10	<.40	<.10	<.20	<.10	<10	<.40	E.020	<.20	<.10
30...	<.20	<.80	<.20	<.40	<.20	<20	<.80	E.020	<.40	<.20
MAY										
15...	<.10	<.40	<.10	<.20	<.10	<10	<.40	E.020	<.20	<.10
JUN										
23...	<.08	<.50	<.08	<.22	<.08	<2.3	<.21	E.030	<.18	<.10
JUL										
08...	<.04	<.25	<.04	<.11	<.04	<1.1	<.10	E.040	<.09	E.010
AUG										
12...	*<.04*	*<.25*	*<.04*	*<.11*	*<.04*	*<1.1*	*<.10*	*<.04*	*<.09*	*<.05*
12...	*<.04*	*<.25*	*<.04*	*<.11*	*<.04*	*<1.1*	*<.10*	*<.04*	*<.09*	*<.05*
12...	<.08	<.50	<.08	<.22	<.08	<2.3	<.21	E.060	<.18	<.10
SEP										
09...	<.04	<.25	<.04	<.11	<.04	<1.1	<.10	E.050	<.09	E.008

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	62	58	59	65	63	64	69	65	68	81	79	80
2	61	58	59	65	63	63	97	63	74	82	80	81
3	65	61	63	64	63	63	97	71	83	82	81	82
4	67	65	66	64	63	63	71	65	67	83	82	82
5	68	67	67	65	63	64	65	64	64	84	82	83
6	69	68	68	65	65	65	64	55	59	84	84	84
7	70	69	69	65	65	65	61	55	59	85	84	84
8	70	59	67	66	65	65	59	55	57	85	83	84
9	63	54	58	73	62	64	59	55	57	84	80	83
10	54	51	52	74	65	70	60	58	59	105	80	89
11	55	54	55	65	63	64	64	60	62	106	94	99
12	56	54	55	63	62	62	66	64	65	148	106	122
13	59	56	57	65	62	63	67	65	66	---	---	---
14	62	59	60	69	65	67	65	59	61	---	---	---
15	63	62	63	70	69	69	59	58	58	---	---	---
16	66	63	64	69	68	69	60	58	59	---	---	---
17	66	65	65	69	68	68	64	60	61	203	121	158
18	65	65	65	68	68	68	67	64	66	121	104	110
19	65	48	54	68	66	67	70	66	67	108	98	102
20	52	49	51	68	67	67	73	70	72	105	100	102
21	55	52	53	68	65	67	70	68	68	102	98	100
22	55	54	54	65	65	65	72	69	70	99	94	97
23	57	55	56	66	64	65	75	72	74	97	91	94
24	60	57	58	66	65	65	77	72	75	91	88	89
25	61	60	60	65	65	65	93	69	80	91	68	81
26	63	61	62	70	61	63	91	77	83	88	79	85
27	64	63	63	77	59	67	78	74	75	79	76	77
28	65	63	64	59	56	57	77	77	77	82	70	74
29	65	62	64	63	58	60	79	77	78	92	74	84
30	65	65	65	68	63	66	79	78	79	77	74	75
31	65	64	65	---	---	---	79	78	79	79	76	78
MONTH	70	48	61	77	56	65	97	55	68	203	68	91

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	81	78	79	107	94	102	107	70	78	77	74	76
2	82	80	81	124	94	114	167	107	142	85	77	80
3	84	82	83	109	80	97	114	90	99	85	76	82
4	85	83	85	129	80	113	90	87	88	91	76	86
5	85	70	78	124	98	109	87	86	86	81	76	77
6	82	73	76	100	94	97	87	85	86	78	76	78
7	73	71	71	100	96	98	95	85	89	83	78	81
8	72	71	72	96	95	96	94	92	93	84	83	83
9	94	71	84	96	95	95	93	91	92	84	79	81
10	188	94	146	118	86	93	94	92	93	85	82	84
11	205	187	198	123	98	112	95	93	94	84	82	84
12	187	139	158	98	92	95	95	88	93	82	80	81
13	139	130	132	92	90	91	113	86	99	84	81	82
14	150	105	121	90	74	84	106	90	97	88	84	86
15	212	150	183	104	74	95	90	85	86	89	84	86
16	157	111	129	92	80	85	90	85	87	86	84	85
17	111	101	105	81	79	80	91	87	90	86	85	85
18	101	99	100	82	80	81	94	84	86	86	85	85
19	104	100	102	82	81	82	122	94	109	87	86	86
20	108	104	106	83	81	83	98	85	89	86	85	86
21	108	106	107	86	83	84	85	83	84	88	86	87
22	106	104	105	87	85	86	86	83	84	88	86	87
23	110	103	106	90	87	88	88	86	87	87	86	86
24	108	105	106	89	87	88	86	80	83	88	86	87
25	105	104	104	90	88	89	99	85	94	89	69	87
26	104	102	104	98	81	85	87	79	81	90	61	70
27	112	99	105	107	91	100	82	79	80	71	60	63
28	112	107	108	91	89	89	86	59	72	64	59	61
29	---	---	---	90	77	86	76	69	71	69	63	65
30	---	---	---	97	75	86	75	70	74	77	69	73
31	---	---	---	84	62	72	---	---	---	78	74	76
MONTH	212	70	108	129	62	92	167	59	90	91	59	81

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	78	76	77	86	80	82	88	83	85	72	68	70
2	76	60	68	80	75	77	84	81	82	99	68	78
3	61	59	60	75	70	72	81	76	78	98	71	82
4	59	56	58	89	74	81	76	73	75	71	67	70
5	63	58	61	89	82	84	74	69	72	71	69	70
6	68	63	66	82	74	76	96	69	82	71	69	70
7	75	68	71	74	68	71	101	93	96	71	69	69
8	80	74	78	69	64	66	94	76	84	71	70	70
9	82	77	80	66	62	64	76	68	72	74	68	72
10	83	81	82	63	61	62	68	62	65	75	73	74
11	84	82	83	61	59	60	63	59	61	76	72	74
12	84	80	83	61	58	59	62	59	60	90	73	82
13	80	77	79	58	56	57	63	59	61	90	79	85
14	77	72	75	58	56	57	124	59	94	79	73	75
15	75	72	73	57	54	55	113	105	109	73	70	71
16	73	70	71	56	53	55	112	105	109	71	69	70
17	72	71	71	54	52	53	106	96	100	70	69	69
18	72	70	70	54	52	53	96	87	92	70	68	69
19	72	70	70	53	51	52	93	87	89	70	69	69
20	72	70	71	52	50	51	92	61	86	73	66	71
21	71	69	70	50	48	49	94	64	88	76	66	69
22	72	69	70	52	48	50	93	91	92	77	74	76
23	72	69	70	84	52	57	92	84	88	74	67	70
24	72	70	71	99	73	87	84	83	83	67	63	65
25	72	68	70	137	99	122	83	73	77	64	62	63
26	70	65	67	120	112	114	74	73	73	64	63	63
27	67	65	66	114	111	113	75	73	74	64	63	63
28	66	65	65	112	104	107	74	73	74	64	61	63
29	114	66	98	105	97	101	87	74	79	78	61	65
30	104	86	92	97	91	94	93	81	86	88	78	84
31	---	---	---	91	87	89	81	72	76	---	---	---
MONTH	114	56	73	137	48	73	124	59	82	99	61	71

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.5	14.5	16.0	21.5	18.5	20.0	21.0	17.0	19.0	20.0	17.0	18.5
2	17.0	14.0	15.0	20.5	18.5	19.5	20.5	18.0	19.5	21.0	17.5	19.5
3	14.0	12.5	13.0	23.0	18.5	20.5	21.5	17.5	19.5	21.0	18.0	19.5
4	15.0	12.0	13.5	23.5	19.5	22.0	21.5	18.5	20.0	18.0	15.0	16.5
5	16.5	11.5	14.0	23.0	18.5	21.0	21.0	17.5	19.0	16.5	13.0	15.0
6	15.0	12.5	14.0	21.0	16.5	19.0	19.5	16.0	18.0	16.0	13.5	15.0
7	14.0	12.5	13.5	22.0	17.5	20.0	20.0	15.5	18.0	18.0	14.0	16.0
8	15.5	11.0	13.5	22.5	18.0	20.5	19.5	15.5	18.0	18.0	16.0	17.0
9	17.0	11.0	14.0	23.5	19.0	21.5	20.0	16.0	18.5	18.0	16.0	17.0
10	19.0	13.0	15.5	23.0	19.0	21.0	20.0	17.0	19.0	17.0	16.0	16.0
11	20.0	15.0	17.5	22.0	16.5	19.5	21.0	17.0	19.0	18.5	16.0	17.0
12	19.5	16.0	18.0	21.5	16.5	19.5	20.5	18.0	19.5	19.0	16.5	17.5
13	18.5	16.5	17.5	23.5	18.0	20.5	20.5	18.0	19.5	18.5	16.0	17.5
14	18.5	16.0	17.0	24.0	19.5	22.0	21.5	19.0	20.5	18.0	15.5	16.5
15	19.0	14.5	16.5	24.5	20.0	22.5	22.0	19.5	21.0	17.5	15.0	16.5
16	18.5	13.0	16.0	25.0	21.0	23.0	24.0	20.0	22.0	17.0	14.0	16.0
17	17.5	13.5	15.5	25.5	21.5	23.5	24.0	21.0	22.5	17.5	15.0	16.5
18	18.0	15.5	16.5	25.5	21.5	23.5	23.5	19.0	20.5	17.5	16.0	16.5
19	20.0	16.0	18.0	24.0	20.0	22.5	19.5	16.0	18.0	17.5	15.0	16.5
20	21.0	15.5	18.5	22.5	17.5	19.5	19.0	16.5	17.5	18.5	16.0	17.0
21	22.5	17.0	20.0	21.0	16.5	18.5	19.5	17.5	18.5	17.5	14.5	15.5
22	22.5	18.5	20.5	21.0	18.5	19.5	20.0	18.5	19.0	14.5	11.0	13.0
23	---	---	---	19.0	17.0	18.0	19.5	18.0	18.5	14.5	12.0	13.5
24	21.5	17.0	19.5	17.0	16.5	17.0	19.5	16.5	18.0	14.5	12.5	13.0
25	23.5	18.5	21.0	19.0	16.5	17.5	20.0	16.0	18.0	13.0	10.0	11.5
26	23.5	19.5	21.5	21.5	17.0	19.0	19.5	16.0	17.5	14.5	12.0	13.0
27	22.5	18.5	20.5	22.5	19.0	20.5	19.0	16.0	17.5	14.5	12.0	13.5
28	21.5	16.0	19.5	23.5	19.5	21.5	18.5	16.5	17.0	14.5	12.0	13.0
29	23.0	17.5	20.5	23.0	20.0	21.5	19.0	16.0	17.5	16.5	14.5	15.5
30	22.0	17.5	20.0	21.5	16.5	19.0	19.0	16.5	18.0	16.0	14.5	15.5
31	---	---	---	20.5	16.0	18.5	19.0	16.0	17.5	---	---	---
MONTH	23.5	11.0	17.0	25.5	16.0	20.5	24.0	15.5	19.0	21.0	10.0	16.0

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ

LOCATION.--Lat 39°35'42", long 74°51'06", Atlantic County, Hydrologic Unit 02040302, on left bank 25 ft upstream from bridge on State Highway 54, 1.0 mi south of Folsom, and 2.0 mi upstream from Pennypot Stream.

DRAINAGE AREA.--57.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1925 to current year. Prior to October 1947, published as "Great Egg River at Folsom".

REVISED RECORDS.--WSP 1432: 1928(M), 1933. WDR NJ-83-1: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Nov. 26, 1934. Datum of gage is 53.32 ft above sea level. Prior to Mar. 6, 1941, water-stage recorder at site 100 ft downstream at same datum. Mar. 6 to Oct. 5, 1941, nonrecording gage at site 145 ft downstream at datum 0.25 ft higher.

REMARKS.--Records good. Several measurements of water temperature were made during the year. Satellite rain-gage and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

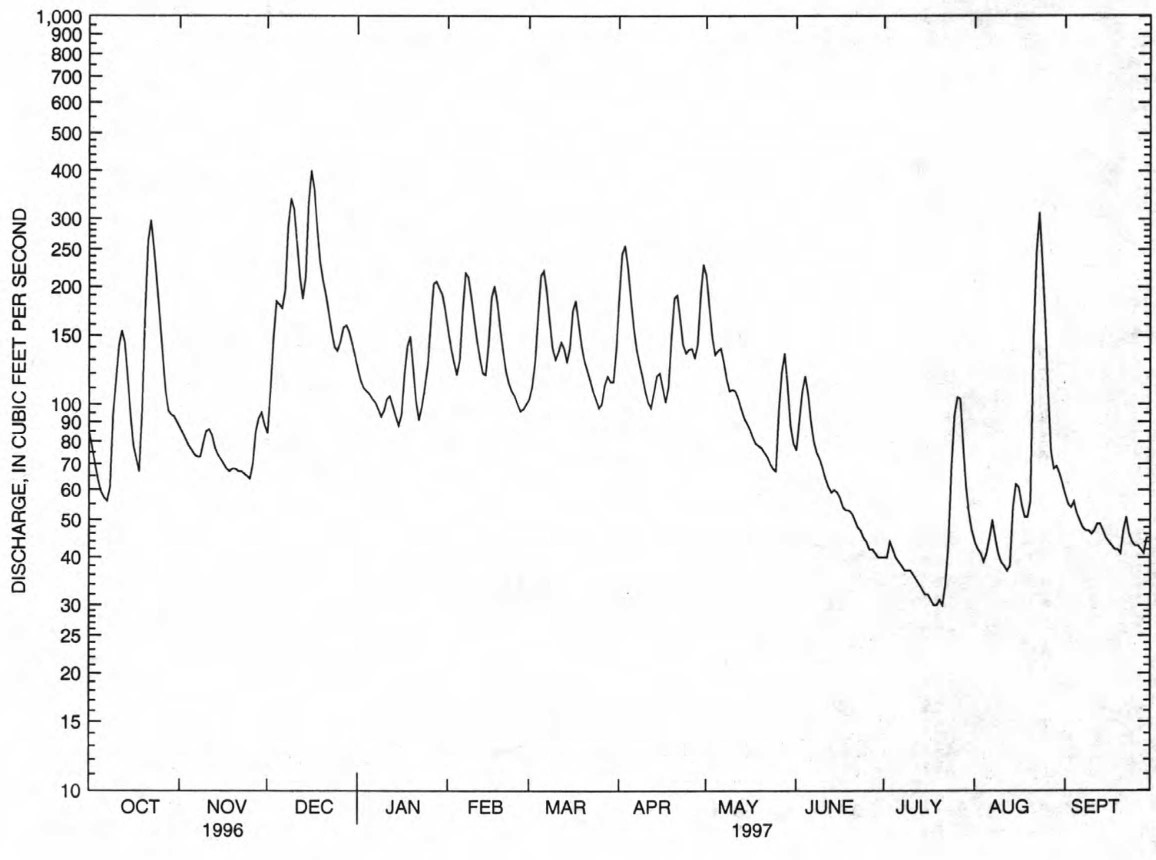
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	87	84	123	154	103	188	214	76	40	44	58
2	76	84	109	115	139	111	244	178	91	40	42	55
3	69	81	148	110	128	128	256	148	108	44	41	54
4	63	78	183	108	119	168	225	134	118	42	39	56
5	59	76	180	106	130	214	187	137	106	40	41	52
6	57	74	176	103	174	220	156	139	90	39	45	50
7	56	73	195	101	217	195	138	128	80	38	50	48
8	61	73	284	97	212	164	127	116	75	37	45	47
9	94	79	339	93	189	140	118	108	72	37	41	47
10	115	85	318	96	164	130	108	109	68	37	39	46
11	141	86	260	103	145	136	101	108	64	36	38	47
12	154	83	212	105	131	144	98	103	61	35	37	49
13	144	77	186	99	120	139	107	97	59	34	38	49
14	118	74	211	93	119	128	118	92	60	33	54	47
15	93	72	330	88	143	140	120	89	59	32	62	45
16	78	70	401	94	187	174	110	86	57	32	61	44
17	72	68	357	119	201	184	101	82	54	31	55	43
18	67	67	280	141	182	161	111	79	53	30	51	42
19	98	68	231	149	156	141	149	78	53	30	51	42
20	174	68	207	124	136	129	187	77	52	31	56	41
21	263	67	190	102	121	122	190	75	50	30	152	47
22	297	67	171	91	113	115	165	73	48	34	248	51
23	251	66	153	99	108	108	142	70	47	43	312	46
24	203	65	140	111	105	103	135	68	45	69	230	44
25	165	64	137	126	100	98	138	67	44	94	164	43
26	133	70	144	163	96	100	139	97	42	104	107	43
27	108	85	157	204	97	112	131	121	42	103	76	42
28	96	92	159	206	100	118	142	135	41	78	68	41
29	94	95	153	198	---	114	190	111	40	61	69	45
30	93	88	143	191	---	114	229	88	40	52	66	45
31	90	---	133	174	---	140	---	79	---	47	62	---
TOTAL	3666	2282	6371	3832	3986	4293	4550	3286	1895	1433	2484	1409
MEAN	118	76.1	206	124	142	138	152	106	63.2	46.2	80.1	47.0
MAX	297	95	401	206	217	220	256	214	118	104	312	58
MIN	56	64	84	88	96	98	98	67	40	30	37	41
CFSM	2.07	1.33	3.60	2.16	2.49	2.43	2.66	1.86	1.11	.81	1.40	.82
IN.	2.39	1.49	4.15	2.50	2.60	2.80	2.96	2.14	1.23	.93	1.62	.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	61.0	78.4	93.6	103	106	121	115	95.4	71.5	63.2	64.8	60.5
MAX	148	213	212	203	228	229	234	199	149	187	182	215
(WY)	1939	1973	1973	1936	1939	1958	1983	1958	1948	1938	1967	1940
MIN	27.8	30.1	35.1	39.3	50.7	60.1	53.9	47.1	34.4	22.1	19.3	25.6
(WY)	1931	1966	1966	1981	1931	1981	1985	1955	1977	1966	1966	1964

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1925 - 1997	
ANNUAL TOTAL	42760		39487			
ANNUAL MEAN	117		108		86.1	
HIGHEST ANNUAL MEAN					133	1973
LOWEST ANNUAL MEAN					44.4	1931
HIGHEST DAILY MEAN	401	Dec 16	401	Dec 16	1300	Sep 3 1940
LOWEST DAILY MEAN	46	Sep 6	30	Jul 18	15	Aug 29 1966
ANNUAL SEVEN-DAY MINIMUM	47	Sep 4	31	Jul 15	16	Aug 26 1966
INSTANTANEOUS PEAK FLOW			407	Dec 16	1440	Sep 3 1940
INSTANTANEOUS PEAK STAGE			5.79	Dec 16	9.09	Sep 3 1940
INSTANTANEOUS LOW FLOW			29	Jul 17	15	Sep 6 1957
ANNUAL RUNOFF (CFSM)	2.05		1.89		1.51	
ANNUAL RUNOFF (INCHES)	27.86		25.73		20.48	
10 PERCENT EXCEEDS	190		190		148	
50 PERCENT EXCEEDS	100		97		73	
90 PERCENT EXCEEDS	61		42		37	



01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ, DAILY MEAN DISCHARGE

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961-80, 1991 to September 1997 (discontinued).

PERIOD OF DAILY RECORD
SPECIFIC CONDUCTANCE: April 1969 to April 1975, April 1977 to May 1980.
WATER TEMPERATURE: October 1960 to April 1975, April 1977 to May 1980.
SUSPENDED-SEDIMENT DISCHARGE: December 1965 to September 1970, October 1978 to September 1979.

REMARKS.--For the definition of a field blank sample, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
14...	1016	73	61	6.2	6.0	775	10.7	84	E1.1	13	10	11
JAN 1997												
23...	1240	100	72	6.1	4.5	760	11.1	86	<1.0	13	70	12
MAR												
24...	1220	103	70	6.2	7.5	773	10.4	85	E1.4	8	10	12
MAY												
22...	1145	73	66	6.6	13.5	762	9.0	86	E1.4	17	10	13
JUL												
29...	1215	60	81	6.2	21.0	759	7.5	85	<1.0	70	100	15

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
14...	2.3	1.3	5.4	1.2	4.4	3.9	8.3	<.1	6.8	42	34	6
JAN 1997												
23...	2.5	1.4	6.3	1.0	3.9	6.3	11	<.1	5.7	56	39	2
MAR												
24...	2.5	1.4	6.5	1.1	4.2	6.1	11	<.1	3.6	55	37	1
MAY												
22...	2.6	1.5	6.2	1.2	6.0	4.0	9.7	<.1	4.8	47	36	7
JUL												
29...	3.3	1.6	7.2	1.2	4.9	11	10	<.1	6.8	67	47	2

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
14...	.004	.47	.12	.11	.5	.38	.97	.85	.03	<.01	8.9	.5
JAN 1997												
23...	.005	.63	.06	.05	.4	.29	1.0	.92	.02	<.01	5.4	--
MAR												
24...	.035	.50	.06	.07	.3	.31	.80	.81	.01	<.01	6.4	.4
MAY												
22...	.006	.60	.09	.11	.4	.28	1.0	.88	<.01	<.01	7.6	.5
JUL												
29...	.008	.49	.15	.16	.5	.46	1.0	.95	<.01	<.01	7.6	.6

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
NOV 1996											
14...	1016	ENVIRONMENTAL	--	25	--	--	--	<1	--	<10	60
14...	1016	BED MATERIAL	6.7	--	<.2	70	110	--	<1	--	--
MAY 1997											
22...	1145	ENVIRONMENTAL	--	30	--	--	--	<1	--	<10	60
22...	*1145*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV 1996												
14...	<1	--	1.0	--	--	4	--	--	610	--	1	--
14...	--	<1	--	9	<5	--	--	3	--	3700	--	--
MAY 1997												
22...	<1	--	1.4	--	--	6	--	--	770	--	1	--
22...	--	--	--	--	--	--	*<1*	--	--	--	--	*<1*

DATE	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996												
14...	--	20	--	<.1	--	--	3	--	--	<1	--	<10
14...	10	--	27	--	--	.03	--	--	<10	--	<1	--
MAY 1997												
22...	--	20	--	<.1	--	--	3	--	--	<1	--	<10
22...	--	--	--	--	*<.1*	--	--	*<1*	--	--	--	--

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)
NOV 1996											
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	10	.5	3.1	3	<1	<.1	2	E.4	.1	.4
MAY 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
22...	*<.5*	--	--	--	--	--	--	--	--	--	--

DATE	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
NOV 1996											
14...	--	--	--	--	--	--	--	--	--	--	--
14...	<.1	<.1	<.1	<.1	<.1	<.1	<2	<.1	<1	<10	.5
MAY 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ

LOCATION.--Lat 39°30'50", long 74°46'47", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322 in Weymouth, 0.5 mi upstream from Deep Run, and 20.9 mi upstream from mouth.

DRAINAGE AREA.--154 mi^2.

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

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996 13...	1024	210	55	5.6	6.5	778	10.7	85	<1.0	<20	50	9
JAN 1997 23...	1005	285	66	5.6	4.0	760	11.9	91	E1.0	2	<10	11
MAR 24...	1005	300	61	5.5	7.5	774	10.4	85	E1.1	<2	30	10
MAY 28...	1130	285	56	5.7	15.0	772	8.5	83	E1.1	540	110	10
JUL 28...	1130	195	80	5.7	22.5	756	7.3	85	<1.0	130	80	15

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996 13...	1.8	1.1	4.6	1.3	2.4	4.3	8.0	<.1	7.0	40	31	<1
JAN 1997 23...	2.1	1.3	5.4	1.2	2.0	6.7	11	<.1	6.0	52	37	2
MAR 24...	2.0	1.2	5.1	1.1	1.8	6.4	9.4	<.1	3.3	45	31	<1
MAY 28...	2.0	1.1	5.0	1.2	2.8	5.0	9.0	<.1	3.9	56	30	4
JUL 28...	3.3	1.7	6.2	1.2	2.8	14	9.6	<.1	6.9	67	45	<1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996 13...	.010	.32	.05	.07	.4	.33	.72	.65	.01	<.01	8.9	.6
JAN 1997 23...	.005	.56	.04	<.03	.2	.16	.76	.72	<.01	<.01	4.5	.7
MAR 24...	.004	.41	<.03	<.03	.3	.18	.71	.59	<.01	<.01	6.1	.3
MAY 28...	.008	.23	<.03	<.03	.7	.33	.89	.56	.02	<.01	12	.9
JUL 28...	.004	.17	<.03	<.03	.3	.12	.43	.29	<.01	.01	8.0	.2

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
NOV 1996								
13...	1024	26	<1	<10	30	<1	<1.0	2

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1996							
13...	960	1	20	<.1	2	<1	<10

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ

LOCATION.--Lat 39°18'25", long 74°49'15", Cape May County, Hydrologic Unit 02040302, on right bank at highway bridge on State Route 49, 0.2 mi upstream from McNeals Branch, 0.4 mi southeast of Head of River, and 3.7 mi west of Tuckahoe.

DRAINAGE AREA.--30.8 mi^2.

PERIOD OF RECORD.--December 1969 to current year.

REVISED RECORDS.--WDR NJ-78-1: 1975(M), 1976(M). WDR NJ-89-1: (M). WDR NJ-91-1: 1990.

GAGE.--Water-stage recorder, wooden control, and downstream tidal crest-stage gage. Datum of gage is sea level.

REMARKS.--Records good except for periods of water diversion and tide effected, which were fair. Occasional regulation by ponds above station. There is a fish gate in the left weir which was open this year. Planks were placed on top of the center and right weirs from Apr. 3 to May 7 to raise water level for fish migration. Several measurements of water temperature were made during the year.

REVISIONS.--Some peak discharges and the annual maximum (*) for the water years 1971, 1978, 1979, 1983, and 1994 have been revised as shown in the following table. They supersede figures published in the state reports for 1971, 1978, 1979, 1983, and 1994.

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 28, 1971	----	*384	*5.83	Apr. 17, 1983	----	395	5.87
May 25, 1978	----	*297	5.49	Mar. 30, 1994	----	578	*6.51
Feb. 26, 1979	----	*495	*6.23				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	46	41	68	66	57	116	130	44	20	15	40
2	29	45	66	63	61	79	123	101	48	22	15	38
3	27	43	82	59	57	84	109	85	e62	23	15	36
4	27	42	67	57	55	118	91	83	e69	21	14	34
5	24	40	57	56	86	122	74	74	54	19	15	32
6	22	38	65	55	127	110	67	65	46	18	20	30
7	20	38	89	53	107	91	72	60	41	18	18	30
8	33	39	153	51	90	77	66	54	38	18	16	29
9	e85	46	148	50	83	67	58	55	35	18	15	29
10	107	50	120	58	77	75	53	63	33	28	14	29
11	90	47	97	62	69	88	50	60	35	24	15	30
12	63	42	77	57	63	81	49	54	32	20	14	29
13	47	40	e77	52	61	72	79	51	30	18	14	28
14	39	39	e154	49	75	69	89	50	35	19	19	26
15	34	38	e170	46	133	101	83	47	36	17	18	25
16	31	36	152	53	143	105	66	45	34	17	15	25
17	31	35	131	71	120	90	56	43	31	20	13	24
18	30	34	110	59	96	76	63	41	29	20	15	24
19	85	37	103	50	78	73	79	39	30	25	16	24
20	208	37	115	47	69	74	74	39	29	20	26	23
21	154	36	103	45	63	71	66	38	27	18	920	24
22	118	34	88	46	60	66	60	36	25	18	e878	23
23	91	34	77	55	59	62	57	35	25	20	334	22
24	70	33	72	57	56	57	81	33	24	23	170	22
25	59	33	82	68	54	54	102	34	23	25	117	22
26	53	38	87	80	53	57	86	96	22	23	82	22
27	49	46	91	68	54	66	69	120	23	20	63	21
28	49	43	96	70	53	62	138	89	22	18	54	23
29	51	38	87	96	---	61	217	60	21	17	50	31
30	50	37	79	83	---	72	166	48	20	16	46	27
31	48	---	72	70	---	86	---	46	---	15	42	---
TOTAL	1858	1184	3008	1854	2168	2423	2559	1874	1023	618	3078	822
MEAN	59.9	39.5	97.0	59.8	77.4	78.2	85.3	60.5	34.1	19.9	99.3	27.4
MAX	208	50	170	96	143	122	217	130	69	28	920	40
MIN	20	33	41	45	53	54	49	33	20	15	13	21
CFSM	1.95	1.28	3.15	1.94	2.51	2.54	2.77	1.96	1.11	.65	3.22	.89
IN.	2.24	1.43	3.63	2.24	2.62	2.93	3.09	2.26	1.24	.75	3.72	.99

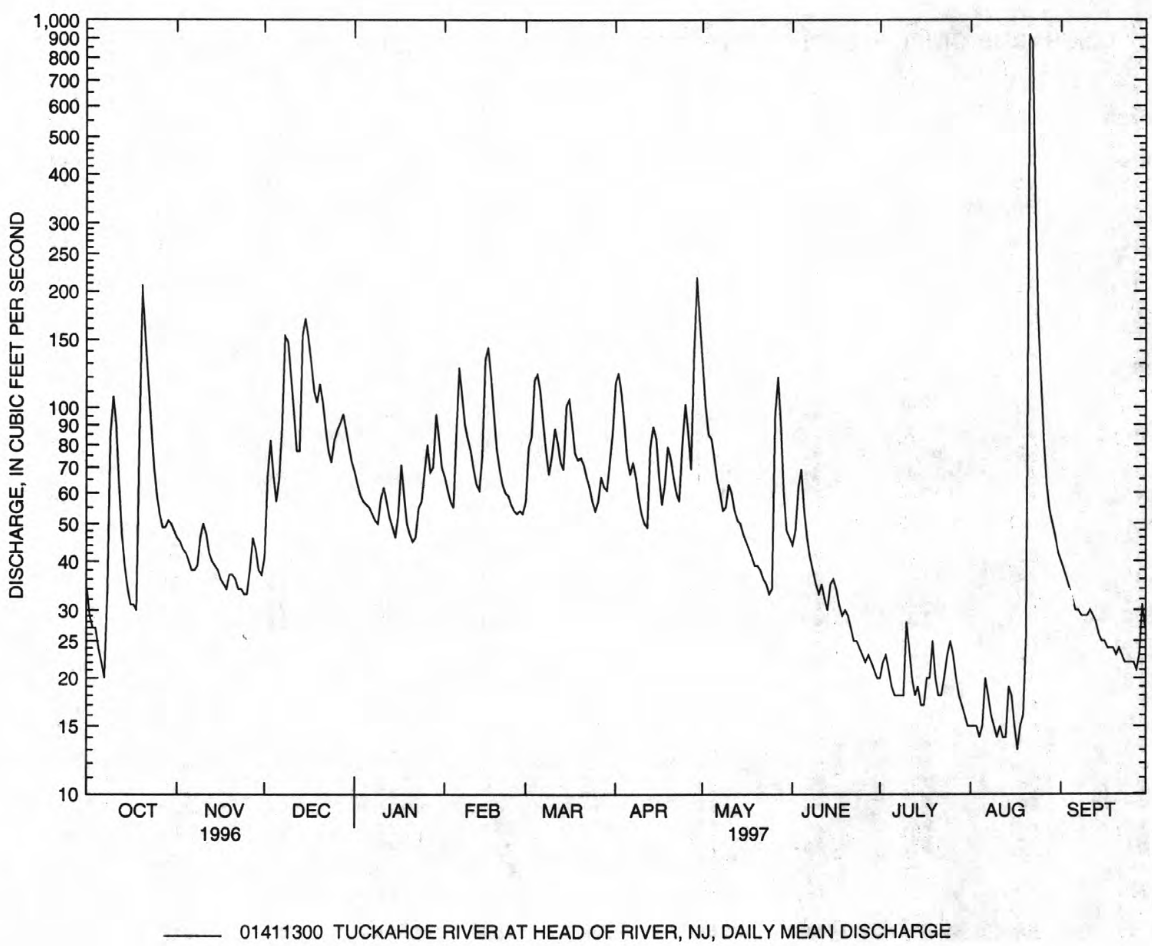
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	27.3	34.2	43.3	52.1	54.2	67.3	69.0	54.4	38.4	28.1	28.4	23.1
MAX	59.9	81.4	97.0	101	101	150	174	111	83.7	55.8	99.3	64.7
(WY)	1997	1973	1997	1978	1973	1994	1983	1983	1984	1996	1997	1989
MIN	15.1	16.8	19.4	16.0	24.4	26.4	21.3	20.0	14.8	12.7	10.6	7.04
(WY)	1978	1992	1981	1981	1995	1995	1985	1977	1977	1988	1988	1980

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1970 - 1997	
ANNUAL TOTAL	21339		22469			
ANNUAL MEAN	58.3		61.6		43.2	
HIGHEST ANNUAL MEAN					64.3	1984
LOWEST ANNUAL MEAN					21.7	1995
HIGHEST DAILY MEAN	236	Jul 14	920	Aug 21	920	Aug 21 1997
LOWEST DAILY MEAN	18	Sep 5	13	Aug 17	1.3	Sep 3 1980
ANNUAL SEVEN-DAY MINIMUM	18	Sep 5	15	Jul 30	1.9	Sep 9 1980
INSTANTANEOUS PEAK FLOW			1340	Aug 21	1340	Aug 21 1997
INSTANTANEOUS PEAK STAGE			9.09	Aug 22	9.09	Aug 22 1997
INSTANTANEOUS LOW FLOW			12	Aug 18	---	
ANNUAL RUNOFF (CFSM)	1.89		2.00		1.40	
ANNUAL RUNOFF (INCHES)	25.77		27.14		19.04	
10 PERCENT EXCEEDS	104		103		82	
50 PERCENT EXCEEDS	47		50		33	
90 PERCENT EXCEEDS	26		20		15	

e Estimated.



01411456 LITTLE EASE RUN NEAR CLAYTON, NJ

LOCATION.--Lat 39°39'32", long 75°04'04", Gloucester County, Hydrologic Unit 02040206, on right bank 30 ft downstream from bridge on Academy Road (County Route 610), 0.9 mi west of Fries Mill, 1.3 mi east of Clayton, and 1.4 mi downstream from Beaverdam Branch.

DRAINAGE AREA.--9.77 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1966, 1976-84, 1987. February 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.94 ft above sea level.

REMARKS.--Records poor. Occasional regulation from unknown sources. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	1330	50	3.48	Dec. 15	0230	*109	*4.14
Dec. 8	0530	91	4.01	Apr. 1	1145	65	3.68

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

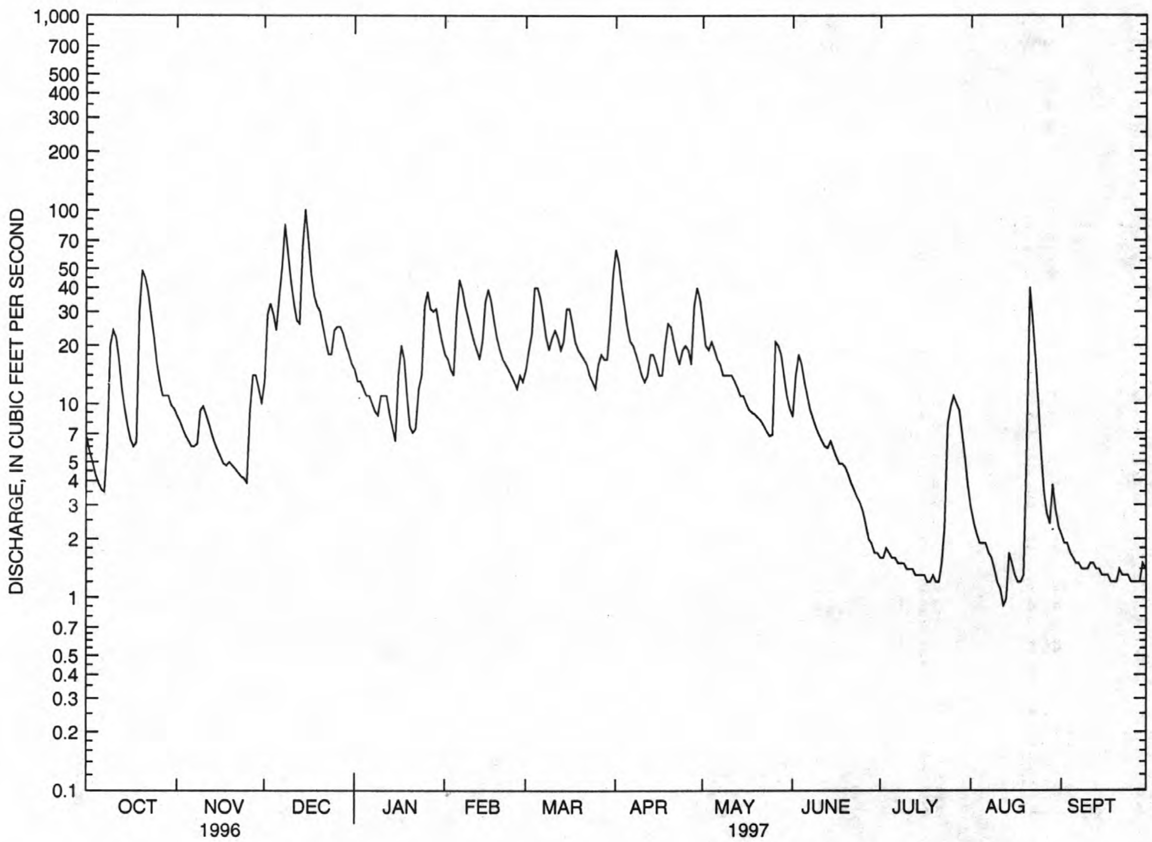
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	8.7	13	15	18	15	63	27	8.6	1.6	2.9	2.1
2	5.6	8.1	29	13	17	19	54	20	14	1.6	2.4	1.9
3	5.0	7.4	33	13	15	23	40	19	18	1.8	2.1	1.9
4	4.3	6.8	29	12	14	40	32	21	16	1.7	1.9	1.7
5	3.9	6.4	24	11	29	40	25	19	13	1.6	1.9	1.6
6	3.6	6.0	36	11	44	35	21	17	11	1.6	1.9	1.5
7	3.5	6.0	51	10	39	28	20	16	9.3	1.5	1.7	1.5
8	6.2	6.2	85	9.1	32	22	18	14	8.4	1.5	1.6	1.4
9	20	9.2	59	8.7	28	19	16	14	7.5	1.5	1.4	1.4
10	24	9.7	43	11	24	22	14	14	6.9	1.4	1.2	1.4
11	22	8.7	33	11	21	24	13	14	6.4	1.4	1.1	1.5
12	17	7.8	27	11	19	22	14	13	6.0	1.4	.91	1.5
13	12	6.9	26	8.9	17	19	18	12	5.9	1.3	.98	1.4
14	9.4	6.2	64	7.5	21	21	18	11	6.4	1.3	1.7	1.4
15	7.6	5.7	101	6.4	34	31	16	11	5.8	1.3	1.5	1.3
16	6.5	5.3	70	14	39	31	14	10	5.3	1.3	1.3	1.3
17	6.0	4.9	47	20	34	26	14	9.3	4.9	1.2	1.2	1.3
18	6.3	4.8	36	17	27	21	20	9.0	4.9	1.2	1.2	1.2
19	30	5.0	32	11	22	19	26	8.8	4.7	1.3	1.3	1.2
20	49	4.8	30	7.6	19	18	25	8.5	4.3	1.2	5.1	1.2
21	45	4.6	25	7.1	17	17	21	8.2	3.9	1.2	40	1.4
22	38	4.4	21	7.4	16	16	18	7.7	3.6	1.5	27	1.3
23	29	4.2	18	12	15	14	16	7.2	3.3	2.3	17	1.3
24	22	4.1	18	14	14	13	19	6.8	3.1	7.8	10	1.3
25	16	3.9	24	32	13	12	20	6.9	2.8	9.6	5.6	1.2
26	13	9.1	25	38	12	16	19	21	2.4	11	3.5	1.2
27	11	14	25	31	14	18	16	20	2.0	10	2.7	1.2
28	11	14	23	30	13	17	32	18	1.9	9.2	2.4	1.2
29	11	12	20	31	---	17	40	14	1.7	6.9	3.8	1.5
30	9.8	10	18	25	---	26	35	11	1.7	5.2	2.8	1.4
31	9.4	---	16	21	---	46	---	9.4	---	3.7	2.3	---
TOTAL	463.8	214.9	1101	476.7	627	707	717	417.8	193.7	97.1	152.39	42.7
MEAN	15.0	7.16	35.5	15.4	22.4	22.8	23.9	13.5	6.46	3.13	4.92	1.42
MAX	49	14	101	38	44	46	63	27	18	11	40	2.1
MIN	3.5	3.9	13	6.4	12	12	13	6.8	1.7	1.2	.91	1.2
CFSM	1.53	.73	3.64	1.57	2.29	2.33	2.45	1.38	.66	.32	.50	.15
IN.	1.77	.82	4.19	1.82	2.39	2.69	2.73	1.59	.74	.37	.58	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.66	7.87	13.6	15.6	14.4	20.0	17.8	12.9	6.69	5.66	5.87	4.46
MAX	19.7	15.0	35.5	26.5	22.4	38.7	26.2	29.3	15.4	19.0	15.2	20.4
(WY)	1990	1990	1997	1991	1997	1994	1996	1989	1989	1989	1989	1989
MIN	1.93	4.22	6.86	6.98	6.37	9.91	5.65	4.54	2.14	1.68	1.12	1.25
(WY)	1989	1992	1995	1992	1992	1992	1992	1992	1995	1995	1995	1995

01411456 LITTLE EASE RUN NEAR CLAYTON, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	6045.3		5211.09			
ANNUAL MEAN	16.5		14.3		11.2	
HIGHEST ANNUAL MEAN					14.3	1997
LOWEST ANNUAL MEAN					5.70	1995
HIGHEST DAILY MEAN	105	Jan 20	101	Dec 15	111	Sep 20 1989
LOWEST DAILY MEAN	2.2	Sep 5	.91	Aug 12	.41	Aug 16 1988
ANNUAL SEVEN-DAY MINIMUM	2.3	Sep 4	1.2	Aug 10	.50	Aug 10 1988
INSTANTANEOUS PEAK FLOW			109	Dec 15	124	Sep 20 1989
INSTANTANEOUS PEAK STAGE			4.14	Dec 15	4.27	Sep 20 1989
INSTANTANEOUS LOW FLOW			.85	Aug 12	.35	Aug 15 1988
ANNUAL RUNOFF (CFSM)	1.69		1.46		1.14	
ANNUAL RUNOFF (INCHES)	23.02		19.84		15.55	
10 PERCENT EXCEEDS	33		31		24	
50 PERCENT EXCEEDS	13		11		7.6	
90 PERCENT EXCEEDS	3.9		1.4		1.6	



—— 01411456 LITTLE EASE RN NEAR CLAYTON, NJ, DAILY MEAN DISCHARGE

01411500 MAURICE RIVER AT NORMA, NJ

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

DRAINAGE AREA.--112 mi^2.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Dec. 27, 1937. Datum of gage is 46.94 ft above sea level.

REMARKS.--Records fair. Occasional regulation by ponds above station. Several measurments of water temperature, other than those published, were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 380 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 9	1230	478	3.62	Apr. 4	0945	418	3.50
Dec. 17	0700	*660	*3.94	Apr. 30	0345	391	3.45
Mar. 6	0815	433	3.53	Aug. 23	0645	494	3.65

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	157	157	261	289	221	321	364	169	82	104	104
2	130	152	203	250	273	256	346	340	179	82	103	99
3	124	146	236	243	257	276	373	316	206	83	99	104
4	115	142	234	237	246	355	401	305	229	84	98	106
5	107	139	230	232	282	378	357	285	222	83	98	103
6	103	140	268	224	308	418	320	267	204	82	97	95
7	102	135	323	217	316	380	301	257	178	82	95	92
8	126	135	413	211	333	342	281	231	163	80	93	89
9	174	148	474	207	341	310	257	226	157	78	91	86
10	191	150	470	217	321	309	245	231	150	80	91	85
11	204	145	445	219	296	304	239	222	144	75	90	88
12	204	138	382	215	276	267	231	214	138	75	88	91
13	194	135	342	209	261	277	222	207	132	76	87	86
14	179	132	376	203	267	285	226	204	132	71	92	85
15	163	132	412	206	306	315	237	190	129	70	91	82
16	146	130	537	228	320	314	236	184	126	68	91	81
17	134	130	635	248	328	311	230	182	123	68	92	79
18	126	130	517	265	330	304	251	180	121	67	91	76
19	185	130	471	252	317	297	254	176	118	72	89	71
20	250	130	433	223	298	284	256	173	115	68	111	61
21	269	130	376	214	278	271	262	168	113	68	331	64
22	307	130	334	209	264	261	258	159	110	65	449	68
23	296	128	235	215	252	251	255	156	103	59	472	71
24	271	126	267	208	243	241	264	154	100	94	318	71
25	242	124	292	247	238	233	266	148	99	149	241	71
26	214	133	291	271	231	240	256	169	95	208	183	70
27	180	143	298	278	227	252	248	178	91	228	147	69
28	174	148	299	311	211	250	314	191	89	180	129	69
29	177	149	293	332	---	248	357	197	79	141	113	77
30	169	146	284	315	---	259	381	190	80	130	113	77
31	163	---	272	300	---	287	---	179	---	121	110	---
TOTAL	5553	4133	10799	7467	7909	8996	8445	6643	4094	2969	4497	2470
MEAN	179	138	348	241	282	290	282	214	136	95.8	145	82.3
MAX	307	157	635	332	341	418	401	364	229	228	472	106
MIN	102	124	157	203	211	221	222	148	79	59	87	61
CFSM	1.60	1.23	3.11	2.15	2.52	2.59	2.51	1.91	1.22	.86	1.30	.74
IN.	1.84	1.37	3.59	2.48	2.63	2.99	2.80	2.21	1.36	.99	1.49	.82

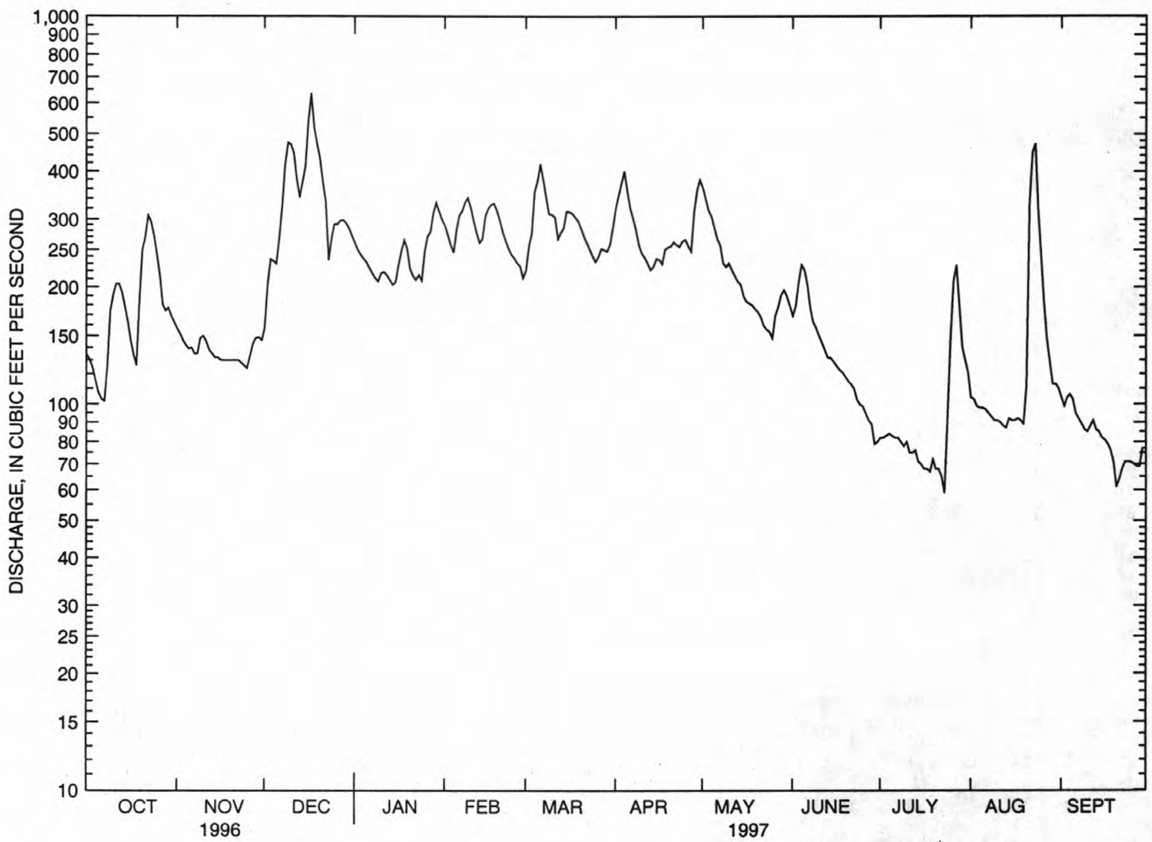
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	113	140	168	191	201	230	227	190	146	124	126	121
MAX	266	330	385	380	418	427	437	387	291	333	327	591
(WY)	1990	1973	1973	1936	1939	1979	1984	1958	1979	1975	1958	1940
MIN	48.6	46.7	57.1	64.7	95.7	97.2	90.9	79.5	57.7	35.6	34.6	40.6
(WY)	1966	1966	1966	1966	1981	1981	1966	1977	1966	1966	1966	1965

01411500 MAURICE RIVER AT NORMA, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1933 - 1997	
ANNUAL TOTAL	72228		73975			
ANNUAL MEAN	197		203		165	
HIGHEST ANNUAL MEAN					253	1973
LOWEST ANNUAL MEAN					67.4	1966
HIGHEST DAILY MEAN	635	Dec 17	635	Dec 17	5260	Sep 2 1940
LOWEST DAILY MEAN	83	Sep 3	59	Jul 23	23	Sep 8 1964
ANNUAL SEVEN-DAY MINIMUM	86	Sep 3	67	Jul 17	23	Sep 7 1966
INSTANTANEOUS PEAK FLOW			660	Dec 17	7360a	Sep 2 1940
INSTANTANEOUS PEAK STAGE			3.94	Dec 17	8.72	Sep 2 1940
INSTANTANEOUS LOW FLOW			56	Jul 22	23	Sep 8 1964
ANNUAL RUNOFF (CFSM)	1.76		1.81		1.47	
ANNUAL RUNOFF (INCHES)	23.99		24.57		19.97	
10 PERCENT EXCEEDS	293		325		283	
50 PERCENT EXCEEDS	183		203		144	
90 PERCENT EXCEEDS	118		82		69	

a From rating curve extended above 3,000 ft^3/s, highest since 1867.



——— 01411500 MAURICE RIVER AT NORMA, NJ, DAILY MEAN DISCHARGE

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953, 1962-63, 1965 to September 1997 (discontinued).

PERIOD OF DAILY RECORD:--
SPECIFIC CONDUCTANCE: January 1980 to November 1986, November 1992 to September 1994.
pH: November 1992 to April 1994.
WATER TEMPERATURE: October 1966 to January 1968 (once daily), January 1980 to November 1986, November 1992 to September 1994.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to January 1968.

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)
NOV 1996										
07...	1035	135	85	6.5	12.0	765	10.6	98	E1.3	7
JAN 1997										
27...	1145	278	85	6.2	2.0	775	13.0	92	E1.0	2
MAR										
18...	1030	304	83	6.2	7.5	768	10.6	88	<1.1	5
JUN										
04...	0815	227	77	6.5	14.0	759	7.7	75	E1.7	240
JUL										
31...	1130	124	86	6.5	22.5	767	7.4	85	2.4	70

DATE	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
NOV 1996										
07...	<10	20	4.2	2.3	5.3	2.0	7.2	6.8	10	<.1
JAN 1997										
27...	<10	19	4.0	2.2	6.2	1.7	3.7	9.4	11	<.1
MAR										
18...	10	19	4.1	2.1	5.8	1.8	5.4	9.9	10	<.1
JUN										
04...	320	18	3.7	2.1	5.6	1.7	7.5	6.7	9.6	<.1
JUL										
31...	50	20	4.1	2.3	5.5	1.9	6.8	10	10	<.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV 1996									
07...	7.9	64	49	--	E.005	1.5	<.03	<.03	.4
JAN 1997									
27...	5.0	58	49	<1	.004	1.6	.05	.04	.3
MAR									
18...	2.4	55	46	5	.006	1.5	<.03	<.03	.3
JUN									
04...	4.7	59	43	<1	.007	.99	.05	<.03	.6
JUL									
31...	5.8	70	49	9	.004	.98	.04	.06	.5

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 1996									
07...	.30	1.9	1.8	<.01	<.01	8.2	.3	5	1.8
JAN 1997									
27...	.24	1.9	1.8	.01	<.01	4.5	.2	--	--
MAR									
18...	.31	1.8	1.8	.02	.02	6.3	.2	--	--
JUN									
04...	.33	1.6	1.3	<.01	<.01	8.2	.7	--	--
JUL									
31...	.34	1.5	1.3	.36	<.01	7.1	.4	--	--

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
07...	1035	26	12	<10	40	<1	<1.0	<1
JUN 1997								
04...	0815	20	13	<10	40	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
07...	900	<1	30	<.1	2	<1	<10
JUN 1997							
04...	1100	2	40	<.1	3	<1	10

01412800 COHANSEY RIVER AT SEELEY, NJ

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

DRAINAGE AREA.--28.0 mi^2.

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

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
06...	1105	E30	224	7.0	11.5	769	10.3	94	<1.0	40	120	60
JAN 1997												
23...	1200	E50	218	6.8	5.5	759	11.8	94	E1.3	39	160	64
MAR												
18...	1245	E60	200	6.9	9.0	769	12.0	103	E1.1	7	10	60
JUN												
04...	1155	E35	198	7.1	15.0	760	9.6	95	<1.0	330	<100	61
AUG												
06...	0925	E20	216	6.9	19.5	762	7.0	76	<1.4	<20	120	58

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
06...	12	7.4	11	5.8	20	22	24	<.1	9.6	120	126	<1
JAN 1997												
23...	13	7.7	9.1	4.6	13	25	21	<.1	8.4	126	122	8
MAR												
18...	12	7.2	8.6	4.3	14	24	19	<.1	6.3	117	112	7
JUN												
04...	12	7.5	9.0	4.1	20	22	21	.1	6.0	129	112	1
AUG												
06...	11	7.2	11	5.4	17	21	24	<.1	7.8	137	119	4

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
06...	.019	5.1	.06	<.03	.2	.18	5.3	5.3	.02	<.01	2.8	.3
JAN 1997												
23...	.020	5.7	.04	<.03	.4	.33	6.1	6.0	.02	<.01	2.2	.5
MAR												
18...	.014	5.1	<.03	<.03	.3	.25	5.4	5.3	.01	<.01	3.0	.3
JUN												
04...	.026	4.3	<.03	.04	.4	.32	4.6	4.6	.03	<.01	3.3	.5
AUG												
06...	.022	4.9	.05	.07	.3	.24	5.2	5.1	.08	.04	2.2	.3

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
06...	1105	<10	<1	<10	20	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
06...	420	<1	60	<.1	1	<1	<10

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.

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

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. WDR NJ-97-1: 1996 (Note: WDR NY-96-1 daily mean values are correct).

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft above sea level. October 1904 to August 13, 1928, non-recording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Service prior to June 20, 1914.

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 64,600 ft^3/s, Dec. 2, gage height, 12.70 ft; minimum, 741 ft^3/s, Sept. 24, gage height, 1.62 ft; minimum daily, 1,210 ft^3/s, Sept. 6.

REVISIONS.--Revised figures of discharges for the water year 1996, superseding those published in WDR NJ-96-1 only are given below (Note: WDR NY-96-1 daily mean values are correct).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	3690	4830	1360	12100	9420	5190	21700	2150	2910	4170	1490
2	1330	3820	4270	1950	10600	8040	6150	23000	1880	3080	4400	1460
3	1430	4400	3720	2680	8980	6850	6370	18400	1850	3100	3530	1720
4	1440	4710	3970	2120	7510	6340	5360	15700	2100	3000	2830	1830
5	1890	3860	4710	2320	6720	5720	4800	14000	2010	2710	2810	1760
6	2080	3510	4660	2530	6270	5630	4040	13100	1840	3040	3570	2750
7	2060	3440	4450	2220	5710	6510	3950	13300	2090	2550	3080	2930
8	1800	3220	4190	e2300	5400	6120	4830	11900	1890	2340	2890	2530
9	1210	3590	3200	e2500	5610	5040	5250	10500	2280	2990	2960	2570
10	970	2940	2770	e2600	5520	4020	4750	10600	3530	2780	3150	2460
11	781	2830	e3000	e2400	4980	4820	4470	11400	6920	2160	1860	1720
12	1030	11100	e3400	e2500	5360	4200	3850	21800	7100	2300	1840	1610
13	1160	15700	e3100	e2300	4800	4840	5210	24000	8340	4190	2810	1680
14	1300	11800	3040	e1700	3850	5390	13000	20200	8820	10800	2390	1640
15	1820	15600	3050	e2000	3830	6540	15300	16200	6950	12300	1620	1720
16	3090	17600	3280	e3200	3860	8610	25800	13500	5120	14700	1920	1640
17	2100	13300	2590	e3000	3570	7210	33500	11700	4170	13700	1820	1970
18	1470	10600	2690	2930	2720	7180	24200	9680	4360	10800	1780	3770
19	1180	9040	3220	21600	2880	7630	18500	8390	4230	9310	1710	5970
20	1060	8320	2950	95200	3430	10300	14700	8100	4800	8140	1730	3640
21	3860	7830	3160	29200	8150	13400	12000	7810	4350	6900	1300	2620
22	29200	7340	2770	17700	13500	11600	10600	7340	3520	5740	1350	2100
23	14500	5360	1540	13100	14700	9230	10000	6640	2770	5670	2330	2470
24	7960	4820	1680	11200	15400	7580	10400	5840	2850	4840	1870	3370
25	5400	4220	1990	16700	16900	7040	10600	4770	3150	4120	2220	2900
26	4080	3810	2330	14000	14700	7220	9960	3440	2950	5340	2140	2900
27	3480	3920	3280	21800	12400	7480	8560	3030	2680	7040	2150	2740
28	4130	3930	2790	50900	11000	6920	7510	2940	2580	5220	1710	2490
29	7840	4340	2450	31500	11200	6580	7380	2830	2320	4510	2230	2670
30	5860	5900	2220	21900	---	5690	14100	2740	2030	4660	2220	3740
31	4400	---	1330	15000	---	5100	---	2270	---	4100	1570	---
TOTAL	121291	204540	96630	402410	231650	218250	310330	346820	111630	175040	73960	74860
MEAN	3913	6818	3117	12980	7988	7040	10340	11190	3721	5646	2386	2495
MAX	29200	17600	4830	95200	16900	13400	33500	24000	8820	14700	4400	5970
MIN	781	2830	1330	1360	2720	4020	3850	2270	1840	2160	1300	1460

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996, BY WATER YEAR (WY)

MEAN	3019	4094	4987	4770	5175	7943	9539	6109	3780	2683	2264	2437
MAX	10440	10310	12320	12980	13730	17520	23650	12670	12650	6680	4513	7928
(WY)	1978	1973	1974	1996	1976	1977	1993	1984	1972	1973	1969	1987
MIN	1001	884	1866	1216	1601	2583	2954	1890	993	699	963	1144
(WY)	1965	1965	1965	1981	1980	1981	1985	1995	1965	1965	1965	1965

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1964 - 1996	
ANNUAL TOTAL	1339551		2367411			
ANNUAL MEAN	3670		6468		4728	
HIGHEST ANNUAL MEAN					7216	1973
LOWEST ANNUAL MEAN					2028	1965
HIGHEST DAILY MEAN	29200	Oct 22	95200	Jan 20	95200	Jan 20 1996
LOWEST DAILY MEAN	781	Oct 11	781	Oct 11	385	Jul 6 1965
ANNUAL SEVEN-DAY MINIMUM	1180	Oct 8	1180	Oct 8	432	Jul 1 1965
10 PERCENT EXCEEDS	7690		14000		10100	
50 PERCENT EXCEEDS	2540		4060		2840	
90 PERCENT EXCEEDS	1470		1790		1490	

e Estimated.

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3720	4260	7750	8840	2960	12000	17300	4530	2600	1550	1890	1680
2	2880	3970	39300	8320	2280	10300	15400	4300	2530	1500	1860	1760
3	2790	3390	46500	8170	2420	13300	15300	4340	3410	1770	1860	1590
4	2550	3380	29000	7780	3350	12400	16600	8580	3490	1870	1790	1330
5	2490	2790	20800	7730	3180	10600	16800	9830	2950	1470	1730	1350
6	1580	3000	17600	8170	3870	13500	16500	8220	2390	1560	1860	1210
7	1840	2840	16700	7930	3610	15400	16000	8090	2060	1520	1870	1360
8	2520	2860	15900	6980	3070	12200	14800	7730	1960	1760	1620	1390
9	3390	39100	14200	5710	2860	10100	12900	6920	1780	1970	1650	1550
10	3440	40400	11900	5750	2670	9290	11300	6820	2110	1990	1580	1550
11	3680	28000	10500	6250	2430	9220	9400	7120	2080	1780	1370	2130
12	3010	20900	11500	5930	2350	8340	7960	7090	1980	1680	1420	3810
13	2640	16100	15300	5330	2550	7330	7980	6610	2050	1820	1540	3430
14	2380	13200	24100	5440	2290	6610	8340	6060	1530	2110	1930	2470
15	2710	11200	23400	4980	1880	7170	7510	5580	1720	1830	1960	1700
16	2090	8980	19300	4220	1900	6650	6170	4890	1590	1750	1900	1990
17	2010	7040	17700	e4500	2170	5580	5650	4500	1600	1630	1930	1860
18	2040	6470	19700	e4200	2300	5290	5270	4230	1640	1790	2110	1810
19	2570	6850	20900	4100	3030	5040	5170	4390	1690	1520	1840	1730
20	9190	8360	19100	3960	4060	4980	4700	7220	1700	1760	1490	1510
21	13200	7900	16000	4160	4870	4820	4780	9600	1830	1590	1570	1680
22	11300	7090	13900	4220	6960	4370	4660	8110	1870	1590	1510	1450
23	9020	6170	12600	4140	15600	4630	4090	7130	1660	1940	1230	1590
24	8870	5680	11500	5030	13800	4150	3890	6060	1760	1710	1400	1430
25	8400	5370	13900	3750	11400	4190	3910	5490	1680	1470	1340	1430
26	6230	6640	14000	3210	9440	4980	3460	5360	2120	1480	1420	1380
27	4830	9960	11500	3450	8870	6790	3170	4900	1750	1650	1490	1490
28	4650	9290	10700	3610	12500	6470	3860	4220	1970	1840	1500	1540
29	4570	7430	9150	3720	---	7310	5650	3440	1910	1670	2240	1420
30	4630	7750	10600	3930	---	9290	5080	3090	1600	1590	1810	1640
31	4490	---	10800	3450	---	13100	---	2700	---	1550	1560	---
TOTAL	139710	306370	535800	166960	138670	255400	263600	187150	61010	52710	52270	52260
MEAN	4507	10210	17280	5386	4953	8239	8787	6037	2034	1700	1686	1742
MAX	13200	40400	46500	8840	15600	15400	17300	9830	3490	2110	2240	3810
MIN	1580	2790	7750	3210	1880	4150	3170	2700	1530	1470	1230	1210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3063	4274	5348	4788	5169	7951	9517	6107	3728	2654	2247	2417
MAX	10440	10310	17280	12980	13730	17520	23650	12670	12650	6680	4513	7928
(WY)	1978	1973	1997	1996	1976	1977	1993	1984	1972	1973	1969	1987
MIN	1001	884	1866	1216	1601	2583	2954	1890	993	699	963	1144
(WY)	1965	1965	1965	1981	1980	1981	1985	1995	1965	1965	1965	1965

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	2926830		2211910			
ANNUAL MEAN	7997		6060		4767	
HIGHEST ANNUAL MEAN					7216	1973
LOWEST ANNUAL MEAN					2028	1965
HIGHEST DAILY MEAN	95200	Jan 20	46500	Dec 3	95200	Jan 20 1996
LOWEST DAILY MEAN	1300	Aug 21	1210	Sep 6	385	Jul 6 1965
ANNUAL SEVEN-DAY MINIMUM	1660	Aug 16	1390	Sep 4	432	Jul 1 1965
10 PERCENT EXCEEDS	16700		13600		10300	
50 PERCENT EXCEEDS	5200		3970		2860	
90 PERCENT EXCEEDS	2010		1560		1500	

e Estimated.

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'08", Orange County, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi downstream from Basher Kill, 0.8 mi southeast of Godeffroy, 1.7 mi south of Cuddebackville, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--307 mi^2.

PERIOD OF RECORD.--July 1937 to current year. Gage heights and discharge measurements, August to October 1903 and August 1909 to April 1914, and twice-daily figures of discharge for January 1911 to December 1912 (which do not represent daily mean discharges because of diurnal fluctuation) are published in WSP 97, 261, 321, 351, and 381. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.--WSP 1502: 1951(M). WDR NY-82-1: Drainage area. WDR NY-87-1: 1986.

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

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 92.5 mi^2 of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft^3/s, Aug. 19, 1955, gage height, 12.49 ft, from rating curve extended above 11,000 ft^3/s, on basis of slope-area measurement of peak flow; minimum discharge observed, no flow July 21, 22, 28, 1911, result of regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,730 ft^3/s, Nov. 9, gage height, 7.65 ft; minimum, 73 ft^3/s, Aug. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	525	408	710	527	297	612	e1600	424	273	201	84	156
2	465	380	e1400	511	294	649	1390	416	269	171	88	199
3	428	350	e1300	521	293	780	1450	490	335	162	113	190
4	361	320	e1200	543	289	632	1650	1020	297	157	115	164
5	326	304	e1100	524	e340	569	1580	657	268	152	115	140
6	312	294	1130	529	e450	1110	1390	602	252	151	89	142
7	301	287	1250	486	e390	973	1220	647	239	146	83	149
8	313	298	1350	432	e350	775	1320	556	230	143	80	142
9	759	3690	1350	392	e330	674	1130	495	221	162	79	143
10	586	2060	1230	e400	e300	636	865	616	211	237	78	146
11	543	1400	1000	e400	e290	647	675	534	224	166	92	253
12	443	1100	1110	e390	e280	579	595	463	221	135	95	752
13	413	907	1670	e390	e270	511	762	437	202	125	81	383
14	406	796	1930	e380	e270	497	648	417	198	121	95	252
15	399	709	1850	e360	302	586	552	391	189	139	82	215
16	372	628	1570	354	e280	552	484	374	182	154	87	186
17	363	578	1540	e340	e270	471	457	359	179	163	121	174
18	348	548	1430	e330	e270	472	470	358	191	167	160	163
19	532	569	1340	e320	290	460	467	388	200	143	130	150
20	2970	562	1230	e310	390	451	437	615	191	98	96	141
21	1790	508	933	e300	405	442	403	489	202	93	202	136
22	1380	477	802	e290	856	496	385	410	215	101	230	124
23	1110	449	732	311	e920	520	370	378	204	100	153	118
24	950	428	735	298	e740	443	357	352	185	99	141	110
25	768	415	1050	325	e600	421	344	335	178	99	127	103
26	651	576	793	342	e540	797	325	348	201	104	121	98
27	565	637	708	304	585	776	308	321	206	125	134	92
28	515	516	658	e300	702	737	534	300	188	136	171	99
29	490	481	637	e300	---	738	629	288	199	126	205	133
30	443	462	659	e300	---	760	469	275	224	121	164	127
31	425	---	603	299	---	e1800	---	275	---	109	139	---
TOTAL	20252	21137	35000	11808	11593	20566	23266	14030	6574	4306	3750	5380
MEAN	653	705	1129	381	414	663	776	453	219	139	121	179
MAX	2970	3690	1930	543	920	1800	1650	1020	335	237	230	752
MIN	301	287	603	290	270	421	308	275	178	93	78	92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	304	386	450	367	411	683	849	540	364	234	225	216
MAX	2033	1094	1227	1053	981	1370	2080	1392	1722	652	1327	705
(WY)	1956	1956	1974	1979	1976	1977	1993	1989	1972	1972	1955	1960
MIN	94.9	86.3	119	72.6	118	297	248	180	111	54.2	76.0	71.1
(WY)	1985	1966	1981	1981	1980	1981	1985	1962	1957	1966	1968	1972

01437500 NEVERSINK RIVER AT GODEFFROY, NY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	243920		177662			
ANNUAL MEAN	666		487		419	
HIGHEST ANNUAL MEAN					704	1956
LOWEST ANNUAL MEAN					215	1965
HIGHEST DAILY MEAN	4370	May 1	3690	Nov 9	15900	Aug 19 1955
LOWEST DAILY MEAN	140	Aug 30	78	Aug 10	32	Aug 17 1965
ANNUAL SEVEN-DAY MINIMUM	150	Aug 27	84	Aug 7	38	Aug 11 1965
10 PERCENT EXCEEDS	1340		1100		878	
50 PERCENT EXCEEDS	486		372		270	
90 PERCENT EXCEEDS	190		125		107	

e Estimated.

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 mi^2.

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 estimated daily discharges and periods of shifting control, 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 (see Delaware River basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River basin, diversions). Several measurements of water temperature were made during the year. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4650	4950	8340	9800	e3700	12700	18800	5310	3060	1640	1980	1930
2	3810	4610	37900	9010	e2900	11000	17700	5070	2860	1640	2100	2110
3	3490	4010	50600	9000	e2800	13800	17400	5080	3770	1750	2150	2020
4	3150	4000	32000	8740	e3700	13000	18800	9340	4040	2020	1990	1590
5	3060	3300	23300	8610	e3700	11300	19300	10800	3500	1550	2010	1690
6	2100	3510	19700	8900	e3800	14100	18700	9190	2830	1550	2050	1430
7	2170	3350	18600	8780	e4600	16900	17900	9060	2490	1610	2110	1560
8	2970	3400	17900	7790	e4300	13300	16500	8680	2300	1780	1840	1670
9	4390	38900	15800	6500	3490	11100	14300	7800	2070	2030	1770	1790
10	4460	43700	13200	6420	3190	10200	12500	7750	2350	2220	1650	1850
11	4520	30200	11600	e6800	2890	10200	10600	7950	2250	2150	1460	2450
12	3840	22800	12400	e6600	2860	9370	9150	7900	2240	1870	1420	4790
13	3410	17400	16700	e5900	3130	8310	9240	7390	2200	2010	1670	4470
14	2870	14000	26400	e6000	2740	7550	9530	6790	1750	2270	2040	3140
15	3330	12000	26500	e5500	2520	8190	8610	6270	1800	2110	2190	1920
16	2680	10100	21700	e4800	2240	7790	7260	5610	1710	2050	2140	2380
17	2530	8060	19700	e5400	2580	6610	6640	5120	1710	1880	2370	2310
18	2500	7400	21800	e4800	2600	6190	6250	4850	1750	1980	2550	2080
19	3350	7520	23100	e4500	3500	5960	6170	4930	1820	1790	2150	1930
20	11800	9030	21300	e4400	4550	5810	5650	7460	1840	1960	1660	1780
21	14600	8590	17600	e4500	5540	5680	5620	10200	1890	1780	1870	1760
22	12800	7710	15000	e4600	7800	5330	5460	8800	2060	1800	1930	1580
23	10600	6960	13400	e4500	15000	5510	4960	7840	1660	2090	1500	1840
24	10100	6340	12300	e5300	14500	5020	4570	6700	1940	1970	1560	1580
25	9480	5920	15000	e4700	12100	4790	4610	6130	1760	1730	1520	1510
26	7470	7170	15100	e3700	10300	5990	4170	5970	2280	1580	1620	1540
27	5910	10500	12400	e3800	9710	7880	3840	5510	1880	1990	1620	1530
28	5590	9980	11500	e4200	12700	7580	4450	4790	2010	2010	1760	1540
29	5430	8270	10300	e4200	---	8230	6610	4030	2060	1970	2390	1610
30	5450	8260	11100	e4400	---	10100	6040	3540	1740	1850	2410	1730
31	5250	---	11500	e4000	---	13700	---	3180	---	1760	1910	---
TOTAL	167760	331940	583740	186150	153440	283190	301330	209040	67620	58390	59390	61110
MEAN	5412	11060	18830	6005	5480	9135	10040	6743	2254	1884	1916	2037
MAX	14600	43700	50600	9800	15000	16900	19300	10800	4040	2270	2550	4790
MIN	2100	3300	8340	3700	2240	4790	3840	3180	1660	1550	1420	1430

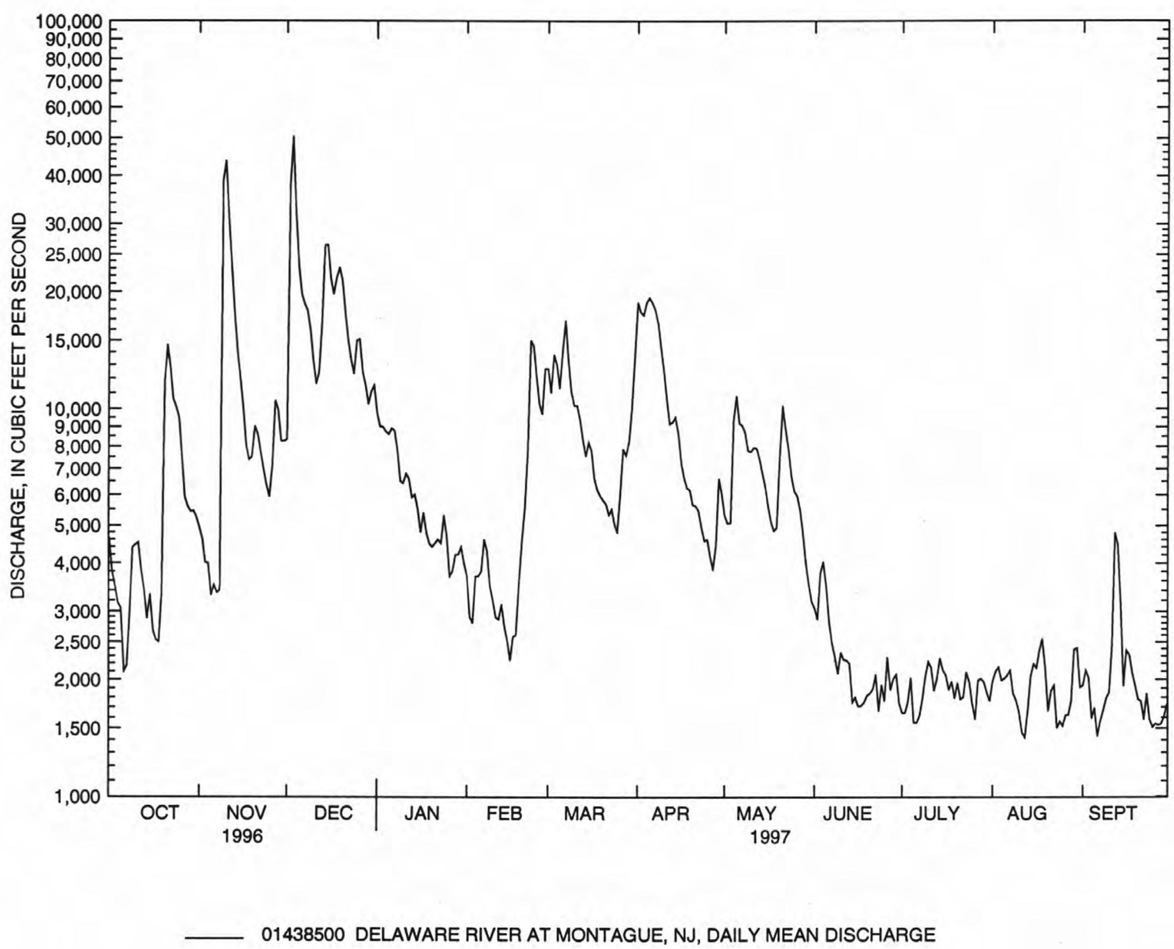
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3363	5214	6306	5846	5977	9951	12000	7406	4318	3035	2606	2650
MAX	15690	11760	18830	15600	15120	24480	31560	16090	15200	11220	14230	9167
(WY)	1956	1952	1997	1996	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

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	3336440		2463100			
ANNUAL MEAN	9116		6748		5717	
HIGHEST ANNUAL MEAN					8621	1952
LOWEST ANNUAL MEAN					2309	1965
HIGHEST DAILY MEAN	118000	Jan 20	50600	Dec 3	187000	Aug 19 1955
LOWEST DAILY MEAN	1500	Aug 22	1420	Aug 12	412	Aug 23 1954
ANNUAL SEVEN-DAY MINIMUM	1960	Aug 30	1580	Sep 24	565	Jul 1 1965
INSTANTANEOUS PEAK FLOW			67100	Dec 2	250000a	Aug 19 1955
INSTANTANEOUS PEAK STAGE			18.15	Dec 2	35.15	Aug 19 1955
INSTANTANEOUS LOW FLOW			870	Sep 27	382	Aug 24 1954
10 PERCENT EXCEEDS	18500		14500		12100	
50 PERCENT EXCEEDS	6070		4600		3440	
90 PERCENT EXCEEDS	2390		1750		1590	

a From rating curve extended above 90,000 ft^3/s on basis of flood-routing study.
e Estimated.



01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER-QUALITY RECORDS

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
19...	1130	7000	69	7.3	5.5	745	11.5	93	E1.8	20	<10	20
JAN 1997												
27...	1100	E3800	96	7.3	0.5	766	14.2	98	<1.1	<20	<10	25
APR												
14...	1100	9160	66	7.7	7.5	751	11.6	98	<1.0	<20	<10	18
JUN												
09...	1200	1990	89	7.5	20.0	755	7.8	87	<1.5	50	10	23
AUG												
05...	1145	2160	87	7.6	23.0	746	8.8	105	<1.5	<20	<10	24

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
19...	6.0	1.3	4.6	.8	13	8.0	7.1	<.1	3.2	44	40	3
JAN 1997												
27...	7.7	1.5	7.7	.8	14	9.3	12	<.1	3.9	56	53	<1
APR												
14...	5.4	1.2	4.9	.7	11	7.9	8.4	<.1	2.4	38	39	<1
JUN												
09...	7.0	1.4	6.3	.8	15	7.3	11	<.1	1.5	50	45	<1
AUG												
05...	7.2	1.5	5.4	.9	17	7.8	9.0	<.1	1.3	51	44	4

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
19...	<.003	.35	<.03	<.03	.2	.22	.55	.57	.02	.03	2.8	.2
JAN 1997												
27...	.004	.39	<.03	<.03	.2	.14	.55	.53	.02	<.01	2.1	.2
APR												
14...	<.003	.30	<.03	<.03	.1	.11	.42	.41	.02	<.01	1.9	.3
JUN												
09...	.003	.20	<.03	<.03	.1	.17	.32	.37	<.01	<.01	2.1	.2
AUG												
05...	.003	.20	<.03	<.03	.3	.16	.45	.36	<.01	<.01	2.1	.2

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
19...	1130	11	<1	<10	10	<1	<1.0	1
JUN 1997								
09...	1200	<10	<1	<10	<10	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
19...	140	<1	60	<.1	<1	<1	<10
JUN 1997							
09...	100	<1	40	<.1	<1	<1	<10

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ

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

DRAINAGE AREA.--64.0 mi^2.

WATER-DISCHARGE RECORDS

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

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

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

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0800	*1,810	*5.76	Dec. 2	1615	1,560	5.36
Nov. 9	1615	1,170	4.67	Dec. 14	2015	820	4.03

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	111	267	171	104	118	435	127	58	21	14	17
2	81	104	1200	163	109	122	344	138	58	22	13	16
3	77	96	768	166	113	136	393	142	87	22	12	14
4	63	92	466	175	119	135	447	206	99	21	12	13
5	58	89	363	162	240	129	432	161	74	22	12	14
6	53	84	435	156	257	201	328	143	62	21	12	13
7	49	85	490	142	188	197	274	144	56	19	11	12
8	58	103	549	129	162	161	226	127	52	18	11	11
9	220	842	442	122	142	146	195	124	49	18	10	11
10	174	567	347	123	127	144	175	129	46	33	9.7	11
11	140	330	303	120	117	162	161	117	43	31	9.3	60
12	109	259	376	102	113	141	155	105	40	23	8.8	184
13	94	225	514	115	105	125	235	99	38	20	9.6	75
14	86	199	760	105	106	141	187	102	37	18	14	47
15	75	177	694	100	118	292	158	91	35	16	13	35
16	71	157	492	e105	117	239	147	80	33	16	16	29
17	65	144	421	118	106	187	140	75	32	16	39	27
18	65	137	395	93	100	174	189	75	32	15	56	22
19	267	149	375	90	114	165	222	82	54	14	65	20
20	1490	142	335	e83	155	151	181	117	49	13	35	18
21	716	128	267	82	150	147	157	96	38	13	67	16
22	371	119	235	81	197	149	143	75	34	15	58	15
23	273	113	221	101	190	133	133	65	31	16	38	15
24	228	106	241	97	151	121	127	60	29	17	31	15
25	190	101	422	177	129	115	120	63	28	22	26	15
26	166	240	280	182	121	152	113	107	27	21	22	14
27	148	293	241	122	124	160	106	86	27	18	19	13
28	140	194	227	135	129	135	157	71	25	16	19	13
29	138	166	221	e160	---	124	177	65	24	14	19	15
30	127	154	236	113	---	123	134	61	22	13	18	15
31	120	---	202	106	---	275	---	60	---	12	16	---
TOTAL	6009	5706	12785	3896	3903	4900	6391	3193	1319	576	715.4	795
MEAN	194	190	412	126	139	158	213	103	44.0	18.6	23.1	26.5
MAX	1490	842	1200	182	257	292	447	206	99	33	67	184
MIN	49	84	202	81	100	115	106	60	22	12	8.8	11
CFSM	3.03	2.97	6.44	1.96	2.18	2.47	3.33	1.61	.69	.29	.36	.41
IN.	3.49	3.32	7.43	2.26	2.27	2.85	3.71	1.86	.77	.33	.42	.46

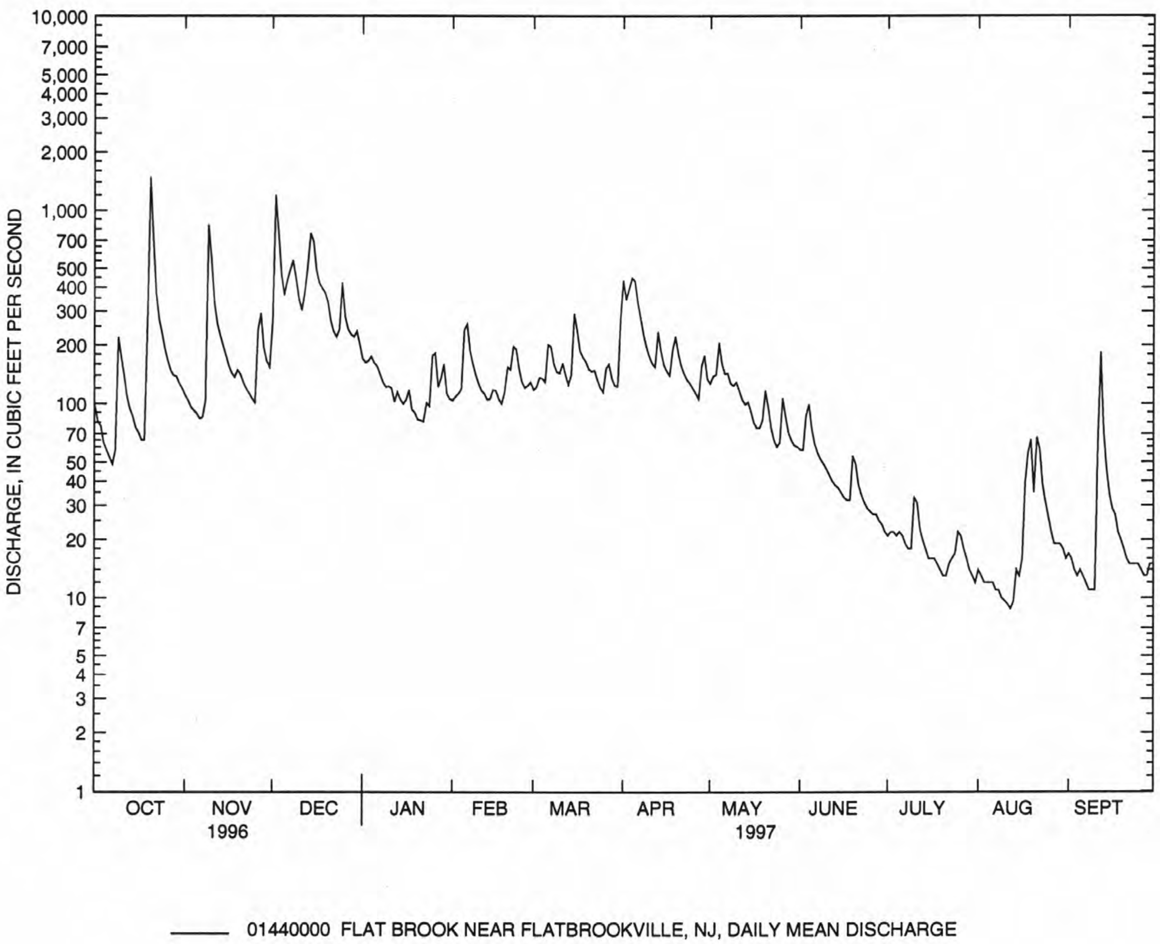
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	57.3	99.7	125	123	134	204	207	142	86.7	57.2	51.4	47.2
MAX	306	292	412	367	275	513	570	372	334	333	386	258
(WY)	1956	1928	1997	1979	1951	1936	1983	1989	1972	1928	1955	1933
MIN	9.57	12.2	20.6	24.5	37.3	82.0	65.9	44.0	23.7	13.1	9.30	7.01
(WY)	1964	1965	1947	1981	1940	1985	1946	1941	1965	1966	1995	1964

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1924 - 1997	
ANNUAL TOTAL	69846		50188.4			
ANNUAL MEAN	191		138		111	
HIGHEST ANNUAL MEAN					210	1928
LOWEST ANNUAL MEAN					43.4	1965
HIGHEST DAILY MEAN	1840	Jan 28	1490	Oct 20	6310	Aug 19 1955
LOWEST DAILY MEAN	19	Sep 4	8.8	Aug 12	4.1	Sep 11 1966
ANNUAL SEVEN-DAY MINIMUM	21	Aug 31	9.9	Aug 7	5.3	Sep 6 1995
INSTANTANEOUS PEAK FLOW			1810	Oct 20	9560a	Aug 19 1955
INSTANTANEOUS PEAK STAGE			5.76	Oct 20	12.58b	Aug 19 1955
INSTANTANEOUS LOW FLOW			8.4	Aug 12	3.6	Sep 25 1964
ANNUAL RUNOFF (CFSM)	2.98		2.15		1.74	
ANNUAL RUNOFF (INCHES)	40.60		29.17		23.58	
10 PERCENT EXCEEDS	395		274		237	
50 PERCENT EXCEEDS	129		109		72	
90 PERCENT EXCEEDS	41		15		17	

a From rating curve extended above 2,000 ft^3/s on basis of slope-area measurement of peak flow.
b From high-water mark in gage house.
e Estimated.



01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

PERIOD OF RECORD.--Water years 1923-24, 1956-57, 1959-80, 1993, 1995, October 1996 to September 1997.

DRAINAGE AREA.--64.0 mi^2.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
31...	1200	123	171	7.6	9.5	746	11.0	98	<1.0	20	20	66
JAN 1997												
23...	1145	100	217	7.9	1.0	748	13.2	95	E1.0	20	<10	78
APR												
08...	1200	223	134	7.8	10.5	749	11.0	100	2.7	<20	<10	46
JUN												
05...	1145	73	185	8.0	17.0	751	9.9	104	<1.0	70	<10	68
AUG												
12...	1100	9.0	290	8.1	21.5	756	8.6	98	<1.0	<20	210	110

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
31...	20	4.0	7.2	.6	53	12	12	<.1	5.4	86	93	<1
JAN 1997												
23...	23	4.9	9.0	.5	62	14	16	<.1	5.3	118	111	<1
APR												
08...	14	2.8	6.7	.6	36	11	12	<.1	3.8	76	73	4
JUN												
05...	20	4.4	8.8	.5	55	11	16	<.1	4.0	104	98	1
AUG												
12...	32	8.2	12	.7	95	20	19	<.1	3.8	165	153	<1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
31...	<.003	.096	<.03	<.03	.1	.11	.21	.21	<.01	<.01	2.6	.2
JAN 1997												
23...	.003	.26	.05	.04	.03	<.03	.29	--	<.01	<.01	1.2	.3
APR												
08...	<.003	.083	<.03	<.03	.1	.11	.20	.19	.01	<.01	2.2	.3
JUN												
05...	<.003	.081	<.03	<.03	.4	<.20	.50	--	.06	<.01	2.6	.2
AUG												
12...	<.003	.13	.04	<.03	.1	.15	.27	.28	<.01	<.01	1.5	.3

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
31...	1200	--	<10	--	--	--	<1	--	<10	20	<1
31...	1200	7.2	--	.8	100	230	--	2	--	--	--
JUN 1997											
05...	1145	--	<10	--	--	--	<1	--	<10	10	<1

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
OCT 1996											
31...	--	<1.0	--	--	<1	--	100	--	<1	--	<10
31...	<1	--	5	<5.0	--	5	--	5800	--	<10	--
JUN 1997											
05...	--	<1.0	--	--	<1	--	170	--	<1	--	20

DATE	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
OCT 1996										
31...	--	<.1	--	<1	--	<1	--	<10	--	--
31...	130	--	<.01	--	<10	--	<1	--	30	1.9
JUN 1997										
05...	--	<.1	--	<1	--	<1	--	<10	--	--

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39368)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)
OCT 1996										
31...	--	--	--	--	--	--	--	--	--	--
31...	3.0	2	<1	<.1	<1	<.1	<.1	<.1	<.1	<.1
JUN 1997										
05...	--	--	--	--	--	--	--	--	--	--

DATE	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39758)	PER- THANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (81886)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
31...	--	--	--	--	--	--	--	--	--	--
31...	<.1	<.1	<.1	<.1	<1.5	<.1	<1	<10	.3	.6
JUN 1997										
05...	--	--	--	--	--	--	--	--	--	--

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 mi^2.

PERIOD OF RECORD.--May 1964 to January 1996 (discontinued).

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

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River basin, diversions). Several measurements of water temperature were made during the year. Gage height 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 ft^3/s). Information on stage supplied by Harlan Fish, retired caretaker of Worthington State Forest.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1570	5650	7030	e2680	---	---	---	---	---	---	---	---
2	1540	5570	6150	e2520	---	---	---	---	---	---	---	---
3	1480	5840	5420	e2500	---	---	---	---	---	---	---	---
4	1580	6690	5080	e3230	---	---	---	---	---	---	---	---
5	1670	5880	6080	e2720	---	---	---	---	---	---	---	---
6	3340	5020	6180	e2450	---	---	---	---	---	---	---	---
7	3250	5090	6000	e2540	---	---	---	---	---	---	---	---
8	2810	4770	5820	e2690	---	---	---	---	---	---	---	---
9	2040	4810	e5530	e2770	---	---	---	---	---	---	---	---
10	1550	4850	e4380	e2900	---	---	---	---	---	---	---	---
11	1260	4020	e3220	e3220	---	---	---	---	---	---	---	---
12	1090	11000	e3440	e3180	---	---	---	---	---	---	---	---
13	1330	22100	e4070	e3250	---	---	---	---	---	---	---	---
14	1500	16800	e4250	e3430	---	---	---	---	---	---	---	---
15	2020	19800	e4300	e2770	---	---	---	---	---	---	---	---
16	3080	24900	e5000	e2480	---	---	---	---	---	---	---	---
17	3510	19800	e5070	e3570	---	---	---	---	---	---	---	---
18	2230	15300	e4110	e3940	---	---	---	---	---	---	---	---
19	1710	12700	e4220	e11100	---	---	---	---	---	---	---	---
20	1470	11600	e3600	e131000	---	---	---	---	---	---	---	---
21	3730	10900	e3650	e57300	---	---	---	---	---	---	---	---
22	27400	10100	e4060	e28900	---	---	---	---	---	---	---	---
23	23800	8760	e4140	e19000	---	---	---	---	---	---	---	---
24	12400	7210	e3060	e16300	---	---	---	---	---	---	---	---
25	8420	6570	e2760	e24500	---	---	---	---	---	---	---	---
26	6520	5990	e2900	e21900	---	---	---	---	---	---	---	---
27	5190	5540	e2980	e27600	---	---	---	---	---	---	---	---
28	5650	5710	e3890	e69200	---	---	---	---	---	---	---	---
29	8740	5610	e4040	e47600	---	---	---	---	---	---	---	---
30	8960	7130	e3430	e35100	---	---	---	---	---	---	---	---
31	6760	---	e3210	e22300	---	---	---	---	---	---	---	---
TOTAL	157600	285710	137070	564640	---	---	---	---	---	---	---	---
MEAN	5084	9524	4422	18210	---	---	---	---	---	---	---	---
MAX	27400	24900	7030	131000	---	---	---	---	---	---	---	---
MIN	1090	4020	2760	2450	---	---	---	---	---	---	---	---

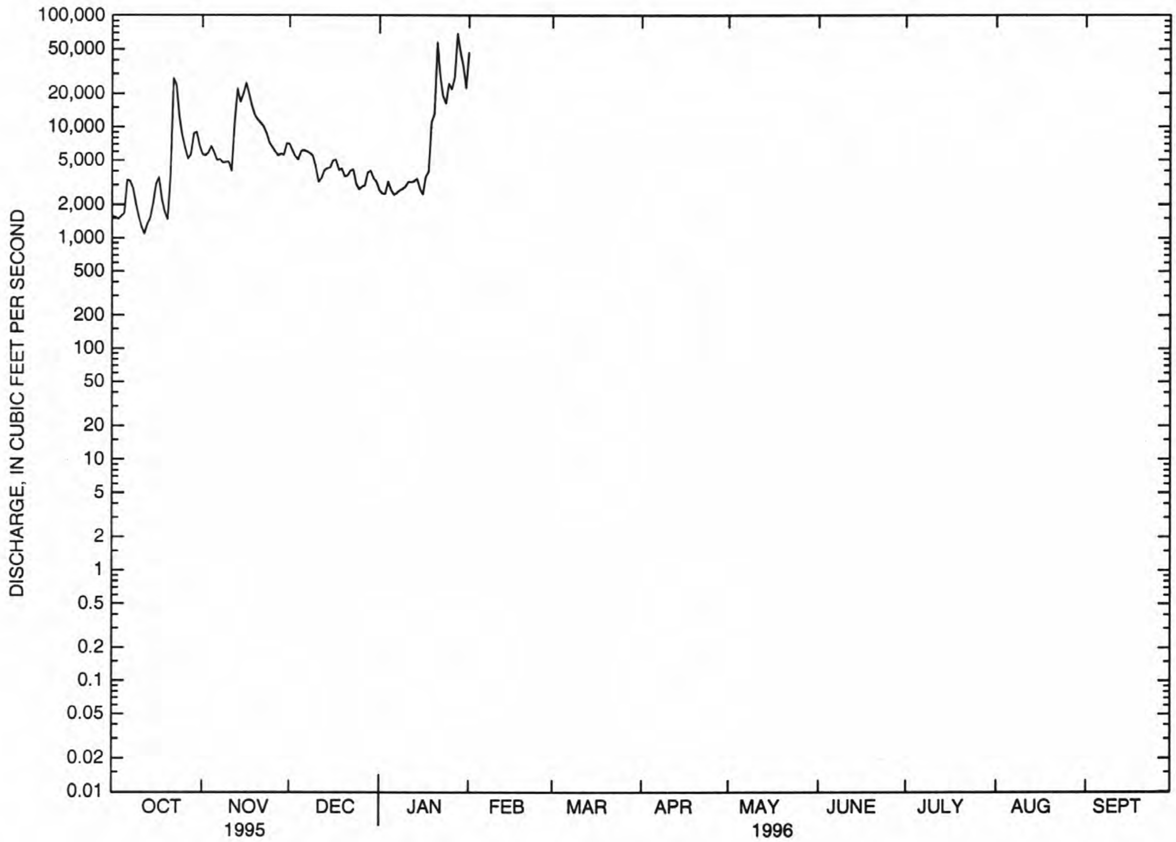
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3919	5399	6693	6465	7047	10390	12610	8108	5158	3374	2847	3018
MAX	13030	12870	16730	18210	17320	21490	33860	17970	18150	9455	6242	10310
(WY)	1978	1973	1974	1996	1976	1977	1993	1989	1972	1973	1969	1987
MIN	1193	992	1914	1437	1936	3873	3796	2657	1397	950	1101	1283
(WY)	1965	1965	1965	1981	1980	1981	1985	1995	1965	1965	1965	1965

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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		WATER YEARS 1964 - 1996	
ANNUAL TOTAL	1735670			
ANNUAL MEAN	4755		6222	
HIGHEST ANNUAL MEAN			9418	1973
LOWEST ANNUAL MEAN			2572	1965
HIGHEST DAILY MEAN	27400	Oct 22	131000	Jan 20 1996
LOWEST DAILY MEAN	1090	Oct 12	580	Jul 7 1965
ANNUAL SEVEN-DAY MINIMUM	1540	Oct 9	620	Jul 2 1965
INSTANTANEOUS PEAK FLOW			155000	Jan 20 1996
INSTANTANEOUS PEAK STAGE			24.89	Jan 20 1996
10 PERCENT EXCEEDS	9670		13100	
50 PERCENT EXCEEDS	3370		3770	
90 PERCENT EXCEEDS	1710		1840	

e Estimated.



01440200 DELAWARE RIVER NEAR DELAWARE WATER GAP PA, DAILY MEAN DISCHARGE

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 from Paulins Kill.

DRAINAGE AREA.--4,165 mi^2.

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
19...	1200	9650	76	7.6	5.0	748	11.8	94	<1.1	<20	<10	23
JAN 1997												
28...	1145	7280	103	7.2	0.5	752	13.5	95	E1.5	20	10	31
APR												
14...	1145	11800	78	7.3	8.0	755	11.6	99	<1.0	<20	<10	21
JUN												
10...	1100	3370	98	7.7	19.5	756	9.3	102	E1.9	<20	10	30
AUG												
05...	1200	2150	104	7.4	22.0	751	7.0	82	E1.8	<20	30	31

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
19...	6.8	1.4	4.4	.8	15	8.5	7.0	<.1	3.7	46	43	<1
JAN 1997												
28...	9.4	1.8	8.2	.7	18	10	12	<.1	3.9	64	58	<1
APR												
14...	6.2	1.3	4.9	.6	13	8.4	8.8	<.1	2.4	46	42	<1
JUN												
10...	9.1	1.7	6.3	.8	20	8.8	11	<.1	1.7	57	51	3
AUG												
05...	9.2	1.9	7.1	.8	21	8.9	12	<.1	1.2	58	55	5

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
19...	<.003	.34	<.03	<.03	.2	.19	.54	.53	<.01	<.01	2.8	.2
JAN 1997												
28...	.004	.35	.06	.06	.2	.12	.50	.47	.01	<.01	1.8	.5
APR												
14...	<.003	.24	<.03	<.03	.1	.11	.34	.35	<.01	<.01	1.9	.3
JUN												
10...	.005	.20	<.03	<.03	.1	.26	.33	.47	<.01	<.01	2.2	.4
AUG												
05...	.004	.24	.04	<.03	.3	.22	.52	.47	<.01	<.01	2.1	.2

01443000 DELAWARE RIVER AT PORTLAND, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
NOV 1996								
19...	1200	<10	<1	<10	10	<1	<1.0	1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1996							
19...	110	<1	30	<.1	<1	<1	<10

01443280 EAST BRANCH PAULINS KILL NEAR LAFAYETTE, NJ

LOCATION.--Lat 41°04'34", long 74°41'45", Sussex County, Hydrologic Unit 02020007, on right downstream wingwall of bridge on Garrison Road, 1.6 mi south of Lafayette, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--13.0 mi^2.

PERIOD OF RECORD.--August 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 555.40 ft above sea level (levels from American Geodetic Survey Co. benchmark).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Possible regulation from ponds and golf courses upstream. A significant portion of the base flow is the result of pumpage from a limestone quarry into a tributary approximately 1.5 mi upstream from gage.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0930	*181	*4.92	Dec. 8	0645	104	4.09
Nov. 9	1700	100	4.03	Dec. 15	0200	101	4.05
Nov. 27	0200	77	3.70	Dec. 25	0945	80	3.75
Dec. 2	1715	140	4.51	Apr. 1	1015	95	3.97

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	24	36	37	22	23	87	21	14	6.4	8.0	11
2	18	23	110	34	23	24	69	24	16	10	6.8	11
3	19	23	101	34	22	25	72	28	24	11	9.1	9.9
4	17	21	69	35	21	24	76	40	20	7.5	8.9	9.3
5	16	21	53	34	37	25	71	29	17	9.8	8.9	9.1
6	15	20	65	30	39	27	58	25	15	9.5	9.0	9.1
7	15	20	90	26	28	25	50	25	14	8.4	8.4	9.2
8	17	22	100	24	25	24	43	23	14	8.2	7.9	9.1
9	32	74	81	23	24	23	38	23	13	9.1	8.1	9.1
10	33	72	64	25	23	23	34	23	12	18	7.8	8.1
11	25	47	54	23	23	24	32	21	12	14	7.8	15
12	21	42	58	e20	22	24	32	20	11	9.5	7.6	21
13	20	34	63	e18	23	23	46	19	11	11	8.1	13
14	20	31	85	e18	23	25	38	19	11	9.1	8.2	9.9
15	19	29	96	20	26	38	30	18	11	8.7	7.8	9.0
16	18	27	78	e22	27	30	28	18	9.9	8.2	7.9	8.3
17	18	26	69	e28	25	27	28	18	9.9	8.2	11	7.8
18	17	26	63	e25	24	27	33	18	10	8.2	23	7.7
19	37	27	57	e25	25	26	36	18	12	8.6	23	7.4
20	160	25	55	e23	27	25	30	22	11	8.1	16	7.3
21	105	24	50	e20	26	24	27	19	11	8.1	20	7.6
22	69	23	46	e18	30	24	25	18	11	9.3	18	7.8
23	51	22	39	e20	29	23	23	16	12	8.5	14	7.8
24	41	22	43	21	26	22	25	16	11	11	12	7.8
25	36	21	73	51	24	21	23	17	11	15	11	7.7
26	31	42	53	e40	23	25	23	20	10	13	10	7.8
27	29	63	46	e35	24	25	22	17	8.2	10	9.8	7.6
28	28	39	43	e40	24	23	25	15	11	9.5	9.8	7.8
29	30	32	42	49	---	21	25	15	10	8.3	9.5	8.6
30	28	29	43	e40	---	23	23	14	8.9	8.5	9.7	7.9
31	26	---	39	e32	---	46	---	14	---	8.2	9.2	---
TOTAL	1030	951	1964	890	715	789	1172	633	371.9	300.9	336.3	279.7
MEAN	33.2	31.7	63.4	28.7	25.5	25.5	39.1	20.4	12.4	9.71	10.8	9.32
MAX	160	74	110	51	39	46	87	40	24	18	23	21
MIN	15	20	36	18	21	21	22	14	8.2	6.4	6.8	7.3
CFSM	2.56	2.44	4.88	2.21	1.97	1.96	3.01	1.57	.95	.75	.84	.72
IN.	2.95	2.72	5.62	2.55	2.05	2.26	3.36	1.81	1.07	.86	.96	.80

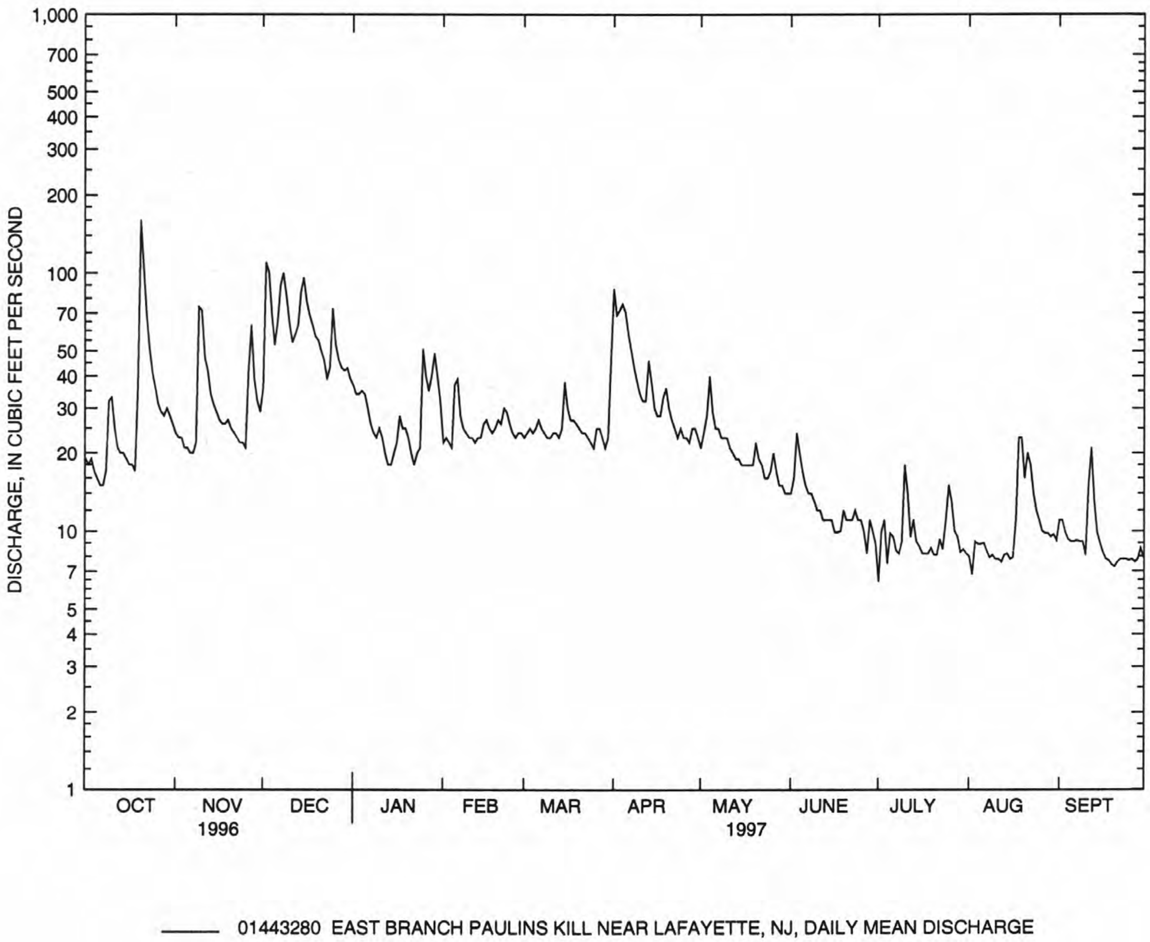
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.5	22.1	31.3	28.6	24.5	42.0	42.3	23.7	14.4	12.7	10.3	11.0
MAX	33.2	34.3	63.4	41.1	32.5	58.5	64.3	37.3	18.4	19.3	14.8	17.1
(WY)	1997	1996	1997	1996	1996	1993	1993	1996	1994	1996	1994	1996
MIN	8.52	12.6	17.1	17.0	17.4	25.5	17.5	14.3	11.9	8.95	6.49	8.58
(WY)	1993	1995	1995	1994	1995	1997	1995	1995	1995	1993	1995	1992

01443280 EAST BRANCH PAULINS KILL NEAR LAFAYETTE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1992 - 1997	
ANNUAL TOTAL	11559.7		9432.8			
ANNUAL MEAN	31.6		25.8		23.4	
HIGHEST ANNUAL MEAN					27.2	1996
LOWEST ANNUAL MEAN					15.6	1995
HIGHEST DAILY MEAN	160	Oct 20	160	Oct 20	160	Oct 20 1996
LOWEST DAILY MEAN	9.1	Sep 4	6.4	Jul 1	5.5	Aug 23 1995
ANNUAL SEVEN-DAY MINIMUM	9.2	Aug 31	7.6	Sep 17	5.8	Aug 20 1995
INSTANTANEOUS PEAK FLOW			181	Oct 20	275	Jan 20 1996
INSTANTANEOUS PEAK STAGE			4.92	Oct 20	5.81a	Jan 20 1996
INSTANTANEOUS LOW FLOW			5.9	Jul 1	4.3	Aug 13 1995
ANNUAL RUNOFF (CFSM)	2.43		1.99		1.80	
ANNUAL RUNOFF (INCHES)	33.10		27.01		24.48	
10 PERCENT EXCEEDS	62		50		46	
50 PERCENT EXCEEDS	26		23		17	
90 PERCENT EXCEEDS	12		8.3		8.2	

a From crest-stage gage.
e Estimated.



01443440 PAULINS KILL AT BALESVILLE, NJ

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

DRAINAGE AREA.--67.1 mi^2.

PERIOD OF RECORD.--January 1979 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
29...	1130	160	396	7.8	10.5	747	10.0	92	E1.0	230	110	140
JAN 1997												
21...	1145	90	473	7.9	0.5	756	13.3	93	E1.5	20	<10	180
APR												
09...	1130	210	394	8.1	7.5	749	11.8	100	2.6	80	<10	130
JUN												
17...	1145	28	581	8.1	18.0	743	8.0	87	E1.7	490	30	210
AUG												
04...	1145	22	635	8.1	22.0	743	7.1	84	E1.3	5400	280	230

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
29...	37	11	22	2.0	116	18	41	<.1	7.6	206	211	6
JAN 1997												
21...	47	16	29	1.7	146	22	55	<.1	7.4	276	272	2
APR												
09...	33	11	26	1.4	103	16	48	<.1	3.7	214	203	<1
JUN												
17...	51	20	34	1.8	173	24	63	.1	4.7	336	308	<1
AUG												
04...	57	21	39	2.4	189	28	68	.2	6.0	405	341	7

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
29...	.011	.74	.04	<.03	.4	.36	1.1	1.1	.05	.03	6.4	.5
JAN 1997												
21...	.012	1.3	.12	.09	.4	.41	1.7	1.7	.02	.01	2.6	.4
APR												
09...	<.003	.54	<.03	<.03	.3	.24	.86	.78	.02	<.01	4.0	--
JUN												
17...	.034	1.3	.04	<.03	.5	.37	1.8	1.7	.12	.09	4.1	.4
AUG												
04...	.029	1.4	.09	.09	.4	.35	1.7	1.7	.04	.04	3.2	.5

01443440 PAULINS KILL AT BALESVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
29...	1130	--	20	--	--	--	<1	--	<10	20	<1
29...	1130	7.4	--	5.8	300	350	--	2	--	--	--

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 1996											
29...	--	<1.0	--	--	1	--	280	--	<1	--	40
29...	<1	--	10	<5	--	6.0	--	13000	--	10	--

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
OCT 1996										
29...	--	<.1	--	<1	--	<1	--	<10	--	--
29...	200	--	.02	--	10	--	<1	--	60	.6

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)
OCT 1996										
29...	--	--	--	--	--	--	--	--	--	--
29...	3.0	4	<1	<.1	<1	.2	.2	.2	<.1	<.1

DATE	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
29...	--	--	--	--	--	--	--	--	--	--
29...	<.1	<.1	<.1	<.1	<1.3	<.1	<1	<10	.6	2

01443500 PAULINS KILL AT BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'44", long 74°57'15", Warren County, Hydrologic Unit 02040105, on right bank 1,200 ft upstream from bridge on State Highway 94 in Blairstown, 1,400 ft upstream from Blairs Creek, and 10 mi upstream from mouth. Water-quality samples collected at bridge 1,200 ft downstream from gage at high flows.

DRAINAGE AREA.--126 mi^2.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and concrete control (Aug. 1, 1931, to Aug. 3, 1941, concrete control at site 280 ft, downstream). Datum of gage is 335.86 ft above sea level. Prior to May 24, 1922, nonrecording gage and May 24, 1922 to July 31, 1931, water-stage recorder, at site of former highway bridge 1,300 ft downstream at different datum. Aug. 1, 1931 to July 28, 1939, water-stage recorder at site 100 ft downstream at present datum.

REMARKS.--Records fair except for those above 200 ft^3/s, and estimated daily discharges, which are poor. Diurnal fluctuations caused by unknown source and flow regulated slightly by Swartswood Lake. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0800	*2,420	*6.30	Dec. 8	0600	1,320	4.26
Nov. 9	1415	1,240	4.01	Dec. 14	2200	1,330	4.28
Dec. 2	1700	1,830	5.39	Apr. 4	0445	1,060	3.47

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	287	554	364	240	209	950	216	100	41	27	54
2	131	264	1640	336	256	212	840	276	115	39	26	49
3	123	239	1390	328	255	225	943	285	180	42	24	46
4	104	216	1140	336	253	222	1010	448	185	41	37	38
5	91	200	934	320	531	224	873	361	139	37	39	35
6	81	188	1020	307	592	313	690	315	117	35	33	34
7	75	178	1150	277	405	298	581	304	106	35	30	33
8	84	194	1280	251	338	259	472	261	98	37	26	34
9	278	1010	1170	231	296	253	408	251	90	38	25	33
10	267	866	1010	229	268	251	352	246	84	74	23	29
11	226	638	853	225	248	271	316	225	77	65	22	50
12	178	494	863	212	235	223	311	200	73	53	21	183
13	153	412	903	199	222	189	474	188	70	43	28	128
14	138	364	1230	185	222	238	420	180	69	40	34	87
15	121	322	1260	173	241	543	337	168	63	37	30	67
16	107	288	1120	217	266	460	291	153	59	35	29	54
17	103	269	1000	259	233	353	277	149	57	32	43	47
18	96	258	879	237	216	324	367	141	60	29	107	41
19	543	266	772	e219	229	292	434	150	85	30	109	38
20	2140	254	671	202	257	270	355	204	79	26	86	34
21	1520	234	550	181	250	261	307	185	69	26	122	33
22	1160	218	478	154	287	256	282	154	63	36	107	30
23	904	204	450	184	294	246	256	138	62	35	81	29
24	705	191	495	181	251	227	244	120	60	46	64	29
25	536	183	838	415	223	211	225	128	57	59	53	28
26	430	495	655	403	207	250	215	176	54	54	46	27
27	369	622	544	277	212	266	197	151	51	45	42	27
28	345	461	494	330	224	239	256	128	46	44	43	26
29	326	370	472	384	---	218	284	112	44	37	47	28
30	309	330	475	286	---	215	233	104	42	30	42	29
31	306	---	423	244	---	522	---	103	---	28	39	---
TOTAL	12109	10515	26713	8146	7751	8540	13200	6220	2454	1249	1485	1400
MEAN	391	351	862	263	277	275	440	201	81.8	40.3	47.9	46.7
MAX	2140	1010	1640	415	592	543	1010	448	185	74	122	183
MIN	75	178	423	154	207	189	197	103	42	26	21	26
CFSM	3.10	2.78	6.84	2.09	2.20	2.19	3.49	1.59	.65	.32	.38	.37
IN.	3.58	3.10	7.89	2.41	2.29	2.52	3.90	1.84	.72	.37	.44	.41

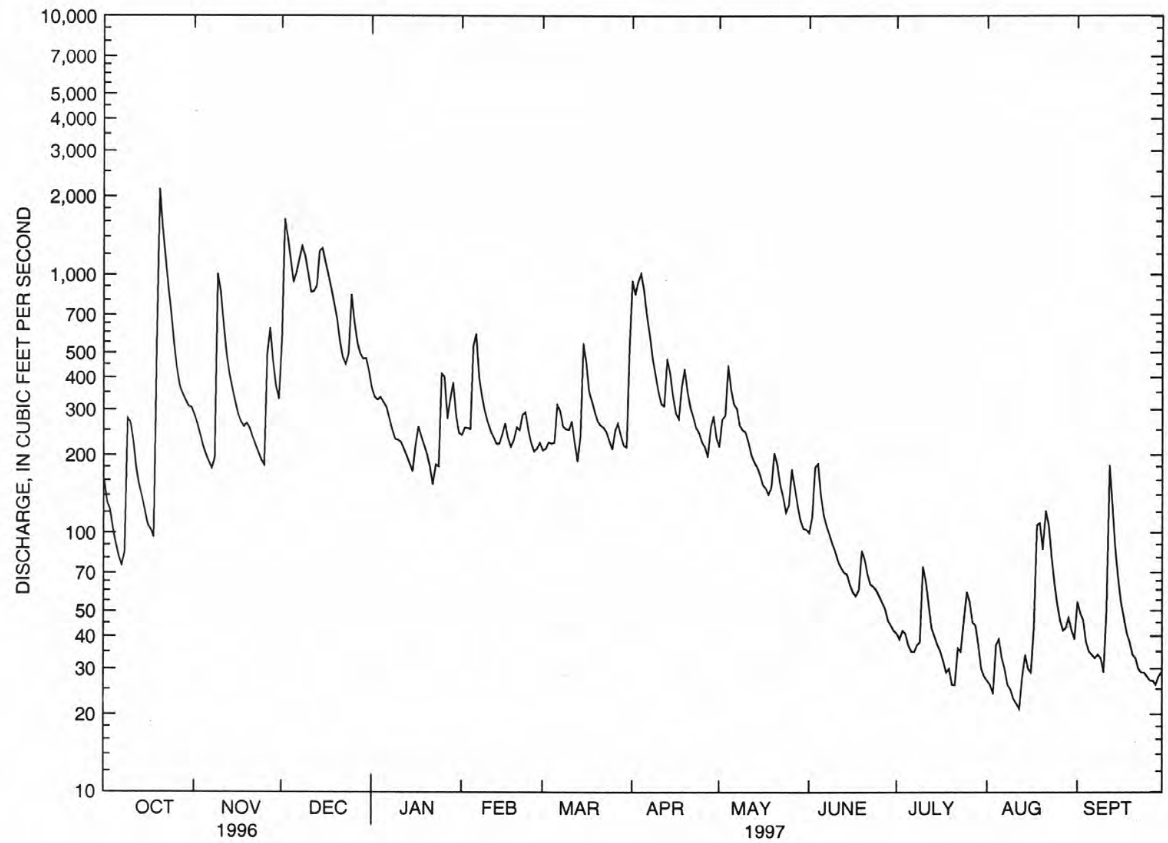
01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

MEAN	110	170	218	224	249	372	340	224	152	116	105	105
MAX	634	479	862	712	516	963	930	650	690	527	663	626
(WY)	1956	1933	1997	1979	1951	1936	1983	1989	1972	1945	1955	1933
MIN	20.5	22.1	39.5	50.5	67.4	139	106	54.6	41.0	19.4	19.6	18.2
(WY)	1964	1965	1947	1981	1940	1965	1985	1941	1965	1955	1932	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	133224		99782			
ANNUAL MEAN	364		273		198	
HIGHEST ANNUAL MEAN					362	1952
LOWEST ANNUAL MEAN					67.4	1965
HIGHEST DAILY MEAN	2170	Jan 28	2140	Oct 20	5950	Aug 19 1955
LOWEST DAILY MEAN	39	Sep 4	21	Aug 12	5.0	Aug 13 1930
ANNUAL SEVEN-DAY MINIMUM	41	Sep 1	25	Aug 7	12	Jul 31 1955
INSTANTANEOUS PEAK FLOW			2420	Oct 20	8750	Aug 19 1955
INSTANTANEOUS PEAK STAGE			6.30	Oct 20	11.12a	Aug 19 1955
INSTANTANEOUS LOW FLOW			20	Aug 12	2.8	Nov 1 1922
ANNUAL RUNOFF (CFSM)	2.89		2.17		1.57	
ANNUAL RUNOFF (INCHES)	39.33		29.46		21.39	
10 PERCENT EXCEEDS	913		604		415	
50 PERCENT EXCEEDS	261		216		133	
90 PERCENT EXCEEDS	79		34		35	

a From high-water mark in gage house.
e Estimated.



—— 01443500 PAULINS KILL AT BLAIRSTOWN, NJ, DAILY MEAN DISCHARGE

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER-QUALITY RECORDS

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
28...	1130	335	337	8.0	12.5	746	10.0	96	<1.0	2100	80	120
JAN 1997												
21...	1100	161	488	8.1	0.0	762	13.9	95	E1.6	<20	<10	160
APR												
10...	1130	354	351	8.2	8.5	757	12.2	105	E1.3	<20	<10	120
JUN												
18...	1145	58	464	8.1	18.0	747	8.2	89	E2.1	<20	30	180
AUG												
07...	1145	29	471	8.1	21.5	756	8.0	92	E1.5	130	10	170

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
28...	31	11	16	1.3	109	15	28	<.1	6.7	186	177	7
JAN 1997												
21...	38	15	35	1.3	129	18	54	<.1	5.7	254	249	3
APR												
10...	31	11	20	1.1	103	14	37	<.1	3.6	188	181	<1
JUN												
18...	44	18	23	1.2	155	16	41	<.1	2.9	254	242	4
AUG												
07...	38	18	27	1.7	143	18	50	<.1	2.2	270	242	5

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
28...	.007	.53	<.03	.05	.4	.36	.93	.89	.04	.05	5.0	.7
JAN 1997												
21...	.007	1.1	<.03	<.03	.3	.32	1.4	1.4	.02	.01	2.7	.3
APR												
10...	.007	.39	<.03	<.03	.3	.17	.68	.56	.02	<.01	3.2	--
JUN												
18...	.012	.39	<.03	<.03	.5	.33	.87	.72	.06	.02	3.2	.5
AUG												
07...	.007	.19	.05	<.03	.3	.35	.52	.54	.04	.03	3.7	.6

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
28...	1130	--	11	--	--	--	<1	--	<10	20	<1
28...	1130	7.6	--	1.2	300	430	--	4	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
OCT 1996											
28...	--	<1.0	--	--	1	--	270	--	<1	--	30
28...	<1	--	10	<5	--	20	--	18000	--	40	--

DATE	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
OCT 1996										
28...	--	<.1	--	2	--	<1	--	<10	--	--
28...	190	--	.01	--	10	--	<1	--	70	9.8

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39368)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)
OCT 1996										
28...	--	--	--	--	--	--	--	--	--	--
28...	14	3	<1	<.1	<1	<.1	.1	<.1	<.1	<.1

DATE	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39758)	PER- THANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (81886)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
28...	--	--	--	--	--	--	--	--	--	--
28...	<.1	<.1	<.1	<.1	<5	<.1	<1	<10	.3	.9

01443900 YARDS CREEK NEAR BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'51", long 75°02'25", Warren County, Hydrologic Unit 02040105, on left bank 100 ft upstream from bridge on Hainesburg-Mount Vernon Road, 1.4 mi downstream from Yards Creek Reservoir, 2.2 mi northeast of Hainesburg, 4.2 mi west of Blairstown, and 2.4 mi upstream from mouth.

DRAINAGE AREA.--5.34 mi^2.

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.8 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by the Jersey Central Power and Light Co., at Yards Creek Reservoir 1.4 mi above station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	14	37	23	22	6.9	31	20	3.1	1.5	2.8	3.7
2	4.8	8.1	117	19	19	7.0	32	20	4.2	2.0	2.9	2.8
3	15	6.6	133	18	19	6.5	29	24	5.0	2.1	3.0	2.9
4	19	6.1	134	9.4	20	6.7	23	20	3.8	2.2	2.9	2.9
5	16	6.2	83	8.9	28	7.3	22	13	3.3	1.9	3.4	2.8
6	13	5.0	33	8.3	23	8.4	20	5.4	3.3	2.3	2.9	2.9
7	11	5.1	35	8.7	23	7.8	19	5.1	3.2	1.6	2.9	2.8
8	15	13	45	8.5	22	7.7	20	4.8	3.1	1.7	2.8	2.7
9	16	35	40	7.6	20	7.2	20	5.4	2.5	2.4	2.7	2.6
10	17	34	40	7.6	e19	13	14	5.0	2.7	2.6	2.5	1.9
11	15	61	42	7.6	e18	17	7.2	4.6	2.9	2.1	2.4	13
12	14	95	40	8.4	19	17	9.1	4.1	2.6	1.8	3.1	6.7
13	12	96	90	7.1	22	17	9.3	4.2	2.3	1.8	3.2	3.9
14	5.1	15	134	7.7	14	25	19	4.2	2.2	1.8	2.9	3.0
15	4.5	6.5	100	8.7	7.5	27	20	4.0	2.2	1.7	2.7	2.5
16	4.9	9.5	64	9.9	7.1	22	19	4.0	1.7	1.7	3.4	2.6
17	5.0	9.3	50	8.2	6.4	21	20	3.8	1.9	2.0	3.2	2.5
18	4.9	9.7	41	e7.0	6.4	38	20	3.5	2.4	1.9	6.5	2.3
19	43	15	42	e7.0	7.0	50	18	3.8	3.5	1.8	3.1	2.2
20	43	17	41	e6.5	7.3	42	16	4.3	2.2	1.7	4.2	2.0
21	86	17	11	e6.5	7.2	27	13	3.7	2.1	1.7	5.5	2.0
22	119	12	9.5	14	7.7	20	7.7	3.3	2.1	2.1	3.4	1.9
23	107	7.1	8.3	7.6	7.0	18	6.6	3.5	1.7	1.8	3.2	2.1
24	64	6.3	12	8.7	6.2	15	4.3	3.5	1.9	4.0	2.9	2.0
25	24	6.0	11	18	6.5	7.6	4.3	4.4	1.9	2.7	2.8	1.9
26	10	19	9.8	8.2	6.5	9.0	4.1	4.1	1.8	1.9	2.9	2.1
27	9.3	22	16	24	7.1	8.1	3.9	3.3	1.8	2.4	2.9	1.9
28	15	22	23	28	6.9	8.3	11	3.0	2.0	2.3	3.2	1.9
29	21	22	21	25	---	8.3	19	4.6	2.0	2.0	2.9	2.0
30	22	22	19	28	---	7.6	19	2.8	1.5	2.0	2.9	1.8
31	21	---	20	22	---	23	---	2.8	---	5.0	2.7	---
TOTAL	781.0	622.5	1501.6	387.1	384.8	506.4	480.5	202.2	76.9	66.5	98.8	88.3
MEAN	25.2	20.8	48.4	12.5	13.7	16.3	16.0	6.52	2.56	2.15	3.19	2.94
MAX	119	96	134	28	28	50	32	24	5.0	5.0	6.5	13
MIN	4.5	5.0	8.3	6.5	6.2	6.5	3.9	2.8	1.5	1.5	2.4	1.8

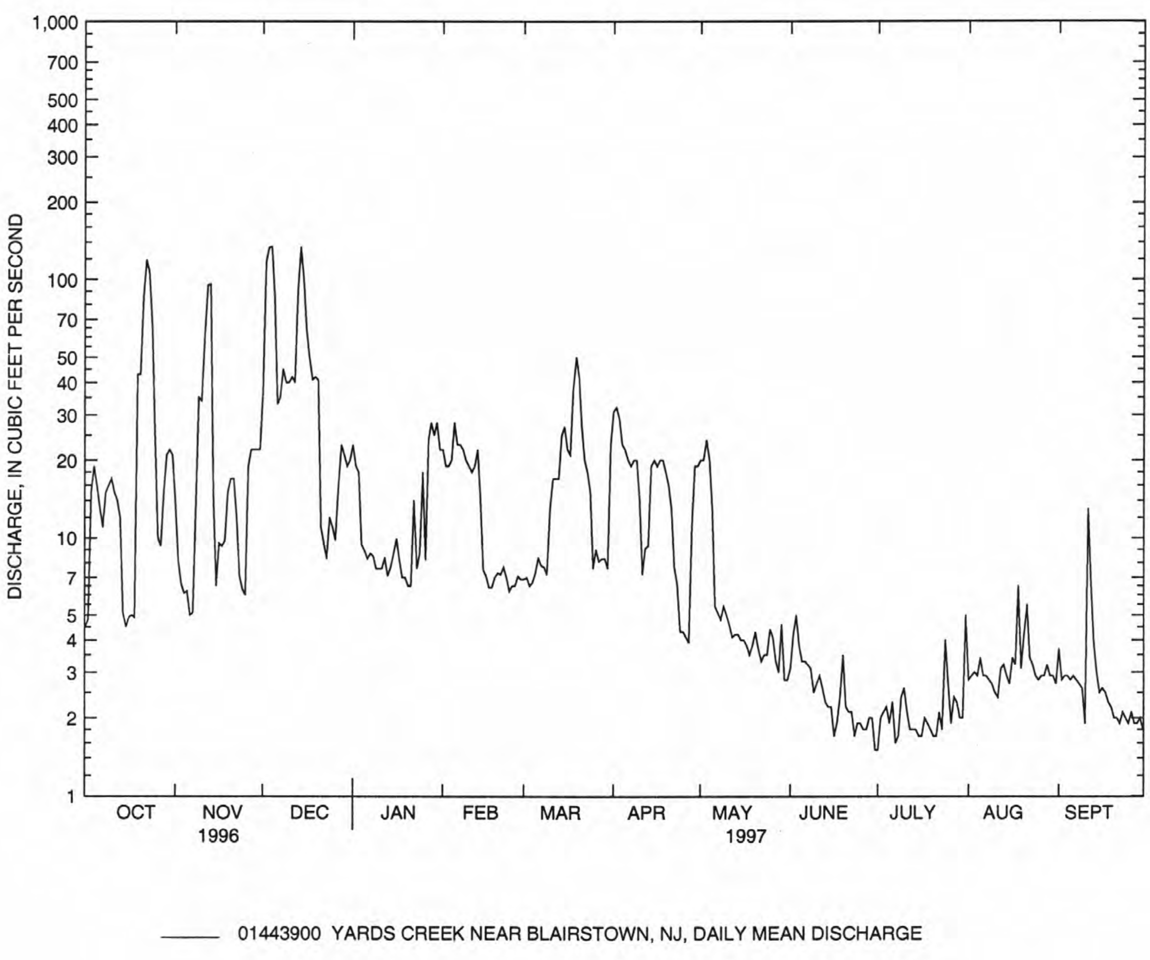
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.29	8.63	14.8	14.8	14.6	17.8	18.3	13.9	8.64	5.01	4.63	4.62
MAX	33.6	26.3	48.4	51.0	36.4	50.1	55.3	33.7	35.2	19.9	21.6	27.0
(WY)	1990	1996	1997	1979	1979	1977	1983	1989	1972	1984	1969	1987
MIN	.97	1.20	.91	1.66	2.24	6.99	4.43	1.58	1.00	.89	.65	.58
(WY)	1981	1967	1981	1981	1985	1973	1981	1970	1980	1980	1980	1980

01443900 YARDS CREEK NEAR BLAIRSTOWN, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1967 - 1997	
ANNUAL TOTAL	7195.3		5196.6			
ANNUAL MEAN	19.7		14.2		11.0	
HIGHEST ANNUAL MEAN					16.1	1996
LOWEST ANNUAL MEAN					3.17	1985
HIGHEST DAILY MEAN	160	Jan 20	134	Dec 4	225	Jan 18 1977
LOWEST DAILY MEAN	3.1	Sep 3	1.5	Jun 30	.02	Jun 19 1970
ANNUAL SEVEN-DAY MINIMUM	3.2	Aug 29	1.8	Jun 25	.46	Oct 7 1980
INSTANTANEOUS PEAK FLOW			145	Dec 2	583	Feb 24 1977
INSTANTANEOUS PEAK STAGE			3.06	Dec 2	3.92	Feb 24 1977
INSTANTANEOUS LOW FLOW			1.1	Jul 21	.00	Sep 12 1971
10 PERCENT EXCEEDS	44		30		24	
50 PERCENT EXCEEDS	11		7.0		5.0	
90 PERCENT EXCEEDS	3.6		2.0		1.2	

e Estimated.



01445500 PEQUEST RIVER AT PEQUEST, NJ

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

DRAINAGE AREA.--106 mi^2.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1929. Datum of gage is 398.78 ft above sea level. Prior to June 22, 1926, nonrecording gage at site 10 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Several measurements of water temperature were made during the year. Some regulation from unknown sources upstream.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0030	*1,500	*4.90	Dec. 14	1600	1,250	4.43
Nov. 9	0900	959	3.83	Dec. 25	0415	670	3.17
Nov. 26	1515	724	3.30	Jan. 28	1615	695	3.23
Dec. 2	1215	1,340	4.60	Mar. 31	1915	682	3.20
Dec. 8	0430	1,160	4.24				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	201	463	318	241	e165	570	165	100	52	48	43
2	87	189	1250	293	249	e160	595	168	126	53	46	48
3	91	182	1130	286	249	e180	539	213	240	55	45	41
4	81	171	902	290	244	e175	461	295	191	53	43	35
5	75	160	704	285	412	e180	418	245	144	50	52	34
6	70	152	838	280	368	e240	380	215	121	50	50	32
7	67	152	938	255	289	e260	355	198	110	48	47	32
8	83	174	1100	235	252	e240	318	184	104	46	43	31
9	213	799	928	217	234	e210	291	185	97	60	40	31
10	175	542	785	211	218	e200	269	191	90	126	39	32
11	143	413	682	209	202	e220	253	181	87	78	37	46
12	115	333	715	194	192	e190	247	165	83	64	35	83
13	112	287	694	179	183	e160	357	155	81	57	34	81
14	98	264	1160	186	190	e170	307	149	81	51	35	61
15	88	241	1110	174	225	e490	265	142	78	48	34	57
16	85	222	945	191	223	e430	240	136	72	48	33	43
17	81	206	836	235	199	e380	228	131	71	45	35	39
18	78	198	764	174	186	e270	296	128	72	45	66	35
19	502	200	698	159	192	e245	307	139	100	55	68	34
20	1480	197	620	155	209	e230	264	204	85	46	63	33
21	1330	184	502	156	205	e215	237	163	77	42	93	32
22	1080	175	420	153	e230	e240	219	137	71	69	76	31
23	675	166	388	185	e245	e200	210	124	66	62	61	31
24	476	163	417	185	e215	e180	198	116	63	120	52	30
25	384	155	643	441	e180	e170	190	127	64	177	45	31
26	324	467	534	352	e160	e190	183	156	60	112	41	34
27	280	432	450	246	e160	e220	175	128	58	81	38	35
28	258	327	404	456	e170	189	227	124	57	83	38	33
29	250	266	381	376	---	177	222	109	55	72	40	35
30	236	239	375	270	---	173	192	101	54	59	37	33
31	219	---	353	238	---	444	---	100	---	51	35	---
TOTAL	9330	7857	22129	7584	6322	7193	9013	4974	2758	2058	1449	1196
MEAN	301	262	714	245	226	232	300	160	91.9	66.4	46.7	39.9
MAX	1480	799	1250	456	412	490	595	295	240	177	93	83
MIN	67	152	353	153	160	160	175	100	54	42	33	30
CFSM	2.84	2.47	6.73	2.31	2.13	2.19	2.83	1.51	.87	.63	.44	.38
IN.	3.27	2.76	7.77	2.66	2.22	2.52	3.16	1.75	.97	.72	.51	.42

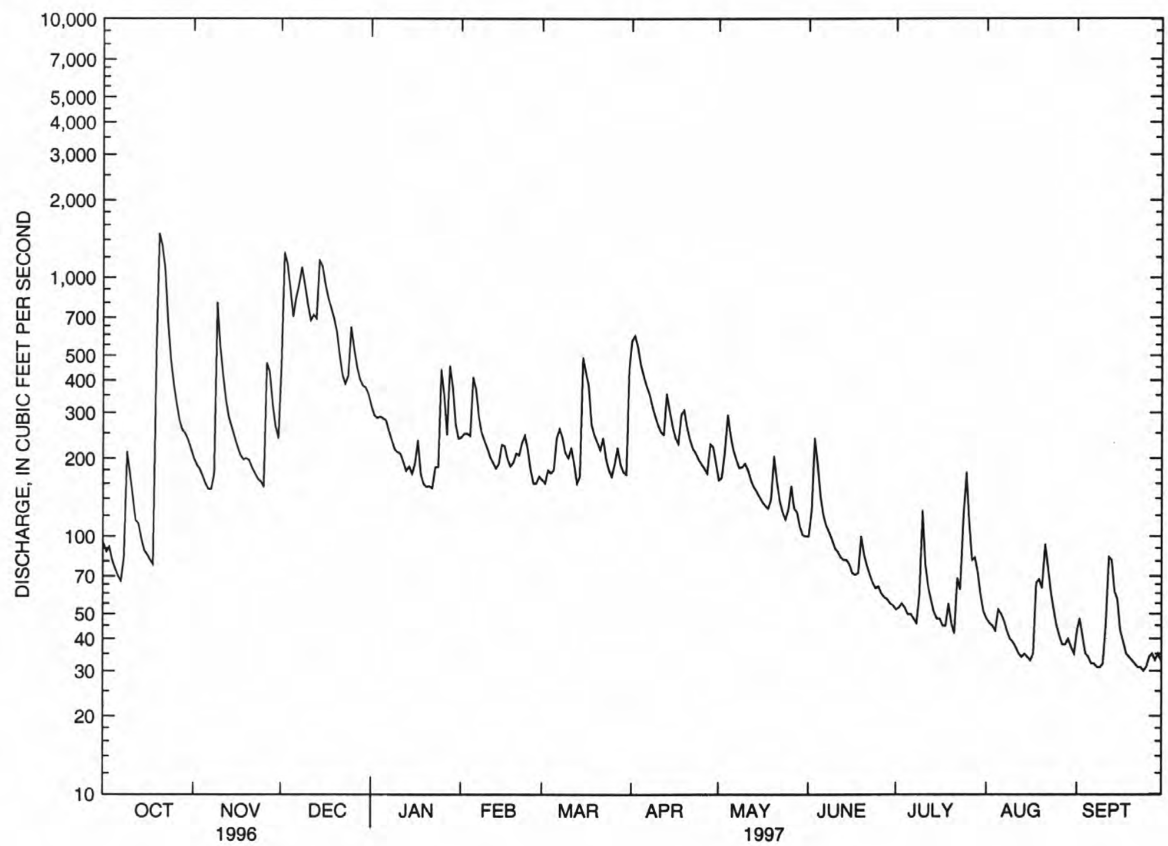
01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

MEAN	89.3	131	167	173	198	279	265	186	128	105	90.9	88.2
MAX	391	409	714	627	372	750	720	430	556	487	409	354
(WY)	1990	1928	1997	1979	1939	1936	1983	1989	1972	1945	1928	1989
MIN	18.0	21.4	27.0	33.9	60.8	93.8	76.9	55.7	35.0	19.0	15.1	16.6
(WY)	1965	1966	1966	1966	1940	1965	1985	1965	1965	1965	1965	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	108103		81863			
ANNUAL MEAN	295		224		158	
HIGHEST ANNUAL MEAN					285	1952
LOWEST ANNUAL MEAN					45.8	1965
HIGHEST DAILY MEAN	1480	Jan 28	1480	Oct 20	2040	Jan 25 1979
LOWEST DAILY MEAN	49	Jan 7	30	Sep 24	12	Aug 18 1965
ANNUAL SEVEN-DAY MINIMUM	53	Aug 31	32	Sep 19	13	Aug 15 1965
INSTANTANEOUS PEAK FLOW			1500	Oct 20	2130	Jan 25 1979
INSTANTANEOUS PEAK STAGE			4.90	Oct 20	5.97a	Jan 25 1979
INSTANTANEOUS LOW FLOW			30	Many days	12	Aug 17 1965
ANNUAL RUNOFF (CFSM)	2.79		2.12		1.49	
ANNUAL RUNOFF (INCHES)	37.94		28.73		20.25	
10 PERCENT EXCEEDS	695		462		330	
50 PERCENT EXCEEDS	213		175		112	
90 PERCENT EXCEEDS	75		41		36	

a From high-water mark.
e Estimated.



01445500 PEQUEST RIVER AT PEQUEST, NJ, DAILY MEAN DISCHARGE

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-80, 1991 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
28...	1200	256	447	8.1	13.0	747	9.5	92	<1.4	220	60	210
JAN 1997												
22...	1100	147	530	8.0	1.5	758	13.5	97	<1.0	80	20	240
APR												
09...	1200	291	437	8.3	9.0	752	11.6	102	2.1	130	<10	200
JUN												
04...	1100	193	438	8.2	13.5	750	9.7	95	E1.5	5400	390	200
AUG												
04...	1200	45	546	8.3	17.0	748	8.7	92	<1.0	110	80	240

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
28...	48	21	13	1.7	188	20	25	<.1	9.6	230	255	11
JAN 1997												
22...	54	25	15	1.5	197	21	27	<.1	8.0	278	277	10
APR												
09...	46	21	16	1.4	176	18	30	<.1	4.4	254	246	<1
JUN												
04...	46	22	14	1.4	176	17	25	<.1	6.6	262	241	15
AUG												
04...	55	25	18	3.1	204	22	39	<.1	7.7	320	300	5

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
28...	.008	.91	.06	.03	.5	.41	1.4	1.3	.05	.04	5.2	.6
JAN 1997												
22...	.010	1.7	.05	<.03	.4	.23	2.1	1.9	.03	<.01	2.0	.7
APR												
09...	.003	.80	<.03	<.03	.3	.29	1.1	1.1	.02	<.01	3.3	.5
JUN												
04...	.019	.95	.06	.05	.7	.75	1.6	1.7	.07	.02	5.8	1.2
AUG												
04...	.058	1.7	.09	.08	.4	.28	2.0	2.0	.08	.07	2.6	.3

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
28...	1200	--	10	--	--	--	<1	--	<10	20	<1
28...	1200	7.5	--	.7	200	390	--	2	--	--	--
JUN 1997											
04...	1100	--	10	--	--	--	<1	--	<10	20	<1

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)
OCT 1996										
28...	--	<1.0	--	--	1	--	340	--	<1	--
28...	<1	--	7	<5	--	4.0	--	11000	--	<10
JUN 1997										
04...	--	<1.0	--	--	1	--	530	--	<1	--

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)
OCT 1996										
28...	40	--	<.1	--	<1	--	<1	--	<10	--
28...	--	320	--	<.01	--	<10	--	<1	--	40
JUN 1997										
04...	60	--	<.1	--	1	--	<1	--	<10	--

DATE	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)
OCT 1996										
28...	--	--	--	--	--	--	--	--	--	--
28...	8.4	12	<2	<1	<.1	<1	.2	.2	.2	<.1
JUN 1997										
04...	--	--	--	--	--	--	--	--	--	--

DATE	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
28...	--	--	--	--	--	--	--	--	--	--
28...	<.1	<.1	<.1	<.1	<.1	<1.4	<.1	<1	<10	1
JUN 1997										
04...	--	--	--	--	--	--	--	--	--	--

01446500 DELAWARE RIVER AT BELVIDERE, NJ

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

DRAINAGE AREA.--4,535 mi^2.

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. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River basin, reservoirs in) and smaller reservoirs. Diversions from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River basin, diversions). 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 ft^3/s, from rating curve extended above 170,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6500	7580	13600	14800	6300	17000	24700	7830	4350	2310	2000	2360
2	5560	7130	40700	12600	5850	14800	24400	7750	4360	2260	2280	2400
3	4810	6650	75800	12600	5270	15300	22900	7600	5190	2240	2310	2410
4	4290	5900	50500	12500	5570	17600	24100	9950	6420	2390	2360	2180
5	3920	5680	35300	12100	8010	15300	25300	14300	5570	2520	2370	1780
6	3570	5200	30800	12000	8910	15700	24500	13100	4750	2070	2250	1840
7	2750	5180	29700	12100	8490	21400	22900	12000	4100	2060	2300	1560
8	3290	5440	29700	11300	7650	18800	21500	11700	3660	2090	2320	1710
9	5770	29900	26000	9750	6560	15400	19300	10900	3440	2410	2040	1800
10	6940	64300	21800	9030	6020	13800	17100	10300	3260	3060	2010	1930
11	6290	43900	18900	9130	5550	14000	14600	10400	3360	2900	1920	4050
12	6110	33400	18300	8430	5230	13200	13200	10200	3300	2530	1740	8260
13	5070	25500	22700	7900	4990	11900	13200	9900	3190	2290	1740	7230
14	4320	20500	38600	7470	5170	11400	13200	9170	3140	2410	2010	5440
15	4330	17400	43200	7180	5190	14100	12300	8520	2630	2680	2360	3960
16	4130	15100	34900	7720	4700	13500	10900	7920	2690	2430	2550	3080
17	3550	12700	30100	6540	4520	11700	9830	7070	2560	2330	2720	3120
18	3410	11000	29500	5400	4600	10400	9510	6720	2590	2200	3470	2900
19	7470	10700	31700	4940	5060	9920	9650	6510	3080	2370	3350	2730
20	29500	11600	30400	5150	6290	9390	8920	7470	2870	2050	2760	2560
21	27900	12000	25400	5970	7790	9130	8230	11900	2760	2190	3090	2290
22	22900	11200	21400	6670	9770	8820	8070	11400	2810	2290	2980	2280
23	18400	10200	19100	6940	17000	8130	7830	10000	2750	2170	2650	2110
24	15500	9200	18000	6480	20000	8190	6930	8930	2570	2860	2100	2280
25	14600	8590	20300	8660	17100	7360	6750	8080	2670	2800	2070	2040
26	12900	10600	21600	7690	14500	8300	6620	8010	2560	2250	1970	1970
27	9860	14100	18700	6070	13200	9760	5930	7600	2940	2040	1990	1960
28	8930	14700	16500	6630	14000	10800	6190	6780	2540	2360	2030	1940
29	8550	12900	15600	6840	---	10600	8320	5990	2650	2420	2190	2010
30	8320	11500	14800	6090	---	11800	8960	5100	2630	2230	2920	2020
31	7970	---	16100	6370	---	15700	---	4780	---	2090	2460	---
TOTAL	277410	459750	859700	263050	233290	393200	415840	277880	101390	73300	73310	84200
MEAN	8949	15330	27730	8485	8332	12680	13860	8964	3380	2365	2365	2807
MAX	29500	64300	75800	14800	20000	21400	25300	14300	6420	3060	3470	8260
MIN	2750	5180	13600	4940	4520	7360	5930	4780	2540	2040	1740	1560

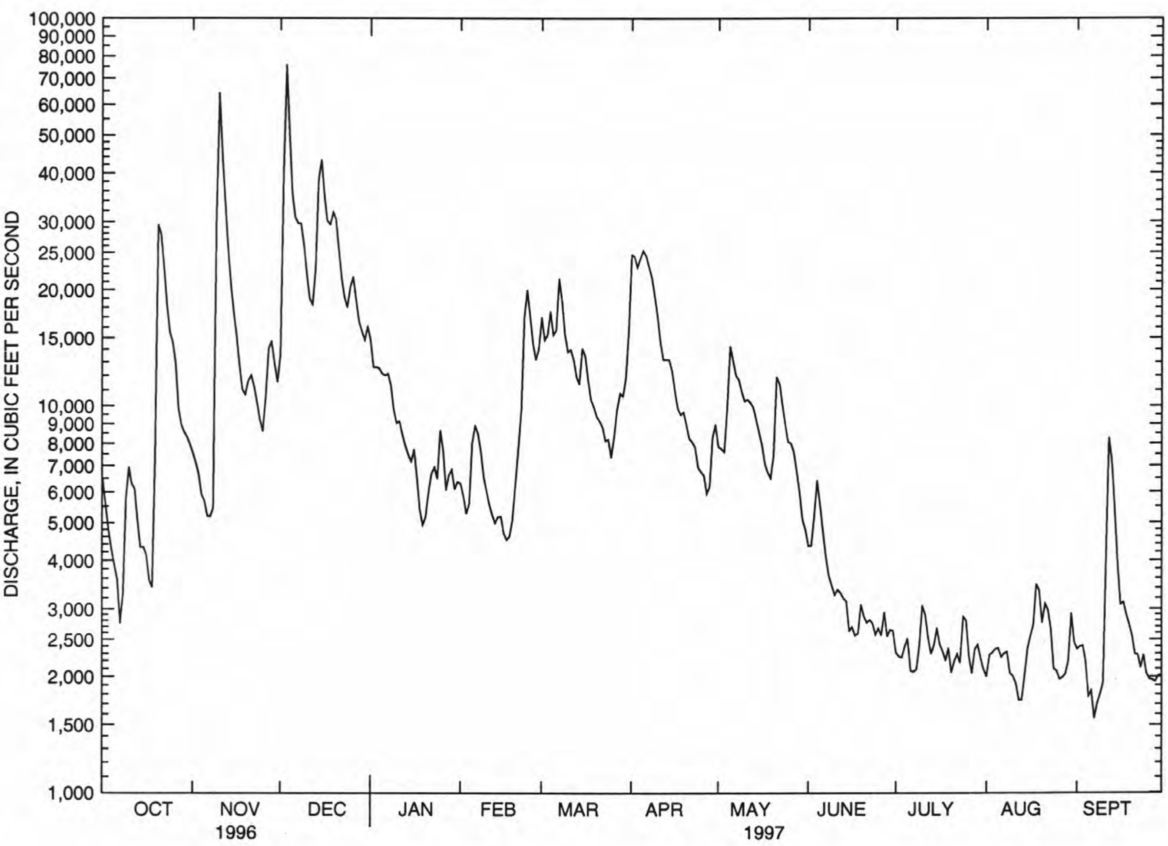
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4677	7305	8581	8043	8357	13940	15930	9896	5866	4316	3662	3768
MAX	19570	21140	27730	21020	19930	42520	40720	21470	22280	16840	19260	13940
(WY)	1956	1928	1997	1996	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

01446500 DELAWARE RIVER AT BELVIDERE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1923 - 1997	
ANNUAL TOTAL	4750540		3512320			
ANNUAL MEAN	12980		9623		7854	
HIGHEST ANNUAL MEAN					14130	1928
LOWEST ANNUAL MEAN					2990	1965
HIGHEST DAILY MEAN	111000	Jan 20	75800	Dec 3	184000	Aug 19 1955
LOWEST DAILY MEAN	2080	Sep 2	1560	Sep 7	610	Aug 25 1954
ANNUAL SEVEN-DAY MINIMUM	2370	Aug 31	1830	Sep 4	782	Aug 14 1954
INSTANTANEOUS PEAK FLOW			85000	Dec 3	273000a	Aug 19 1955
INSTANTANEOUS PEAK STAGE			16.49	Dec 3	30.21b	Aug 19 1955
INSTANTANEOUS LOW FLOW			1450	Sep 7	609	Sep 28 1943
10 PERCENT EXCEEDS	29400		21400		16600	
50 PERCENT EXCEEDS	9230		6940		5020	
90 PERCENT EXCEEDS	3240		2220		1940	

a From rating curve extended above 170,000 ft^3/s on basis of flood-routing study.
b From high-water mark in gage house.



01446500 DELAWARE RIVER AT BELVIDERE, NJ, DAILY MEAN DISCHARGE

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 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
20...	1145	11500	117	7.6	6.0	750	12.1	99	<1.1	20	10	37
JAN 1997												
28...	1100	6600	--	7.9	1.5	753	13.4	--	2.6	16000	14000	54
APR												
15...	1145	14100	113	7.7	9.0	762	10.6	92	<1.0	20	<10	35
JUN												
10...	1130	3510	150	8.1	21.5	758	8.6	98	E2.3	130	20	50
AUG												
06...	1145	2570	173	7.8	24.5	757	7.4	89	<1.8	90	60	56

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
20...	10	2.8	6.1	1.1	28	10	8.9	<.1	4.0	66	62	2
JAN 1997												
28...	15	3.9	25	1.3	36	12	37	<.1	3.6	126	123	5
APR												
15...	9.6	2.7	6.6	.69	25	9.8	11	<.1	2.4	63	59	<1
JUN												
10...	14	3.8	8.2	.91	37	12	13	<.1	1.8	84	78	1
AUG												
06...	15	4.2	10	1.1	39	17	13	<.1	1.7	96	89	2

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
20...	<.003	.46	<.03	<.03	.2	.06	.61	.52	.02	.01	2.8	.3
JAN 1997												
28...	.009	.70	.09	.10	.3	.25	1.0	.95	.04	.04	2.3	.7
APR												
15...	<.003	.36	<.03	<.03	.2	.15	.58	.51	.02	.02	2.1	.5
JUN												
10...	.005	.45	<.03	<.03	.2	.20	.68	.65	.01	<.01	2.2	.5
AUG												
06...	.004	.52	<.03	--	.2	.18	.75	.70	.03	.02	2.2	.3

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
20...	1145	<10	<1	<10	20	<1	<1.0	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
20...	140	<1	30	<.1	<1	<1	<10

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 mi^2.

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.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Francis E. Walter Reservoir (station 01447780), Penn Forest Reservoir (station 01449400), Wild Creek Reservoir (station 01449700), and since February 1971, by Beltzville Lake (station 01449790) about 60 mi upstream. Flows above 10,000 ft^3/s may be affected by backwater from the Delaware River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1270	2560	5300	4130	2570	3120	e4800	e2200	1660	1000	809	1050
2	1200	2400	25200	3940	2810	3070	e5100	e2100	2090	1160	770	1220
3	1110	2210	16200	3670	2970	3170	e5400	e2200	3150	1350	725	1000
4	961	2130	15700	3470	3030	3140	5630	e2600	3070	1270	754	933
5	1120	2000	11800	3350	5770	3070	5760	e2600	2570	1070	962	878
6	1350	1870	13000	3390	5660	3690	5540	e2700	2340	994	802	824
7	989	1840	11700	3210	4150	3920	5290	e2550	2130	932	721	761
8	1220	2350	11400	2940	3410	3680	4710	e2300	1990	903	691	756
9	2160	17100	9130	2760	3030	3560	4170	e2400	1810	1040	655	867
10	2040	12500	7590	2700	2780	3480	3620	e2500	1630	1310	661	894
11	1840	14900	6580	2450	2480	3560	3230	e2450	1590	1000	656	3930
12	1630	10900	6450	2080	2380	e3200	3270	e2200	1480	908	706	4170
13	1540	7560	8560	2000	2300	e3000	3860	e2050	1420	956	800	3290
14	1500	5570	18900	1980	2350	e3750	3390	e2050	1490	876	889	2870
15	1350	4920	14200	1910	2530	e6400	3290	e1900	1700	866	755	2590
16	1240	4130	15800	2420	2710	e5400	3130	e1750	1480	828	695	2120
17	1130	3780	12600	2310	2330	e4750	2880	e1750	1240	803	1230	1700
18	1060	3650	10500	1770	2180	e4700	2680	e1850	e1250	786	1330	1430
19	13100	3520	9630	1740	2180	e4200	2470	e1800	1820	909	2140	1300
20	22300	3240	8230	1810	2590	3810	2330	e2100	1620	928	1960	1290
21	13800	3170	6630	1940	2940	3580	2280	2090	1370	865	3280	1480
22	14000	3320	6000	1910	3150	3230	2110	1900	1260	1430	2090	1130
23	9500	2900	5070	2320	4230	3010	2120	1830	1200	1160	1670	1070
24	6770	2490	4970	2400	4130	2820	2060	1780	1150	3760	1560	1060
25	5400	2350	5880	6440	4450	2820	2100	2130	1130	2710	1330	1020
26	4340	4810	5000	4630	4000	3130	1950	2520	1160	1560	1020	1000
27	3830	5050	6210	3070	3460	3330	e1900	2040	1130	1210	964	976
28	3650	4070	5100	4650	3370	3070	e2400	1850	1110	1040	1060	922
29	3040	3670	4720	4560	---	3070	e2600	1780	1300	958	1370	1010
30	3030	3570	4820	3150	---	3020	e2300	1690	1250	881	1010	999
31	2830	---	4500	2750	---	e4250	---	1620	---	853	1010	---
TOTAL	130300	144530	297370	91850	89940	112000	102370	65280	49590	36316	35075	44540
MEAN	4203	4818	9593	2963	3212	3613	3412	2106	1653	1171	1131	1485
MAX	22300	17100	25200	6440	5770	6400	5760	2700	3150	3760	3280	4170
MIN	961	1840	4500	1740	2180	2820	1900	1620	1110	786	655	756

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2020	2826	3589	3086	3255	4287	4548	3476	2548	1917	1514	1698
MAX	5272	5438	9593	8414	5385	8344	10810	8542	7607	4641	4179	7920
(WY)	1977	1971	1997	1996	1976	1977	1993	1989	1972	1984	1969	1987
MIN	771	835	633	405	1278	1805	1639	1502	1104	811	711	660
(WY)	1981	1985	1981	1981	1980	1981	1985	1995	1987	1991	1980	1983

01454700 LEHIGH RIVER AT GLENDON, PA--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1967 - 1997	
ANNUAL TOTAL	1670280		1199161			
ANNUAL MEAN	4564		3285		2894	
HIGHEST ANNUAL MEAN					3997	1984
LOWEST ANNUAL MEAN					1594	1985
HIGHEST DAILY MEAN	38800	Jan 20	25200	Dec 2	44300	Jun 23 1972
LOWEST DAILY MEAN	741	Sep 16	655	Aug 9	330	Jan 31 1981a
ANNUAL SEVEN-DAY MINIMUM	843	Aug 31	699	Aug 7	349	Jan 26 1981
INSTANTANEOUS PEAK FLOW			b32000	Dec 2	b60600	Jun 23 1972
INSTANTANEOUS PEAK STAGE			18.70	Dec 2	24.86	Jun 23 1972
10 PERCENT EXCEEDS	9950		5810		5730	
50 PERCENT EXCEEDS	3280		2350		2100	
90 PERCENT EXCEEDS	1080		947		900	

a Also Feb. 1, 1981.
b From rating curve extended above 36,000 ft^3/s.
e Estimated.

01455200 POHATCONG CREEK AT NEW VILLAGE, NJ

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

DRAINAGE AREA.--33.3 mi^2.

PERIOD OF RECORD.--Water years 1959, 1962, 1979 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
29...	1200	42	--	8.1	11.0	751	10.1	--	E1.3	490	110	84
JAN 1997												
21...	1130	68	267	8.2	0.5	758	13.6	95	E1.3	70	20	94
APR												
09...	1100	52	220	--	7.0	752	12.2	102	E2.2	20	20	75
JUN												
05...	1100	41	230	7.8	14.5	754	9.2	91	E1.2	2200	130	86
AUG												
04...	1100	20	299	8.6	21.0	751	9.1	104	E1.1	700	210	110

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
29...	20	8.3	9.4	2.2	59	17	17	<.1	16	114	134	5
JAN 1997												
21...	22	9.6	11	1.5	63	17	18	<.1	15	144	145	3
APR												
09...	18	7.4	9.7	1.3	52	16	18	<.1	11	125	120	<1
JUN												
05...	20	8.5	10	1.5	59	15	18	.1	13	135	131	6
AUG												
04...	25	11	13	2.2	84	16	23	<.1	12	195	163	6

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
29...	.031	1.9	.13	.12	.4	.35	2.3	2.3	.10	.09	2.5	.5
JAN 1997												
21...	.010	2.8	.31	.28	.5	.51	3.3	3.3	.09	.06	1.1	.4
APR												
09...	.012	1.6	.03	<.03	.1	.16	1.8	1.8	.04	.02	1.5	.3
JUN												
05...	.057	1.9	.30	.18	.5	.43	2.4	2.3	.09	.08	2.3	.6
AUG												
04...	.040	2.7	<.03	<.03	.2	.21	2.9	2.9	.16	.15	2.0	.3

01455200 POHATCONG CREEK AT NEW VILLAGE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
29...	1200	--	<10	--	--	--	<1	--	<10	20	<1
29...	1200	7.2	--	.7	200	400	--	2	--	--	--

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 1996											
29...	--	<1.0	--	--	2	--	490	--	2	--	30
29...	<1	--	5	<5	--	7.0	--	8500	--	<10	--

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
OCT 1996										
29...	--	<.1	--	<1	--	<1	--	<10	--	--
29...	99	--	.03	--	<10	--	<1	--	30	.2

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)
OCT 1996										
29...	--	--	--	--	--	--	--	--	--	--
29...	2.8	3	<1	<.1	<1	<.1	.1	<.1	<.3	<.1

DATE	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
29...	--	--	--	--	--	--	--	--	--	--
29...	<.1	<.1	<.1	<.1	<2.3	<.1	<1	<10	.4	1

01456200 MUSCONETCONG RIVER AT BEATTYSTOWN, NJ

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

DRAINAGE AREA.--90.3 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
29...	1200	370	310	7.7	12.0	750	9.8	92	E1.4	70	40	88
JAN 1997												
23...	1100	185	416	8.0	2.5	746	13.4	100	E1.2	130	50	130
APR												
10...	1200	295	348	8.2	7.5	756	12.3	103	E1.3	20	<10	100
JUN												
10...	1100	120	411	8.0	17.0	752	9.2	97	E1.1	170	70	140
AUG												
11...	1100	52	475	8.3	19.5	754	9.6	106	<1.0	170	130	190

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
29...	21	8.6	25	1.5	64	14	47	<.1	7.6	152	166	5
JAN 1997												
23...	29	14	29	1.5	91	19	52	<.1	9.2	216	216	1
APR												
10...	23	11	28	1.3	71	15	52	<.1	6.0	187	183	<1
JUN												
10...	30	16	27	1.7	105	17	50	<.1	7.6	233	220	4
AUG												
11...	39	23	26	1.8	139	16	55	<.1	6.3	273	259	1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
29...	.006	.75	.04	.05	.3	--	1.0	--	.02	.01	3.5	.5
JAN 1997												
23...	.006	1.8	<.03	<.03	.2	.23	2.0	2.0	.01	<.01	2.2	.4
APR												
10...	.005	.98	<.03	<.03	.2	.19	1.2	1.2	.03	<.01	2.8	.4
JUN												
10...	.010	1.6	<.03	<.03	.3	.27	1.9	1.9	.01	<.01	2.6	.4
AUG												
11...	.010	2.2	--	--	.3	.28	2.4	2.4	.02	.01	2.5	.4

01456200 MUSCONETCONG RIVER AT BEATTYSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
29...	1200	--	<10	--	--	--	<1	--	<10	20	<1
29...	1200	7.3	--	1.1	300	460	--	3	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
OCT 1996											
29...	--	<1.0	--	--	1	--	170	--	<1	--	30
29...	<1	--	10	<5	--	10	--	22000	--	20	--

DATE	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
OCT 1996										
29...	--	<.1	--	<1	--	<1	--	<10	--	--
29...	320	--	.01	--	<10	--	<1	--	60	.7

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39368)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)
OCT 1996										
29...	--	--	--	--	--	--	--	--	--	--
29...	6.0	21	<1	<.1	2	.2	.3	.2	<.4	<.1

DATE	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39758)	PER- THANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (81886)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
29...	--	--	--	--	--	--	--	--	--	--
29...	<.1	<.1	<.1	<.1	<4.0	<.1	<1	<10	1	2

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ

LOCATION.--Lat 40°40'20", long 75°03'40", Warren County, Hydrologic Unit 02040105, on right bank just downstream from bridge on Limekiln Road (Person Road), 1.5 mi southwest of Bloomsbury, and 9.5 mi upstream from mouth.

DRAINAGE AREA.--141 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1051: 1944-45. WSP 1382: 1904-06, 1922, 1923-29(M), 1931(M), 1933-34(M), 1936(M), 1940, 1942(M), 1944- 45(M), 1951-52(M). WDR NJ-82-2: Drainage area.

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow occasionally regulated by Lake Hopatcong (see Delaware River basin, reservoirs in). Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0215	*3,680	*6.39	Dec. 6	1145	1,400	4.23
Nov. 9	0530	1,340	4.15	Dec. 8	0030	1,600	4.52
Nov. 26	1315	1,050	3.68	Dec. 14	0345	2,100	5.06
Dec. 2	1115	2,690	5.62				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	444	716	425	e320	248	582	289	160	108	102	90
2	147	434	2030	412	e340	252	572	276	217	116	95	90
3	148	390	1410	356	e350	251	576	315	384	137	88	83
4	139	357	1080	e360	e360	268	589	401	307	130	88	92
5	130	345	899	e370	e537	268	582	358	255	116	106	122
6	125	357	1160	e360	560	317	544	334	228	111	99	168
7	121	383	1170	e360	485	297	508	338	212	106	94	134
8	160	421	1330	e350	415	265	471	310	200	107	86	123
9	299	823	1110	e340	370	245	434	318	187	109	82	123
10	261	597	978	e320	354	262	411	315	178	180	76	118
11	226	585	910	302	343	287	381	289	164	137	78	183
12	199	556	923	282	315	267	393	270	152	122	79	399
13	187	561	990	286	294	243	498	253	149	110	77	309
14	181	553	1690	269	330	362	442	245	150	104	80	255
15	172	497	1200	257	385	527	389	229	141	103	77	243
16	181	431	1120	331	356	413	362	217	142	104	79	247
17	190	411	1050	317	318	357	344	204	140	100	96	260
18	194	405	972	289	296	325	440	197	158	106	115	257
19	1490	396	963	263	298	304	433	204	253	127	114	254
20	2590	381	906	255	305	287	391	320	221	98	111	248
21	1680	368	902	260	299	275	356	274	181	102	175	241
22	1210	366	806	288	302	272	336	231	162	164	135	214
23	903	348	767	333	295	257	321	212	149	131	107	174
24	741	338	742	e400	284	242	308	197	139	359	96	165
25	626	338	733	e480	272	237	299	209	137	334	89	172
26	552	689	717	e450	251	270	283	241	131	208	84	166
27	483	596	700	e400	256	284	274	209	125	149	79	159
28	466	531	659	e360	247	255	360	190	118	155	92	154
29	483	489	644	e440	---	243	364	178	114	139	86	164
30	484	453	625	e370	---	234	310	171	111	107	83	161
31	458	---	489	e340	---	440	---	165	---	102	80	---
TOTAL	15386	13843	30391	10625	9537	9054	12553	7959	5365	4281	2928	5568
MEAN	496	461	980	343	341	292	418	257	179	138	94.5	186
MAX	2590	823	2030	480	560	527	589	401	384	359	175	399
MIN	121	338	489	255	247	234	274	165	111	98	76	83

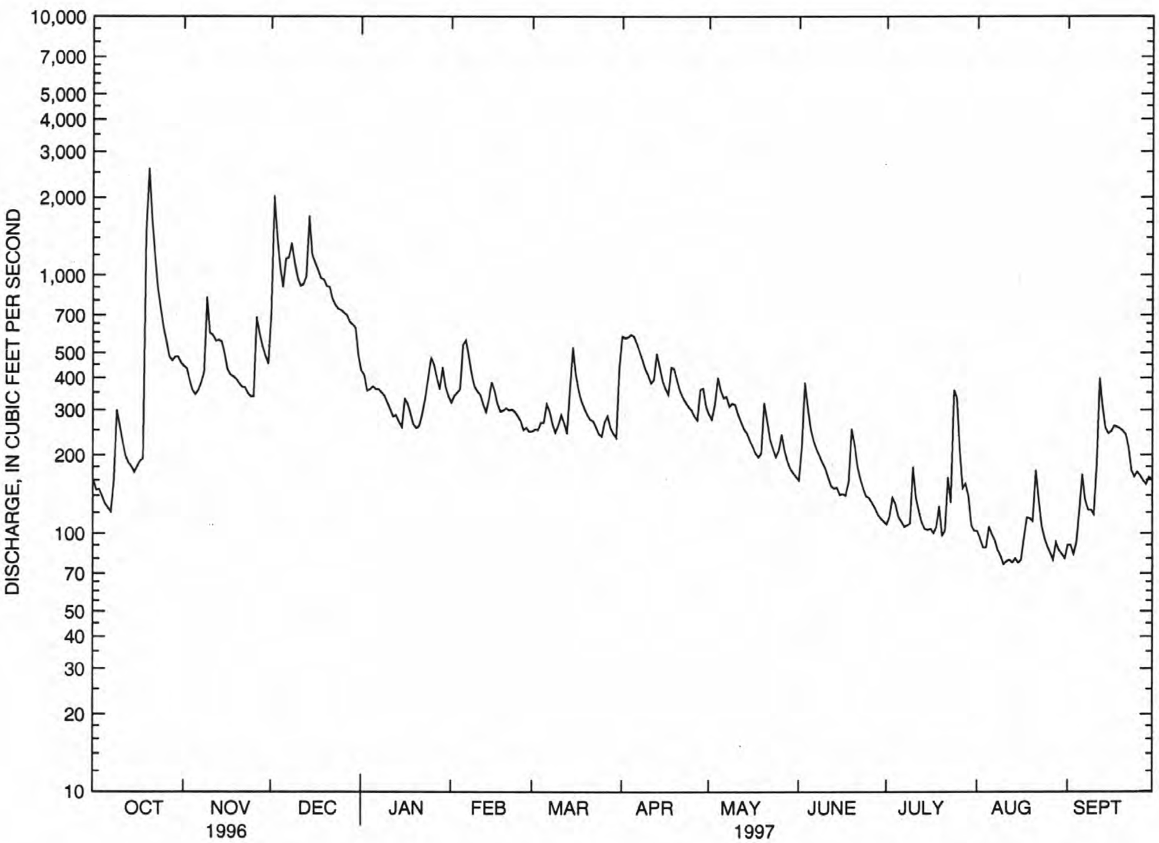
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	178	233	274	267	279	348	356	274	197	162	150	158
MAX	770	701	980	924	582	935	1027	680	843	659	583	454
(WY)	1904	1928	1997	1979	1973	1936	1983	1989	1972	1975	1928	1960
MIN	41.2	61.2	57.3	73.7	99.4	127	103	98.1	56.8	38.1	38.5	37.3
(WY)	1964	1966	1966	1977	1923	1965	1985	1965	1965	1965	1965	1965

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1904 - 1997	
ANNUAL TOTAL	160178		127490			
ANNUAL MEAN	438		349		240	
HIGHEST ANNUAL MEAN					425	1928
LOWEST ANNUAL MEAN					82.6	1965
HIGHEST DAILY MEAN	2590	Oct 20	2590	Oct 20	5850	Oct 10 1903
LOWEST DAILY MEAN	71	Jan 16	76	Aug 10	27	Sep 8 1966
ANNUAL SEVEN-DAY MINIMUM	78	Jan 12	78	Aug 10	32	Aug 28 1966
INSTANTANEOUS PEAK FLOW			3680	Oct 20	7200a	Jan 25 1979
INSTANTANEOUS PEAK STAGE			6.39	Oct 20	8.50b	Jan 25 1979
INSTANTANEOUS LOW FLOW			73	Aug 10	8.1	Aug 2 1955
10 PERCENT EXCEEDS	884		650		462	
50 PERCENT EXCEEDS	367		282		183	
90 PERCENT EXCEEDS	116		106		77	

a From rating curve extended above 1,800 ft^3/s on basis of slope-area measurement at gage height 6.95 ft.
b From floodmark.
e Estimated.



01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ, DAILY MEAN DISCHARGE

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-80, 1991 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
30...	1200	482	310	7.8	11.0	746	10.0	93	<1.0	110	60	98
JAN 1997												
22...	1100	246	398	8.5	2.0	755	13.8	101	<1.0	80	20	140
APR												
10...	1130	434	340	8.4	7.5	761	12.3	103	<1.0	<20	10	110
JUN												
11...	1100	165	384	8.2	18.0	754	9.4	100	<1.0	310	30	150
AUG												
11...	1100	78	418	8.8	19.0	757	10.0	109	E1.3	330	80	170

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
30...	23	9.9	21	1.4	75	15	41	<.1	8.7	158	171	5
JAN 1997												
22...	31	15	18	1.2	109	18	37	<.1	10	212	207	1
APR												
10...	25	11	22	1.3	81	15	41	<.1	7.1	187	177	<1
JUN												
11...	34	16	18	1.4	114	16	35	.1	8.1	218	205	<1
AUG												
11...	34	20	17	1.6	138	17	35	.1	3.9	239	222	1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
30...	<.003	1.3	<.03	<.03	.2	.24	1.5	1.5	.02	<.01	2.8	.4
JAN 1997												
22...	.005	2.5	<.03	<.03	.08	.04	2.6	2.5	<.01	<.01	1.3	.3
APR												
10...	.006	1.4	<.03	<.03	--	.17	--	1.5	<.01	.02	2.0	.4
JUN												
11...	.015	2.0	<.03	<.03	.2	.19	2.2	2.2	<.01	<.01	3.7	.7
AUG												
11...	.012	2.3	.04	.03	.2	.18	2.6	2.5	.03	.01	1.7	.7

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
30...	1200	--	<10	--	--	--	<1	--	<10	20	<1
30...	1200	7.4	--	4.0	200	450	--	4	--	--	--

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 1996											
30...	--	<1.0	--	--	<1	--	200	--	<1	--	20
30...	<1	--	8	10	--	20.0	--	24000	--	10	--

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
OCT 1996										
30...	--	<.1	--	<1	--	<1	--	<10	--	--
30...	670	--	.02	--	10	--	<1	--	50	8.4

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)
OCT 1996										
30...	--	--	--	--	--	--	--	--	--	--
30...	15	2	<1	<.1	<1	.1	.2	.1	<.1	<.1

DATE	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
30...	--	--	--	--	--	--	--	--	--	--
30...	<.1	<.1	<.1	<.1	<2.0	<.1	<1	<10	2	5

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ

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

DRAINAGE AREA.--156 mi^2.

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

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
30...	1130	370	332	7.8	11.5	746	10.2	96	<1.0	170	30	110
JAN 1997												
23...	1100	330	385	8.4	3.5	753	12.8	98	E1.7	1100	600	130
APR												
10...	1100	490	331	8.4	7.5	760	11.9	100	E1.2	70	10	110
JUN												
11...	1100	E180	376	8.0	19.0	757	8.8	96	E1.3	330	280	150
AUG												
12...	1100	E88	406	8.4	21.0	760	8.1	91	E1.1	490	90	170

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
30...	25	11	20	1.5	79	16	39	<.1	9.0	184	174	9
JAN 1997												
23...	30	14	20	2.1	100	18	38	<.1	9.7	204	202	17
APR												
10...	24	12	21	1.3	83	16	40	<.1	7.5	186	177	<1
JUN												
11...	33	16	17	1.5	115	18	33	<.1	8.1	228	206	13
AUG												
12...	37	20	17	1.7	134	19	32	<.1	2.4	244	219	1

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
30...	<.003	1.2	<.03	<.03	.3	.21	1.5	1.4	.02	.01	2.8	.6
JAN 1997												
23...	.009	2.3	<.03	<.03	.7	.51	3.0	2.8	.04	<.01	2.6	1.0
APR												
10...	.007	1.4	<.03	<.03	.4	.30	1.7	1.7	.01	<.01	2.1	--
JUN												
11...	.021	2.2	.05	<.03	.3	.29	2.5	2.5	.01	.02	3.5	.9
AUG												
12...	.043	2.2	.07	.06	.9	.69	3.1	2.9	<.01	<.01	1.9	.7

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
30...	1130	--	<10	--	--	--	<1	--	<10	20	<1
30...	1130	7.5	--	1.7	300	260	--	2	--	--	--

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 1996											
30...	--	<1.0	--	--	1	--	260	--	<1	--	20
30...	<1	--	9	<5	--	10	--	11000	--	20	--

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
OCT 1996										
30...	--	<.1	--	<1	--	<1	--	<10	--	--
30...	180	--	.03	--	<10	--	<1	--	40	.3

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)
OCT 1996										
30...	--	--	--	--	--	--	--	--	--	--
30...	5.3	2	<1	<.1	<1	.1	.3	.2	<.1	<.1

DATE	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
30...	--	--	--	--	--	--	--	--	--	--
30...	<.1	<.1	<.1	<.1	<.8	<.1	<1	<10	.6	2

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'36", long 75°11'17", Warren County, Hydrologic Unit 02040105, just upstream from suspension bridge at Riegelsville, 600 ft upstream from Musconetcong River (flow of which is included in the records for this station since Oct. 1, 1931). Datum of gage is 125.12 ft. National Geodetic Vertical Datum of 1929. Water-quality samples are collected from the bridge and do not include flow of the Museconetcong River.

DRAINAGE AREA.--6,328 mi^2.

PERIOD OF RECORD.--Water years 1934, 1943, 1950, 1960-79, 1991 to current year.

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
20...	1100	15400	132	--	6.0	753	12.3	100	<1.1	20	10	46
JAN 1997												
28...	1100	11800	248	7.8	1.5	756	13.6	98	E1.5	20	50	72
APR												
15...	1130	18100	141	8.1	9.5	762	11.4	100	<1.0	50	10	47
JUN												
11...	1130	5670	200	8.2	22.0	755	8.8	102	E1.6	70	<10	72
AUG												
06...	1200	3670	238	8.0	23.5	758	7.9	94	<1.5	210	30	82

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
20...	12	3.8	6.9	1.2	33	15	10	<.1	4.6	76	77	17
JAN 1997												
28...	19	5.9	18	1.5	46	20	28	<.1	5.3	138	132	<1
APR												
15...	13	3.8	7.3	.92	30	13	13	<.1	2.9	75	74	<1
JUN												
11...	19	6.1	10	1.2	49	19	15	<.1	2.9	120	106	<1
AUG												
06...	21	7.0	12	1.8	57	22	17	<.1	2.8	135	123	3

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
20...	.003	.88	<.03	<.03	--	.25	--	1.1	.06	.05	2.8	.3
JAN 1997												
28...	.008	1.4	.16	.17	.3	.34	1.7	1.7	.04	.03	1.9	.3
APR												
15...	.004	.64	<.03	<.03	.3	.17	.89	.81	.03	.02	2.0	.5
JUN												
11...	.012	.93	<.03	<.03	.2	.16	1.1	1.1	.02	<.01	2.4	.6
AUG												
06...	.012	1.2	.04	<.03	.2	.23	1.4	1.4	.10	.08	2.4	.3

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
NOV 1996								
20...	1100	10	<1	<10	10	<1	<1.0	<1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1996							
20...	110	<1	30	<.1	<1	<1	30

01460440 DELAWARE AND RARITAN CANAL AT PORT MERCER, NJ

LOCATION.--Lat 40°18'16", long 74°41'08", Mercer County, Hydrologic Unit 02040105, on right bank, 300 ft upstream from bridge on Province Line (Quaker Bridge) Road at Port Mercer.

PERIOD OF RECORD.--August 1990 to current year. Miscellaneous measurements made 1923, 1937-38, 1942-43, 1945, 1981, 1987-90.

GAGE.--Water-stage recorder and ultrasonic velocity meter. Datum of gage is sea level.

REMARKS.--Records good except for period of negative flow, which are poor. The canal diverts water from the Delaware River at Raven Rock and discharges into Raritan River at New Brunswick. Reverse flow can occur during periods of heavy precipitation due to waste gate operation upstream and inflow into canal downstream from gage. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

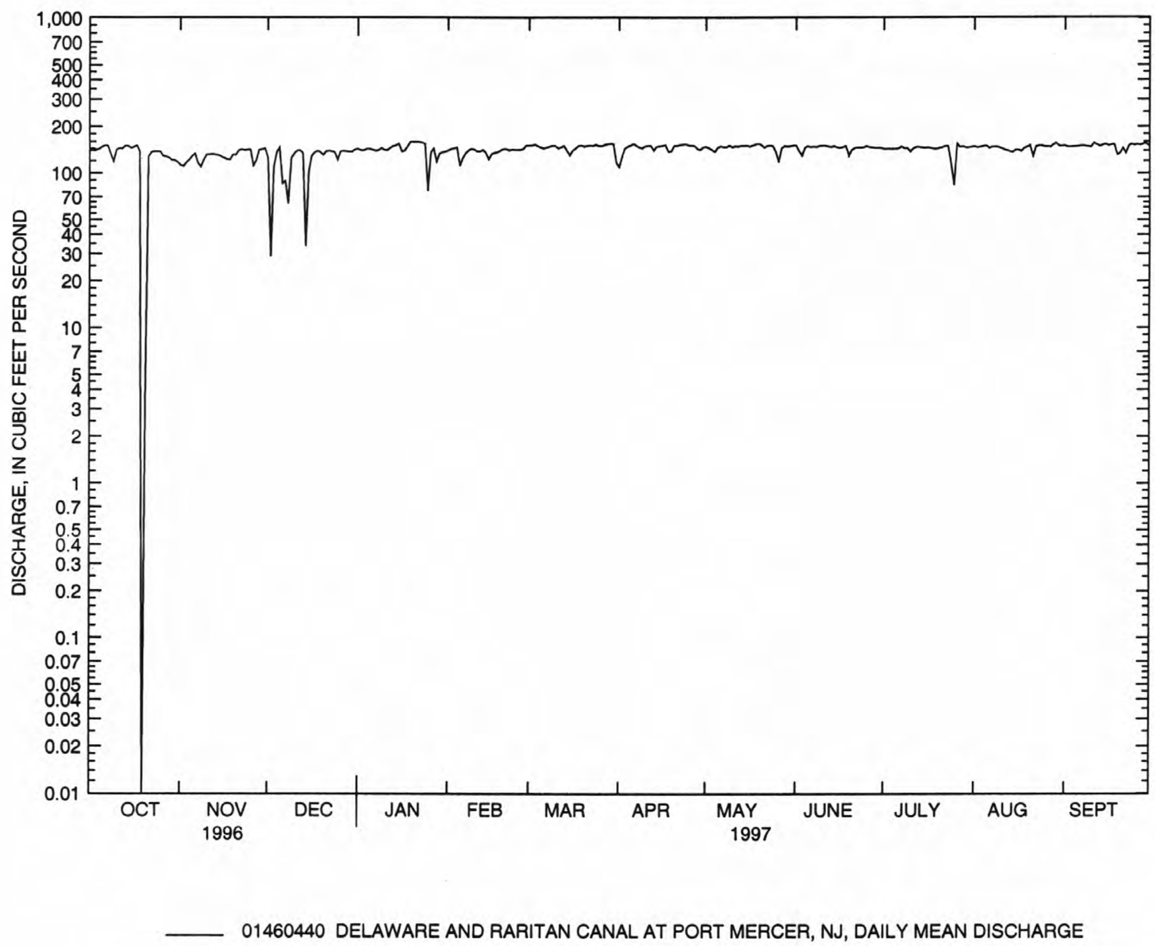
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	113	126	144	141	152	110	149	152	144	149	151
2	145	111	29	141	144	152	129	146	139	144	147	148
3	142	117	110	141	145	154	145	142	130	144	148	148
4	143	122	137	144	147	150	149	138	147	144	150	149
5	148	129	147	144	112	147	152	147	150	144	151	149
6	151	134	86	142	125	145	156	150	148	145	146	150
7	151	116	89	140	135	147	151	148	149	149	148	151
8	133	110	64	141	141	149	147	148	148	145	148	150
9	119	122	126	146	144	151	146	152	151	146	148	149
10	142	132	134	142	143	151	150	148	151	138	146	148
11	145	132	140	141	139	145	151	150	151	145	143	157
12	144	133	141	146	139	148	151	149	149	148	141	153
13	150	132	135	150	142	151	141	151	148	148	139	150
14	150	131	34	152	136	140	149	151	150	147	137	152
15	146	128	102	156	123	131	150	152	147	146	142	155
16	148	125	130	139	133	141	151	149	146	147	142	151
17	152	123	136	140	136	145	153	152	148	146	139	153
18	138	122	140	149	137	151	138	154	150	144	146	154
19	-97	132	137	160	140	152	139	156	130	144	148	132
20	3.4	131	131	160	144	149	151	153	142	146	152	135
21	128	141	139	160	144	151	151	147	146	147	129	146
22	137	143	140	160	141	152	153	151	147	150	149	135
23	139	141	139	158	143	151	154	152	147	150	151	150
24	139	142	137	156	142	154	155	150	147	114	151	155
25	138	143	122	77	142	150	152	138	150	84	149	152
26	129	112	139	137	142	150	152	118	148	156	149	154
27	128	121	140	145	144	153	151	146	147	148	148	152
28	126	142	139	119	152	155	144	150	146	149	153	155
29	121	143	138	134	---	156	142	149	146	147	157	156
30	121	145	138	137	---	156	148	150	146	147	150	150
31	118	---	143	138	---	117	---	152	---	148	150	---
TOTAL	3921.4	3868	3788	4439	3896	4596	4411	4588	4396	4444	4546	4490
MEAN	126	129	122	143	139	148	147	148	147	143	147	150
MAX	152	145	147	160	152	156	156	156	152	156	157	157
MIN	-97	110	29	77	112	117	110	118	130	84	129	132

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	131	130	127	128	131	122	130	143	142	144	142	141
MAX	155	151	143	143	143	148	147	150	156	154	152	155
(WY)	1991	1991	1996	1997	1995	1997	1997	1993	1993	1992	1992	1992
MIN	115	108	103	103	99.5	91.4	95.8	133	120	123	114	116
(WY)	1992	1992	1992	1992	1992	1992	1992	1994	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	44675.4		51383.4			
ANNUAL MEAN	122		141		134	
HIGHEST ANNUAL MEAN					143	1991
LOWEST ANNUAL MEAN					120	1992
HIGHEST DAILY MEAN	156	Jun 12	160	Jan 19	222	Aug 22 1990
LOWEST DAILY MEAN	-97	Oct 19	-97	Oct 19	-97	Oct 19 1996
ANNUAL SEVEN-DAY MINIMUM	67	Jan 15	84	Oct 18	67	Jan 15 1996
INSTANTANEOUS PEAK FLOW			291	Jul 9	291	Jul 9 1997
INSTANTANEOUS LOW FLOW			-563	Oct 19	-563	Oct 19 1996
10 PERCENT EXCEEDS	143		152		153	
50 PERCENT EXCEEDS	129		146		140	
90 PERCENT EXCEEDS	101		126		104	

01460440 DELAWARE AND RARITAN CANAL AT PORT MERCER, NJ--Continued



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 from Lockatong Creek.

DRAINAGE AREA.--6,598 mi^2.

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
21...	1100	15500	--	7.8	6.0	754	11.3	--	<1.3	50	20	49
JAN 1997												
29...	1045	15100	262	7.6	1.5	772	13.4	94	<1.0	1100	170	61
APR												
15...	1130	17300	160	8.2	10.0	768	12.3	108	<1.0	50	<10	48
JUN												
12...	1100	5050	215	8.1	22.0	754	7.9	91	3.0	<20	50	78
AUG												
06...	1200	3220	252	8.1	23.0	760	7.5	88	E1.6	130	20	91

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
21...	13	3.9	7.1	1.1	33	14	11	<.1	4.8	86	78	4
JAN 1997												
29...	16	5.1	22	1.6	42	17	35	<.1	5.4	140	133	22
APR												
15...	12	4.1	8.3	.95	33	13	14	<.1	3.0	84	79	2
JUN												
12...	20	6.8	11	1.3	54	19	16	.1	2.8	124	115	9
AUG												
06...	23	8.0	13	1.9	63	23	19	<.1	3.4	146	136	5

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
21...	.005	.77	<.03	<.03	.1	.10	.90	.87	.02	.02	2.5	.2
JAN 1997												
29...	.009	1.2	.12	.12	.4	.42	1.6	1.6	.08	.03	2.4	--
APR												
15...	.003	.66	<.03	<.03	.2	.17	.90	.83	.02	.02	2.1	.5
JUN												
12...	.014	1.1	<.03	<.03	.3	.21	1.4	1.3	.02	<.01	2.2	.6
AUG												
06...	.009	1.4	.04	.10	.3	.25	1.7	1.6	.09	.07	2.1	.3

01461000 DELAWARE RIVER AT LUMBERVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
NOV 1996								
21...	1100	<10	<1	<10	20	<1	<1.0	2

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1996							
21...	120	<1	20	<.1	1	<1	20

01463500 DELAWARE RIVER AT TRENTON, NJ

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

DRAINAGE AREA.--6,780 mi^2.

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.--Records fair except for estimated daily discharges, which are poor. 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 (see Delaware River basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs. Diversion to Bradshaw and Merrill Creek Reservoirs and to Delaware and Raritan Canal (see Delaware River basin, diversions). Water diverted just above station by borough of Morrisville, PA, and city of Trenton for municipal supply (see Delaware River basin, diversions). 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 sea level, discharge estimated, 295,000 ft^3/s. Maximum elevation since 1957, 30.6 ft above sea level, Mar. 8, 1904, from floodmark, due to ice jam.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	1100	71,600	16.05	Dec. 14	1045	80,500	16.74
Nov. 10	1445	84,200	17.01	Jan. 21	1500	62,400	15.12
Dec. 3	1530	*101,000	*17.88				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8420	11300	19100	22100	11200	20400	30500	12100	7050	3970	3240	3810
2	8000	10900	62700	19600	11300	20300	35000	11000	6870	3520	3060	3670
3	7070	10300	92100	18300	10600	18700	32400	11200	9840	3780	3190	3820
4	6080	9330	76900	18000	10400	21700	31800	13500	10500	3830	3310	3510
5	5460	8560	56300	17300	14900	21200	33200	16300	10400	3720	3650	3330
6	5320	8090	52900	17200	19300	20700	32700	17700	8820	3740	3620	2930
7	4940	7700	52500	16900	16000	24500	31100	16100	7760	3260	3310	2970
8	4550	7770	52800	16400	14200	26000	29200	15300	6910	3110	3180	2590
9	9970	26400	42900	15200	12700	22100	26600	15200	6260	3230	3190	2660
10	10100	73300	36500	13800	11200	19800	23300	14600	5780	4100	2950	2850
11	10200	62100	31100	13300	10200	19100	20700	13900	5480	4540	2810	3170
12	8860	48400	29500	12600	9580	18400	18400	13700	5350	4020	2750	14200
13	8210	37100	32700	12100	9140	16900	19000	13200	5350	3600	2690	13100
14	7120	29300	74600	12100	9450	17000	18600	12600	5280	3320	2710	11000
15	6050	24400	68800	11100	10800	27600	17600	11800	5060	3320	3030	8730
16	6100	21200	58000	11900	10800	23600	16400	10900	4690	3530	3180	6870
17	5600	18200	49600	12900	9260	20100	14700	10100	4490	3310	3560	5740
18	5170	15900	43900	10500	8700	17800	14700	9490	4150	3140	4260	5210
19	28800	14800	44200	e9470	8600	16500	14200	9180	4720	3070	5460	4820
20	63700	14500	43000	e9130	9540	15500	13600	9520	5460	3310	5620	4410
21	49900	15500	37700	e10100	11300	14700	12600	11700	4880	3040	6720	4280
22	42100	15000	32200	e11000	13000	14100	11900	14700	4510	3510	6870	4110
23	33800	14000	28700	e11900	16900	13300	11500	13100	4370	4040	5320	3620
24	26100	12700	26200	12700	25900	12600	11100	12000	4210	7360	4650	3420
25	22400	11700	29900	23900	24000	12100	10200	11800	4060	13000	3930	3590
26	19700	18400	30300	19200	21000	11900	9990	13500	4100	6680	3580	3310
27	16300	22200	29200	13000	18400	13700	9490	11500	3940	4660	3330	3200
28	14000	21000	25900	15400	17500	15200	10200	10200	4200	3860	3320	3170
29	13100	18800	23600	17400	---	15200	11400	9180	3860	3900	4000	3140
30	12100	16600	22400	13000	---	15700	12700	8320	4060	3710	3810	3180
31	12100	---	22500	11400	---	20400	---	7360	---	3480	4150	---
TOTAL	481320	625450	1328700	448900	375870	566800	584780	380750	172410	128660	118450	144410
MEAN	15530	20850	42860	14480	13420	18280	19490	12280	5747	4150	3821	4814
MAX	63700	73300	92100	23900	25900	27600	35000	17700	10500	13000	6870	14200
MIN	4550	7700	19100	9130	8600	11900	9490	7360	3860	3040	2690	2590

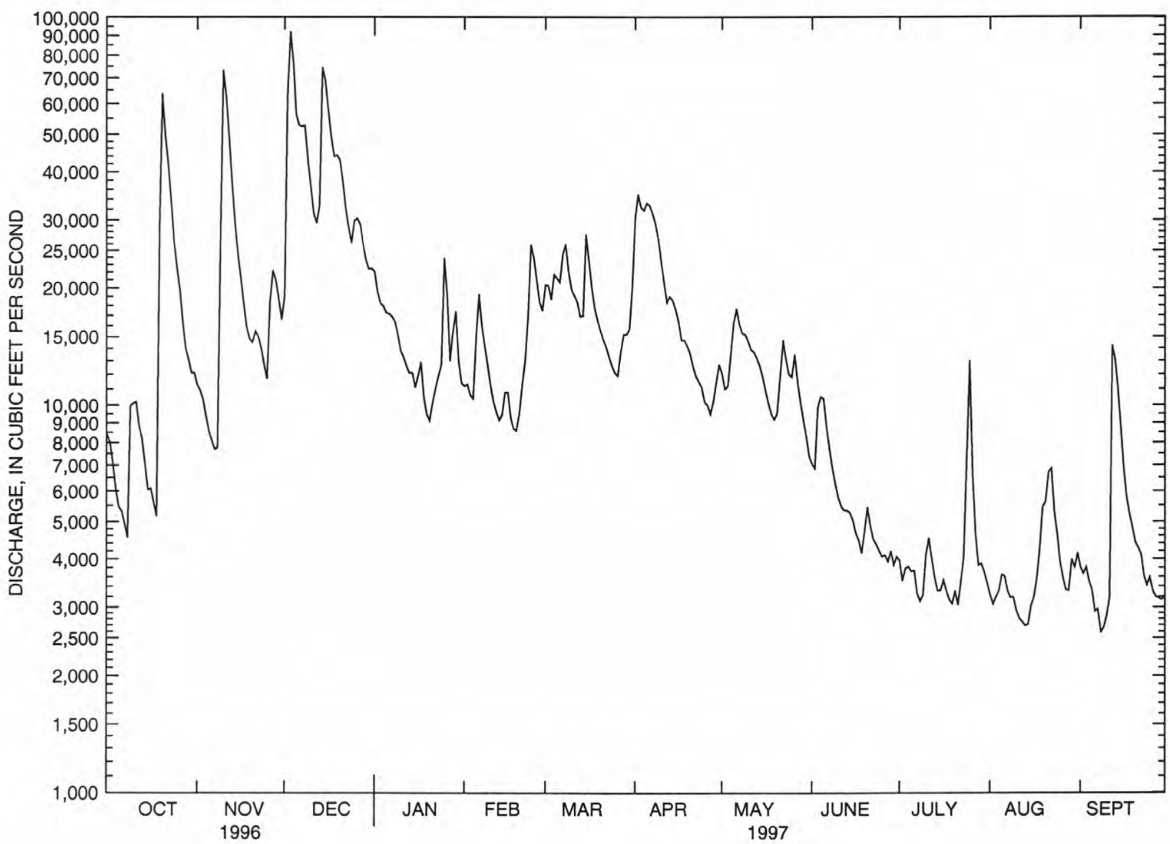
01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1997, BY WATER YEAR (WY)

MEAN	6922	10640	12810	12460	12820	20600	22410	14130	8981	7070	5933	5748
MAX	28710	27340	42860	34950	27550	60840	52680	31690	33460	25720	30290	22490
(WY)	1956	1928	1997	1979	1951	1936	1940	1989	1972	1928	1955	1933
MIN	1632	1868	2037	2539	3500	7715	6828	5074	2572	1548	1808	1762
(WY)	1942	1915	1923	1981	1920	1981	1985	1995	1965	1965	1965	1932

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1913 - 1997	
ANNUAL TOTAL	7068610		5356500			
ANNUAL MEAN	19310		14680		11700	
HIGHEST ANNUAL MEAN					19810	1928
LOWEST ANNUAL MEAN					4708	1965
HIGHEST DAILY MEAN	129000	Jan 21	92100	Dec 3	279000	Aug 20 1955
LOWEST DAILY MEAN	3040	Sep 4	2590	Sep 8	1240	Oct 31 1914
ANNUAL SEVEN-DAY MINIMUM	3370	Sep 1	2870	Aug 10	1310	Oct 31 1914
INSTANTANEOUS PEAK FLOW			101000	Dec 3	329000a	Aug 20 1955
INSTANTANEOUS PEAK STAGE			17.88	Dec 3	28.60b	Aug 20 1955
INSTANTANEOUS LOW FLOW			2490	Sep 8	1180	Oct 31 1963
10 PERCENT EXCEEDS	42900		30100		24700	
50 PERCENT EXCEEDS	14000		11300		7930	
90 PERCENT EXCEEDS	4970		3330		3020	

a From rating curve extended above 230,000 ft^3/s, maximum flow since 1962.
b From high-water mark in gage house.
e Estimated.



01463500 DELAWARE RIVER AT TRENTON, NJ, DAILY MEAN DISCHARGE

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year. Recorded as once daily during years 1964 to 1968, 1979.
pH: June 1968 to current year. Recorded as once daily during 1979.
WATER TEMPERATURE: October 1944 to current year. Recorded as once daily during years 1945 to 1953, 1962, 1964, 1979.
DISSOLVED OXYGEN: October 1962 to current year. Recorded as once daily during 1979.
SUSPENDED-SEDIMENT DISCHARGE: September 1949 to September 1981.

INSTRUMENTATION.--
TEMPERATURE MONITOR (graphic recorder at gage house, in situ system):
October 1953 to September 1961.
TEMPERATURE / DISSOLVED-OXYGEN MONITOR:
October 1962 to September 1965: graphic recorder; only dissolved-oxygen concentration recorded during water year 1964.
October 1965 to May 1968: digital recorder.
WATER-QUALITY MONITOR (continuous pumping system, measurements recorded hourly):
June 1968 to August 1975: water withdrawn from raw-water intake within Trenton Water Filtration Plant, Trenton, N.J.
November 1975 to November 1978: water withdrawn from river through PVC pipe to gage house outside Trenton Water Filtration Plant, Trenton, N.J.
December 1979 to September 1986: water withdrawn from raw-water intake within Trenton Water Filtration Plant, Trenton, N.J.
WATER-QUALITY MONITOR (in situ system, measurements recorded hourly):
October 1986 to September 1995: probes located inside raw-water intake of Trenton Water Filtration Plant, Trenton, N.J.
October 1995 to current year: monitor suspended within stilling well of Morrisville Water Filtration Plant, Morrisville, Pa., 1600 feet upstream from the gage house.

REMARKS.--Missing continuous water-quality records are the result of instrument malfunction, or interruption of flow through the filtration plant. Unpublished records of suspended-sediment discharge for the period Oct. 1, 1981, to Mar. 31, 1982, are available at the U.S. Geological Survey Office in West Trenton, N.J.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: maximum, 377 µS/cm, Feb. 12, 1985; minimum, 63 µS/cm, July 7, 1984.
pH: maximum, 10.3, Aug. 9, 10, 1983; minimum, 5.3, June 22, 1972.
WATER TEMPERATURE: maximum, 34.0° C, June 18, 1957; minimum 0.0° C, on many days during winter months.
DISSOLVED OXYGEN: maximum, 20.0 mg/L, Feb. 11, 1989; minimum recorded 4.0 mg/L, Nov. 9, 1972, Sept. 9, 1995.

EXTREMES FOR CURRENT WATER YEAR.--
SPECIFIC CONDUCTANCE: maximum, 283 µS/cm, Aug. 15, 16; minimum, 72 µS/cm, Nov. 11.
pH: maximum, 9.5, June 23; minimum recorded, 7.1, Oct. 22, but may have been lower during period of instrument malfunction, Apr. 21 to May 6.
WATER TEMPERATURE: maximum, 31.5° C, July 17; minimum, 0.0° C, on several days during January.
DISSOLVED-OXYGEN: maximum, 15.9 mg/L, Feb. 20; minimum, 6.6 mg/L, July 10, 11, 17, Aug. 18.

COOPERATION.--Field data and samples for laboratory analysis provided by the staff of the N.J. Department of Environmental Protection. Analyses for Fecal coliform bacteria by the MPN method, Enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD were performed by the N.J. Department of Health, Public Health and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 1996										
21...	1100	15300	137	7.5	5.0	1.0	758	11.7	92	E1.6
JAN 1997										
29...	1100	17500	217	7.5	1.0	9.6	775	14.3	99	E1.8
APR										
16...	1100	15600	148	8.1	10.5	1.6	764	11.1	99	E1.3
JUN										
12...	1300	4840	214	9.2	24.0	1.9	755	11.4	137	4.2
AUG										
07...	1100	3170	250	8.4	27.0	.6	764	10.4	130	E1.0

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV 1996										
21...	50	<10	49	13	4.0	7.3	1.0	34	15	10
JAN 1997										
29...	1700	150	59	15	5.2	16	1.6	40	18	25
APR										
16...	20	<10	50	13	4.1	7.7	.99	33	14	14
JUN										
12...	<20	140	75	19	6.6	11	1.4	54	19	16
AUG										
07...	80	<10	85	21	7.7	12	1.9	64	22	18

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV 1996									
21...	<.1	4.9	86	79	3	.006	.85	<.03	<.03
JAN 1997									
29...	<.1	6.1	118	117	24	.007	1.4	.08	.09
APR									
16...	<.1	2.6	79	79	<1	.007	.67	<.03	<.03
JUN									
12...	<.1	1.9	126	111	7	.013	.84	<.03	<.03
AUG									
07...	<.1	2.7	142	129	4	.012	1.2	<.03	<.03

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	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)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996									
21...	.1	.09	.99	.94	.02	.02	--	2.5	.2
JAN 1997									
29...	.4	.24	1.8	1.6	.08	.02	--	2.2	.8
APR									
16...	.3	.20	.92	.87	.07	<.01	--	2.1	.5
JUN									
12...	.4	.20	1.3	1.0	.02	<.01	<.01	2.5	1.1
AUG									
07...	.2	.26	1.3	1.4	.06	.06	.06	2.4	.5

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
21...	1100	<10	<1	<10	<10	<1	<1.0	2
JAN 1997								
29...	1100	--	--	--	--	--	--	2
APR								
16...	1100	--	--	--	--	--	--	3
JUN								
12...	1300	10	<1	<10	30	<1	<1.0	2
AUG								
07...	1100	--	--	--	--	--	--	2

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
21...	110	<1	20	<.1	1	<1	20
JAN 1997							
29...	--	4	--	<.1	2	--	30
APR							
16...	--	2	--	<.1	2	--	<10
JUN							
12...	100	<1	40	<.1	<1	<1	10
AUG							
07...	--	<1	--	<.1	2	--	10

CHLORINATED PESTICIDES, POLYCHLORINATED BIPHENYLS, AND VOLATILE ORGANIC COMPOUNDS

DATE	ALPHA BHC TOTAL (UG/L) (39337)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (34259)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	CHLOR-DANE CIS WATER WHOLE TOTAL (UG/L) (39062)	CHLOR-DANE TRANS WATER WHOLE TOTAL (UG/L) (39065)	P,P' DDD, TOTAL (UG/L) (39310)	P,P' DDE, TOTAL (UG/L) (39320)
NOV 1996									
21...	<.03	<.03	<.09	<.04	<.1	<.1	<.1	<.1	<.04
JAN 1997									
29...	<.03	<.03	<.09	<.04	<.1	<.1	<.1	<.1	<.04
APR									
16...	<.03	<.03	<.09	<.04	<.1	<.1	<.1	<.1	<.04
JUN									
12...	<.03	<.03	<.09	<.04	<.1	<.1	<.1	<.1	<.04
AUG									
07...	<.03	<.03	<.09	<.04	<.1	<.1	<.1	<.1	<.04

DATE	P,P' DDT, TOTAL (UG/L) (39300)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN-I WATER WHOLE REC (UG/L) (34361)	ENDO-SULFAN II TOTAL (UG/L) (34356)	ENDO-SULFAN SULFATE TOTAL (UG/L) (34351)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN ALDE-HYDE TOTAL (UG/L) (34366)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)
NOV 1996									
21...	<.1	<.02	<.1	<.04	<.6	<.06	<.2	<.03	<.8
JAN 1997									
29...	<.1	<.02	<.1	<.04	<.6	<.06	<.2	<.03	<.8
APR									
16...	<.1	<.02	<.1	<.04	<.6	<.06	<.2	<.03	<.8
JUN									
12...	<.1	<.02	<.1	<.04	<.6	<.06	<.2	<.03	<.8
AUG									
07...	<.1	<.02	<.1	<.04	<.6	<.06	<.2	<.03	<.8

DATE	LINDANE TOTAL (UG/L) (39340)	TOX-APHENE, TOTAL (UG/L) (39400)	AROCLOR 1016 PCB TOTAL (UG/L) (34671)	AROCLOR 1221 PCB TOTAL (UG/L) (39488)	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1242 PCB TOTAL (UG/L) (39496)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)
NOV 1996									
21...	<.03	<2	<.1	<1	<.1	<.1	<.1	<.1	<.1
JAN 1997									
29...	<.03	<2	<.1	<1	<.1	<.1	<.1	<.1	<.1
APR									
16...	<.03	<2	<.1	<1	<.1	<.1	<.1	<.1	<.1
JUN									
12...	<.03	<2	<.1	<1	<.1	<.1	<.1	<.1	<.1
AUG									
07...	<.03	<2	<.1	<1	<.1	<.1	<.1	<.1	<.1

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	ETHYL-BENZENE TOTAL (UG/L) (34371)
NOV 1996										
21...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
JAN 1997										
29...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
APR										
16...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
JUN										
12...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
AUG										
07...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2

DATE	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)
NOV 1996										
21...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
JAN 1997										
29...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
APR										
16...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
JUN										
12...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
AUG										
07...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2

DATE	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	STYRENE TOTAL (UG/L) (77128)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	XYLENE WATER UNFLTRD REC (UG/L) (81551)
NOV 1996									
21...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
JAN 1997									
29...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
APR									
16...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.3	<.2
JUN									
12...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	1.2	<.2
AUG									
07...	<.2	<.2	<.2	<.2	<.2	<.2	<.2	.6	<.2

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	174	171	172	174	166	170	136	132	135	135	129	132
2	171	165	170	170	166	169	132	101	119	138	132	134
3	171	160	163	172	169	171	101	74	87	146	138	143
4	182	171	177	174	170	172	85	73	79	149	144	145
5	188	182	186	181	174	178	94	84	88	150	144	146
6	197	187	191	184	180	182	108	93	99	151	147	148
7	207	197	205	195	184	189	118	108	115	153	147	150
8	208	190	204	198	193	195	121	111	117	149	142	145
9	199	163	179	196	124	180	124	117	121	146	143	145
10	214	189	203	124	74	90	132	124	129	156	146	151
11	189	178	185	94	72	82	136	130	133	171	156	166
12	181	175	178	88	78	85	142	135	138	188	162	176
13	181	177	179	98	86	93	142	136	139	169	160	164
14	184	175	177	106	97	102	136	106	116	170	158	165
15	189	184	185	120	106	112	118	110	114	177	165	171
16	198	189	194	---	---	---	114	108	111	179	169	173
17	199	192	195	---	---	---	114	109	112	218	174	195
18	204	194	198	135	126	129	118	114	117	237	218	228
19	205	89	160	139	134	136	117	111	114	218	207	210
20	177	119	136	143	139	140	111	110	111	216	211	213
21	131	116	122	143	134	138	112	108	110	215	208	211
22	133	115	122	134	132	133	119	111	115	211	199	205
23	123	113	118	135	132	134	125	118	121	199	183	188
24	134	120	124	138	134	135	131	123	127	194	186	190
25	146	133	137	143	138	141	140	131	136	193	139	168
26	143	138	140	146	125	139	138	125	130	187	176	181
27	152	143	145	154	135	144	130	123	126	184	176	178
28	163	152	158	144	132	136	131	123	126	196	176	188
29	168	163	165	133	128	130	136	130	132	240	176	216
30	172	165	169	135	130	132	141	134	136	219	200	207
31	178	172	175	---	---	---	142	135	139	210	203	206
MONTH	214	89	168	198	72	141	142	73	119	240	129	175

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	211	200	206	135	121	129	141	125	134	---	---	---
2	207	199	202	125	117	119	129	120	124	---	---	---
3	216	204	210	125	121	122	131	121	125	---	---	---
4	220	216	219	124	118	121	130	126	128	---	---	---
5	217	199	211	130	119	123	129	122	126	---	---	---
6	208	191	199	135	129	131	123	116	120	---	---	---
7	192	184	188	137	120	132	117	113	114	138	135	136
8	193	186	191	120	113	116	117	113	115	139	137	138
9	192	186	190	121	116	118	119	114	117	139	137	137
10	203	192	199	128	121	123	122	116	119	146	139	143
11	207	203	205	141	128	135	127	118	122	149	146	148
12	211	203	207	141	134	136	134	125	129	147	142	145
13	217	210	213	136	131	133	146	132	137	143	140	141
14	220	212	215	139	134	136	147	142	144	148	141	145
15	233	215	222	174	139	156	142	139	140	153	147	150
16	266	221	245	166	154	159	143	140	141	156	153	154
17	238	228	234	159	152	155	149	141	144	159	155	157
18	235	225	230	160	155	157	152	149	151	168	159	163
19	233	229	231	162	156	159	160	152	156	171	168	170
20	229	222	227	162	157	160	164	158	161	171	166	168
21	222	205	215	163	158	162	---	---	---	179	168	174
22	205	180	193	166	160	163	---	---	---	168	135	148
23	183	162	174	165	160	163	---	---	---	139	134	136
24	162	128	139	167	162	165	---	---	---	141	138	139
25	128	119	123	166	162	163	---	---	---	145	141	143
26	120	116	118	171	165	168	---	---	---	162	143	151
27	129	119	123	174	166	171	---	---	---	162	157	160
28	135	128	130	169	151	160	---	---	---	159	156	157
29	---	---	---	151	146	149	---	---	---	165	155	161
30	---	---	---	149	145	147	---	---	---	175	165	170
31	---	---	---	146	132	139	---	---	---	184	174	178
MONTH	266	116	195	174	113	144	---	---	---	184	134	152

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	191	184	188	246	235	240	---	---	---	250	227	236
2	194	191	193	235	226	228	---	---	---	235	227	230
3	198	191	194	227	220	223	---	---	---	---	---	---
4	201	197	199	251	227	239	---	---	---	---	---	---
5	198	178	189	253	251	252	---	---	---	239	229	232
6	183	176	179	254	238	247	---	---	---	234	228	230
7	191	181	185	238	227	231	261	253	257	254	234	244
8	199	190	193	235	230	232	255	249	251	258	254	256
9	203	199	200	242	234	238	256	252	255	263	255	258
10	208	200	205	247	238	241	256	251	252	263	261	262
11	214	207	211	251	238	244	252	245	248	262	256	259
12	222	214	219	251	228	240	255	250	253	261	187	231
13	224	215	221	231	228	229	257	254	255	187	166	175
14	223	215	220	237	221	229	266	257	260	168	163	166
15	229	220	225	247	233	242	283	266	275	171	163	167
16	233	227	231	248	237	243	283	265	275	182	171	175
17	236	228	233	237	223	230	267	236	253	201	182	190
18	228	221	226	229	222	224	236	227	231	207	200	204
19	227	219	223	234	228	232	---	---	---	213	204	210
20	243	227	237	239	234	238	---	---	---	224	209	216
21	241	234	238	241	239	240	210	199	204	230	219	224
22	234	230	232	242	236	239	215	199	209	238	225	230
23	230	228	228	239	222	229	---	---	---	238	229	233
24	228	224	226	235	167	222	218	209	213	231	219	225
25	225	215	223	218	154	191	227	217	221	233	220	229
26	234	224	231	199	166	189	232	226	229	236	229	232
27	243	232	236	217	199	207	234	231	233	244	236	240
28	246	240	244	238	216	227	237	231	233	248	241	243
29	242	230	235	245	237	242	241	236	238	254	242	247
30	247	235	239	242	235	237	257	240	249	249	243	246
31	---	---	---	239	230	236	262	250	257	---	---	---
MONTH	247	176	217	254	154	232	---	---	---	263	163	225

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.1	7.8	7.9	7.7	7.6	7.6	7.7	7.7	7.7	7.8	7.7	7.8
2	7.9	7.8	7.9	7.8	7.7	7.7	7.7	7.5	7.6	7.8	7.8	7.8
3	8.1	7.7	7.9	7.9	7.7	7.8	7.6	7.2	7.4	7.8	7.7	7.7
4	8.2	7.8	8.0	7.9	7.8	7.8	7.4	7.3	7.4	7.8	7.7	7.7
5	8.4	7.9	8.1	7.9	7.8	7.8	7.6	7.4	7.5	7.8	7.7	7.8
6	8.4	7.9	8.2	7.9	7.8	7.8	7.6	7.5	7.6	7.8	7.7	7.8
7	8.5	8.0	8.3	7.9	7.8	7.9	7.6	7.6	7.6	7.9	7.8	7.8
8	8.3	7.9	8.1	7.9	7.8	7.9	7.7	7.6	7.7	7.9	7.8	7.8
9	7.9	7.7	7.8	7.9	7.5	7.8	7.7	7.6	7.7	7.9	7.7	7.8
10	8.0	7.9	7.9	7.6	7.2	7.3	7.7	7.7	7.7	7.8	7.7	7.8
11	8.1	7.8	8.0	7.4	7.2	7.3	7.8	7.7	7.7	7.8	7.7	7.8
12	8.2	7.9	8.0	7.5	7.4	7.4	7.8	7.7	7.7	7.8	7.8	7.8
13	8.2	7.9	8.0	7.6	7.5	7.5	7.8	7.7	7.8	7.8	7.7	7.8
14	8.3	7.9	8.1	7.6	7.5	7.6	7.7	7.6	7.7	7.8	7.7	7.8
15	8.5	8.0	8.2	7.7	7.6	7.6	7.7	7.6	7.6	7.8	7.7	7.8
16	8.5	8.0	8.2	---	---	---	7.6	7.6	7.6	7.8	7.7	7.8
17	8.5	8.0	8.3	---	---	---	7.7	7.6	7.6	7.9	7.8	7.8
18	8.2	7.9	8.1	7.8	7.8	7.8	7.7	7.6	7.7	7.9	7.8	7.8
19	7.9	7.2	7.6	7.8	7.6	7.7	7.7	7.7	7.7	7.9	7.8	7.9
20	7.6	7.2	7.4	7.6	7.6	7.6	7.7	7.7	7.7	7.9	7.9	7.9
21	7.3	7.2	7.3	7.6	7.6	7.6	7.7	7.7	7.7	8.0	7.9	7.9
22	7.4	7.1	7.2	7.6	7.6	7.6	7.7	7.7	7.7	8.0	7.9	7.9
23	7.3	7.2	7.2	7.6	7.6	7.6	7.8	7.7	7.7	7.9	7.9	7.9
24	7.4	7.3	7.3	7.6	7.6	7.6	7.8	7.7	7.8	7.9	7.8	7.9
25	7.4	7.3	7.4	7.7	7.6	7.7	7.9	7.8	7.8	7.9	7.6	7.7
26	7.4	7.3	7.4	7.8	7.6	7.7	7.8	7.8	7.8	7.8	7.7	7.7
27	7.5	7.4	7.4	7.7	7.6	7.7	7.8	7.8	7.8	7.8	7.7	7.8
28	7.6	7.4	7.5	7.7	7.7	7.7	7.8	7.7	7.8	7.9	7.8	7.8
29	7.6	7.5	7.5	7.7	7.7	7.7	7.9	7.8	7.8	7.8	7.8	7.8
30	7.6	7.5	7.6	7.7	7.7	7.7	7.9	7.7	7.8	7.9	7.8	7.8
31	7.7	7.6	7.6	---	---	---	7.8	7.7	7.8	7.9	7.9	7.9
MONTH	8.5	7.1	7.8	7.9	7.2	7.7	7.9	7.2	7.7	8.0	7.6	7.8

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

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

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.0	19.5	20.0	28.0	26.0	27.0	---	---	---	26.0	24.0	25.0
2	20.5	18.5	19.5	27.0	26.0	26.5	---	---	---	26.5	24.5	25.5
3	18.5	17.0	17.5	27.5	25.5	26.0	---	---	---	---	---	---
4	18.5	16.5	17.5	28.0	25.5	27.0	---	---	---	---	---	---
5	19.5	17.0	18.0	27.0	25.0	26.0	---	---	---	22.5	20.0	21.0
6	19.0	18.0	18.5	27.0	24.0	25.5	---	---	---	22.5	20.5	21.5
7	19.0	18.5	18.5	27.5	25.0	26.0	26.5	23.5	25.5	23.5	21.0	22.0
8	20.0	18.0	19.0	28.5	25.0	26.5	26.5	23.5	25.0	23.5	22.0	22.5
9	21.0	18.5	19.5	28.5	26.0	27.0	27.5	24.0	25.5	23.0	22.0	22.5
10	23.0	19.5	21.0	28.0	25.5	26.5	27.5	25.0	26.5	22.0	20.5	21.0
11	24.5	21.5	23.0	28.0	25.0	26.5	28.0	25.0	26.5	22.0	20.5	21.5
12	24.5	23.0	23.5	28.5	25.0	26.5	27.5	26.0	26.5	21.5	20.5	21.0
13	24.0	23.0	23.5	29.0	25.5	27.5	26.5	25.5	26.0	21.0	20.0	20.5
14	25.0	23.0	24.0	29.5	26.5	28.0	27.0	25.5	26.5	21.0	20.0	20.5
15	25.0	22.5	24.0	30.5	27.5	29.0	27.5	25.5	26.5	21.0	20.0	20.5
16	24.5	22.0	23.5	31.0	28.5	29.5	29.0	26.0	27.5	22.0	20.0	21.0
17	23.5	21.5	22.5	31.5	28.5	30.0	29.5	27.0	28.0	22.5	20.5	21.5
18	22.5	21.5	22.0	31.0	29.0	30.0	28.5	26.5	27.5	23.0	21.5	22.0
19	24.5	21.0	22.5	30.0	27.5	28.5	---	---	---	23.5	21.0	22.0
20	25.5	22.5	24.0	28.0	25.5	26.5	---	---	---	23.5	22.0	22.5
21	27.0	24.0	25.5	27.5	25.0	26.0	23.5	22.0	22.5	22.0	20.0	21.0
22	28.5	25.5	27.0	27.0	25.0	26.0	23.5	22.0	23.0	20.5	18.5	19.5
23	28.0	25.5	27.0	26.0	24.5	25.5	---	---	---	19.5	18.5	19.0
24	26.5	25.0	26.0	24.5	20.0	22.5	23.5	21.0	22.5	18.5	17.0	17.5
25	28.5	24.5	26.5	21.5	19.5	20.5	24.5	21.5	23.0	17.5	15.5	17.0
26	29.5	26.5	28.0	24.5	21.0	22.5	25.0	22.5	23.5	18.5	16.5	17.5
27	28.5	26.0	27.5	26.5	23.5	25.0	24.5	22.5	23.5	19.0	16.5	18.0
28	28.5	25.5	27.0	28.5	25.5	27.0	24.0	23.0	23.5	18.5	17.0	17.5
29	29.0	25.5	27.5	28.0	26.5	27.0	25.0	22.5	23.5	19.5	17.5	18.5
30	28.5	26.0	27.0	27.5	24.5	26.0	25.5	22.5	24.0	19.0	17.5	18.5
31	---	---	---	28.0	24.5	26.0	25.5	23.0	24.5	---	---	---
MONTH	29.5	16.5	23.0	31.5	19.5	26.5	---	---	---	26.5	15.5	20.5

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.1	9.1	9.5	10.7	10.0	10.4	13.4	12.4	13.1	13.5	12.9	13.2
2	9.6	9.1	9.4	10.9	10.3	10.6	12.4	11.6	11.9	13.7	13.4	13.5
3	10.0	9.1	9.5	11.5	10.7	11.0	12.0	11.7	11.9	13.6	13.3	13.5
4	10.7	9.5	10.0	11.7	11.0	11.4	12.1	11.9	12.0	13.4	12.9	13.2
5	11.0	9.9	10.4	11.7	11.2	11.5	12.2	12.1	12.2	13.0	12.4	12.8
6	11.1	10.1	10.6	11.7	11.1	11.4	12.2	12.0	12.1	12.7	12.4	12.6
7	11.4	10.2	10.7	11.4	10.7	11.1	12.2	12.0	12.2	12.8	12.4	12.7
8	10.6	9.9	10.1	10.7	9.7	10.3	12.2	12.0	12.1	13.5	12.7	13.2
9	10.0	9.6	9.8	10.0	8.9	9.6	12.4	12.2	12.3	13.6	13.3	13.5
10	10.0	9.6	9.8	---	---	---	12.5	12.4	12.5	13.6	13.3	13.5
11	10.8	9.8	10.3	---	---	---	12.6	12.5	12.5	13.9	13.3	13.6
12	11.1	10.2	10.6	---	---	---	12.6	12.5	12.5	14.3	13.4	13.8
13	11.1	10.4	10.7	---	---	---	12.5	12.4	12.4	13.5	12.7	13.2
14	11.2	10.3	10.7	---	---	---	12.6	12.3	12.4	13.2	12.5	12.7
15	11.4	10.2	10.8	---	---	---	12.6	12.3	12.5	13.2	12.4	12.7
16	11.4	10.3	10.8	---	---	---	12.6	12.4	12.5	14.0	12.6	13.4
17	11.5	10.0	10.7	---	---	---	12.5	12.2	12.3	13.0	12.0	12.4
18	10.6	9.8	10.1	13.2	12.5	12.8	12.2	12.0	12.1	12.5	12.0	12.2
19	---	---	---	12.8	12.2	12.6	12.1	11.9	12.0	12.6	12.4	12.5
20	---	---	---	12.6	12.4	12.5	12.6	12.0	12.2	12.5	12.2	12.4
21	---	---	---	12.6	12.4	12.5	13.3	12.6	13.0	13.4	12.3	12.6
22	---	---	---	12.7	12.5	12.6	13.6	13.2	13.5	13.8	12.3	13.1
23	10.5	9.9	10.3	12.8	12.6	12.7	13.7	13.5	13.6	13.9	13.5	13.8
24	10.2	9.7	10.1	12.8	12.6	12.7	13.5	12.8	13.2	13.8	13.4	13.6
25	10.4	9.7	10.2	12.6	12.4	12.6	13.1	12.6	13.0	13.8	13.3	13.5
26	10.4	10.2	10.3	12.4	11.8	12.1	13.5	13.0	13.3	13.9	13.1	13.6
27	10.5	10.1	10.3	12.4	11.9	12.2	13.9	13.3	13.6	13.4	12.9	13.2
28	10.4	10.0	10.2	13.1	12.4	12.9	13.5	13.2	13.4	13.9	13.2	13.6
29	10.3	9.6	10.0	13.5	13.1	13.4	13.5	13.1	13.3	14.0	13.3	13.7
30	10.2	9.6	10.1	13.6	13.4	13.5	13.3	12.8	13.1	13.8	12.6	13.3
31	10.5	10.0	10.2	---	---	---	13.0	12.6	12.9	13.9	13.4	13.6
MONTH	11.5	9.1	10.2	---	---	---	13.9	11.6	12.6	14.3	12.0	13.2

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	13.8	13.0	13.4	13.6	13.0	13.2	12.0	11.0	11.5	---	---	---
2	13.5	12.9	13.2	13.5	12.8	13.1	---	---	---	---	---	---
3	13.9	12.7	13.2	13.4	13.0	13.2	---	---	---	---	---	---
4	13.7	13.2	13.5	13.5	12.9	13.2	---	---	---	---	---	---
5	13.5	13.1	13.3	13.5	13.1	13.3	---	---	---	---	---	---
6	13.5	13.2	13.3	13.7	12.8	13.2	---	---	---	---	---	---
7	13.8	13.4	13.6	13.9	12.9	13.4	---	---	---	11.6	10.5	11.0
8	14.0	13.6	13.8	13.6	13.1	13.3	---	---	---	12.0	10.5	11.2
9	14.5	13.7	14.1	14.3	13.2	13.7	---	---	---	11.3	10.5	10.9
10	14.6	13.8	14.2	14.4	13.3	13.8	---	---	---	11.9	10.6	11.1
11	14.8	13.9	14.3	13.9	13.0	13.5	---	---	---	12.1	10.5	11.3
12	14.8	13.9	14.3	14.6	13.0	13.7	---	---	---	11.9	10.3	11.0
13	15.1	13.9	14.5	15.0	13.1	14.0	---	---	---	10.5	9.7	10.1
14	14.8	13.9	14.3	13.7	12.8	13.1	---	---	---	11.3	9.8	10.5
15	14.5	13.6	14.1	13.0	12.6	12.8	13.3	11.4	12.2	11.1	9.5	10.2
16	15.1	13.7	14.3	13.7	13.0	13.4	13.2	11.0	12.1	11.1	9.2	10.1
17	15.6	13.7	14.6	14.6	13.4	13.9	12.3	10.7	11.5	11.3	9.6	10.4
18	15.7	13.8	14.7	14.6	13.2	13.9	11.9	10.4	11.0	11.7	9.6	10.7
19	15.8	13.3	14.4	14.3	13.1	13.7	13.3	10.7	11.9	11.7	9.7	10.8
20	15.9	12.9	14.2	14.4	13.0	13.5	14.0	11.2	12.5	11.0	9.1	10.0
21	15.2	12.8	13.9	14.9	12.6	13.7	---	---	---	10.8	9.2	9.9
22	14.6	12.3	13.4	14.5	12.3	13.4	---	---	---	10.4	9.4	9.9
23	14.7	12.1	13.3	15.2	12.2	13.6	---	---	---	10.9	9.5	10.2
24	13.5	12.5	13.1	15.6	12.5	14.0	---	---	---	11.0	9.5	10.2
25	13.9	13.4	13.7	14.9	12.7	13.7	---	---	---	10.0	9.3	9.5
26	14.7	13.8	14.2	14.7	12.1	13.3	---	---	---	9.9	9.1	9.5
27	14.7	13.5	14.0	15.3	12.2	13.7	---	---	---	10.2	9.1	9.6
28	14.7	13.1	13.8	14.8	12.0	13.3	---	---	---	11.0	9.2	10.0
29	---	---	---	12.9	11.5	12.1	---	---	---	11.5	9.2	10.3
30	---	---	---	13.4	10.9	12.0	---	---	---	11.9	9.3	10.4
31	---	---	---	11.8	10.8	11.1	---	---	---	12.4	9.5	10.9
MONTH	15.9	12.1	13.9	15.6	10.8	13.3	---	---	---	12.4	9.1	10.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	12.5	9.3	10.8	12.3	7.7	10.0	---	---	---	9.4	7.5	8.4
2	10.9	9.0	10.0	10.9	7.4	9.1	---	---	---	9.3	7.5	8.3
3	10.2	9.0	9.6	10.3	7.4	8.7	---	---	---	---	---	---
4	11.6	9.2	10.3	10.9	7.3	9.0	---	---	---	---	---	---
5	12.0	9.4	10.7	11.5	7.6	9.4	---	---	---	9.9	7.9	8.8
6	12.2	9.2	10.7	11.2	7.8	9.4	---	---	---	10.4	8.1	9.1
7	11.9	9.1	10.5	10.4	7.4	8.9	10.2	7.7	8.9	10.6	8.3	9.4
8	12.2	9.4	10.9	11.0	7.4	9.1	10.1	7.7	8.8	10.9	8.2	9.4
9	13.0	9.4	11.2	10.6	7.2	8.6	10.1	7.7	8.8	10.7	8.1	9.3
10	14.0	9.4	11.6	9.5	6.6	8.0	9.8	7.4	8.6	9.2	8.3	8.6
11	14.1	9.2	11.6	9.2	6.6	7.9	9.9	7.3	8.5	9.9	7.9	8.8
12	13.2	8.7	10.9	9.8	6.7	8.2	9.1	7.2	8.1	8.7	7.6	7.9
13	11.4	8.5	10.0	10.8	6.9	8.7	8.7	7.1	7.8	8.3	7.5	8.0
14	12.3	8.1	10.1	11.1	6.8	8.7	9.0	6.8	7.8	8.7	7.7	8.3
15	12.3	8.2	10.2	11.1	7.1	9.0	9.1	7.0	8.0	9.1	7.7	8.5
16	12.1	8.3	10.2	10.9	6.9	8.8	9.2	7.0	8.0	9.6	8.3	8.9
17	11.6	8.2	9.9	11.4	6.6	8.8	8.9	6.8	7.8	9.7	8.2	8.9
18	11.2	8.4	9.6	11.5	6.8	9.0	8.2	6.6	7.3	9.8	8.1	8.8
19	11.8	8.3	10.0	11.6	7.0	9.2	---	---	---	10.3	8.1	9.1
20	12.3	8.4	10.3	12.0	7.6	9.6	---	---	---	9.9	8.0	8.9
21	12.9	8.5	10.5	11.9	7.9	9.8	8.4	7.7	8.1	10.5	7.9	9.1
22	13.2	8.4	10.9	10.5	7.4	8.7	8.5	7.7	8.1	11.2	8.6	9.8
23	15.3	8.4	11.6	9.4	7.5	8.4	---	---	---	10.8	8.8	9.7
24	13.7	9.0	11.5	8.6	7.5	7.9	9.2	8.1	8.6	11.8	8.6	10.1
25	13.8	8.6	11.1	8.7	8.2	8.4	9.3	8.1	8.6	12.1	9.5	10.7
26	12.7	8.0	10.3	8.8	8.0	8.3	9.3	8.0	8.6	12.2	9.3	10.7
27	13.2	7.4	10.2	8.7	7.5	8.0	9.3	7.9	8.6	12.8	9.3	10.9
28	13.6	7.9	10.6	9.3	7.3	8.3	8.9	7.7	8.3	12.1	9.5	10.7
29	13.1	7.9	10.5	10.0	7.2	8.5	9.3	7.8	8.4	12.1	8.8	10.3
30	12.4	7.7	10.0	10.6	7.6	8.9	9.4	7.6	8.5	11.9	8.8	10.2
31	---	---	---	11.1	7.8	9.3	9.2	7.7	8.4	---	---	---
MONTH	15.3	7.4	10.5	12.3	6.6	8.8	---	---	---	12.8	7.5	9.3

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

Cross section of specific conductance, pH, water temperature, and dissolved oxygen concentration measurements from the Calhoun Street Bridge (distance from left bank looking downstream); and recorded hourly specific conductance, pH, water temperature, and dissolved oxygen concentration measurements from the water-quality monitor at the Morrisville Water Filtration Plant, Morrisville, PA.

January 2, 1997

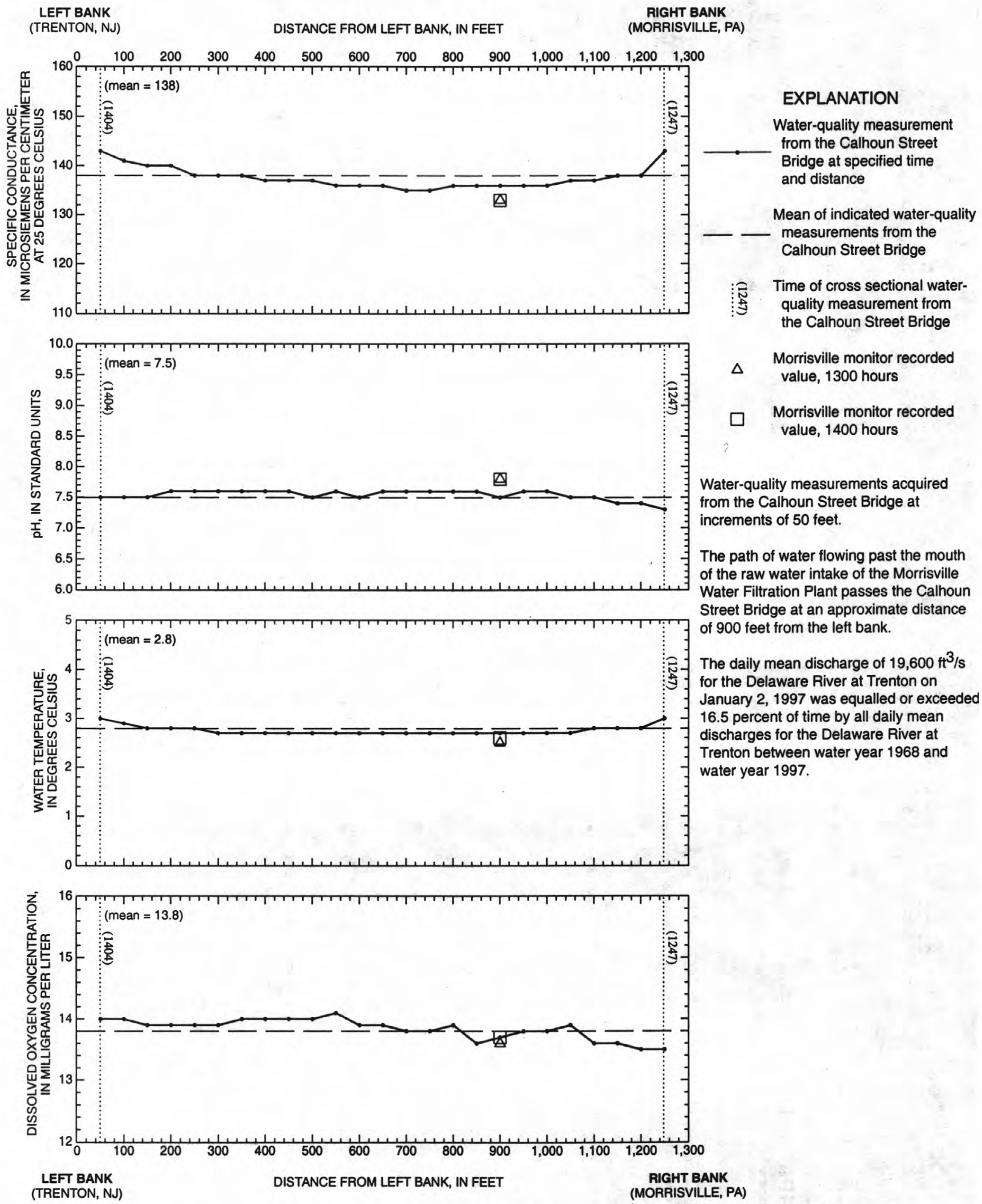


Figure 16. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, January 2, 1997.

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

Cross section of specific conductance, pH, water temperature, and dissolved oxygen concentration measurements from the Calhoun Street Bridge (distance from left bank looking downstream); and recorded hourly specific conductance, pH, water temperature, and dissolved oxygen concentration measurements from the water-quality monitor at the Morrisville Water Filtration Plant, Morrisville, PA.

August 27, 1997

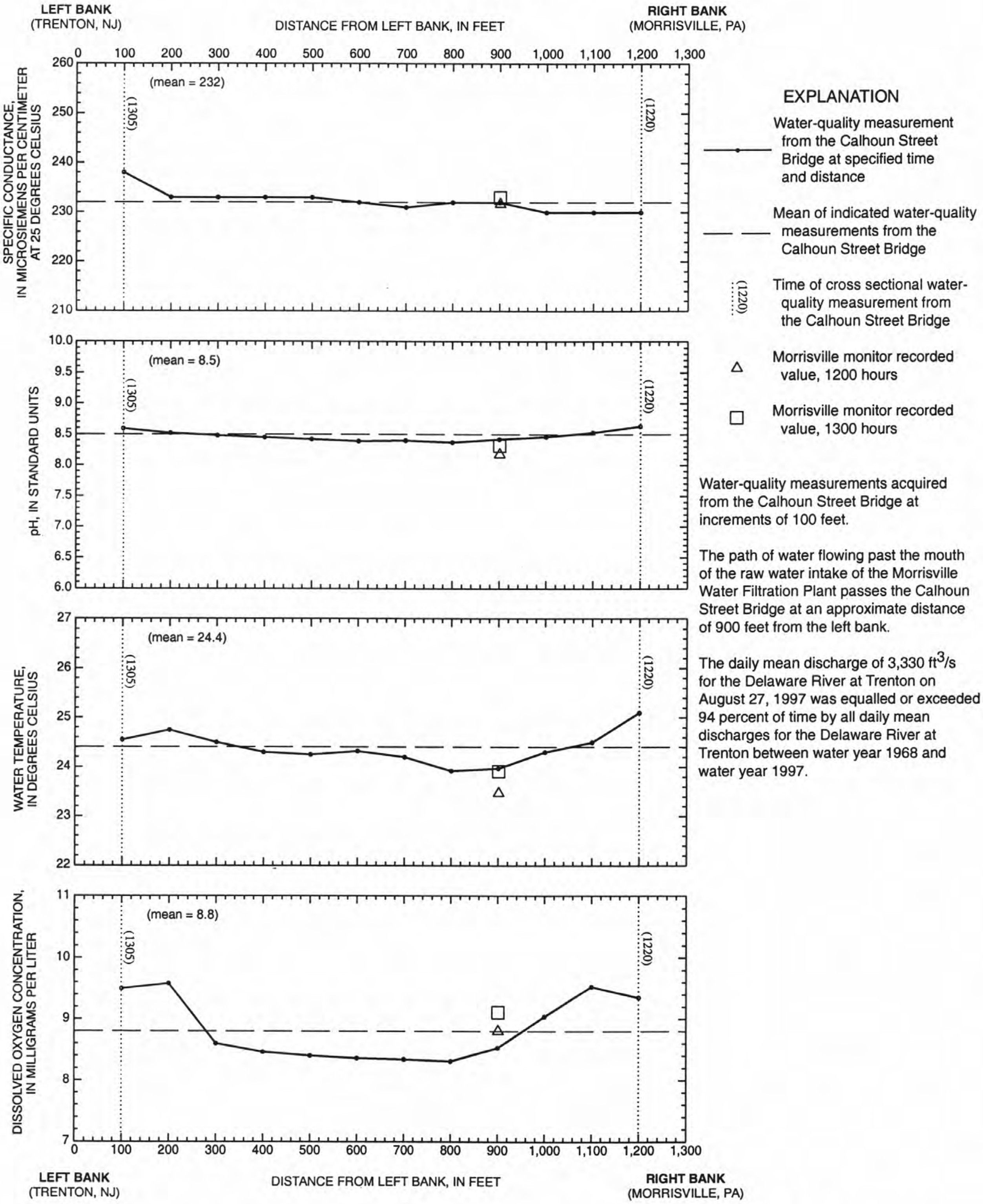


Figure 17. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, August 27, 1997.

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ

LOCATION.--Lat 40°16'11", long 74°40'20", Mercer County, Hydrologic Unit 02040105, on left bank 250 ft upstream from bridge on Quaker Bridge Road, 0.7 mi downstream from dam at Lake Mercer, 1.9 mi south of Clarksville, 2.0 mi upstream from Shipetaukin Creek, and 7.6 mi upstream from mouth.

DRAINAGE AREA.--34.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements water years 1963-67. October 1972 to September 1981, March 1992 to September 1995, growing season records only 1996-97.

GAGE.--Water-stage recorder. Datum of gage is 49.28 ft above sea level.

REMARKS.--Records fair. Regulation from flood-control dams and ponds upstream. Diversions for irrigation upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached a stage of 10.9 ft, discharge, 1,500 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 362 ft^3/s, Oct. 19, gage height, 6.65 ft; minimum daily (period Oct. 1996, or Apr. 1 to Sept. 1997), 6.2 ft^3/s, many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	---	---	---	---	---	145	71	37	10	28	12
2	31	---	---	---	---	---	168	65	50	10	23	12
3	28	---	---	---	---	---	145	65	77	12	20	11
4	24	---	---	---	---	---	121	77	73	12	18	9.5
5	22	---	---	---	---	---	98	72	62	9.9	21	8.7
6	20	---	---	---	---	---	84	63	50	9.1	20	8.3
7	19	---	---	---	---	---	77	57	41	9.3	18	8.1
8	23	---	---	---	---	---	70	50	36	9.3	17	8.0
9	73	---	---	---	---	---	61	58	32	10	16	7.7
10	92	---	---	---	---	---	54	66	28	21	14	7.5
11	86	---	---	---	---	---	50	61	25	18	13	8.3
12	71	---	---	---	---	---	53	52	23	15	12	9.9
13	57	---	---	---	---	---	73	45	25	13	12	9.9
14	47	---	---	---	---	---	75	40	45	12	11	9.6
15	40	---	---	---	---	---	68	36	49	10	11	9.1
16	35	---	---	---	---	---	59	32	43	9.2	12	8.7
17	32	---	---	---	---	---	53	30	35	8.6	13	8.5
18	30	---	---	---	---	---	65	28	30	7.8	13	8.2
19	180	---	---	---	---	---	93	27	35	7.4	13	7.9
20	326	---	---	---	---	---	96	27	30	6.7	14	7.4
21	283	---	---	---	---	---	86	25	25	6.4	21	7.1
22	250	---	---	---	---	---	76	23	22	7.2	24	7.0
23	242	---	---	---	---	---	67	21	20	8.1	25	6.9
24	233	---	---	---	---	---	62	21	18	21	23	6.7
25	182	---	---	---	---	---	61	33	17	80	21	6.7
26	115	---	---	---	---	---	58	97	16	110	18	6.6
27	86	---	---	---	---	---	53	98	15	102	17	6.4
28	74	---	---	---	---	---	69	82	13	79	15	6.4
29	64	---	---	---	---	---	84	65	12	59	15	9.1
30	57	---	---	---	---	---	80	49	11	42	14	9.0
31	51	---	---	---	---	---	---	41	---	33	13	---
TOTAL	2908	---	---	---	---	---	2404	1577	995	768.0	525	252.2
MEAN	93.8	---	---	---	---	---	80.1	50.9	33.2	24.8	16.9	8.41
MAX	326	---	---	---	---	---	168	98	77	110	28	12
MIN	19	---	---	---	---	---	50	21	11	6.4	11	6.4

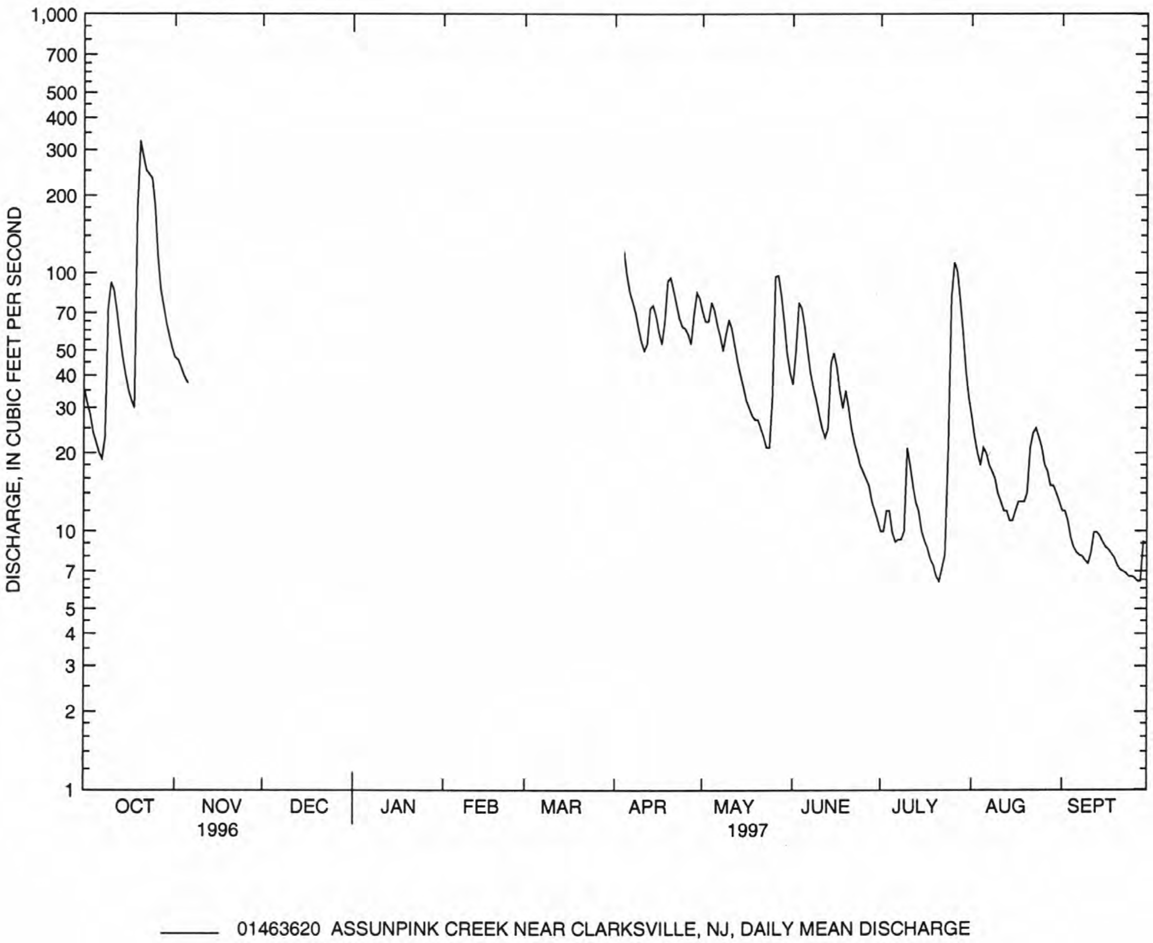
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	39.8	43.0a	74.1a	79.4a	69.8a	85.9a	67.8	44.4	40.8	32.8	29.7	29.7
MAX	93.8	112a	142a	151a	136a	204a	115	72.2	90.9	142	77.4	96.9
(WY)	1997	1973	1993	1979	1994	1994	1973	1979	1996	1975	1994	1975
MIN	11.4	19.2a	20.9a	12.9a	30.7a	33.8a	23.7	16.0	11.9	6.54	11.0	8.08
(WY)	1993	1995	1981	1981	1980	1981	1995	1992	1995	1995	1995	1992

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ--Continued

SUMMARY STATISTICS	WATER YEARS 1973 - 1997	
ANNUAL MEAN	51.9a	
HIGHEST ANNUAL MEAN	74.7a	1994
LOWEST ANNUAL MEAN	24.6a	1995
HIGHEST DAILY MEAN	832a	Feb 26 1979
LOWEST DAILY MEAN	1.0a	Sep 6 1995
INSTANTANEOUS PEAK FLOW	1050b	Jul 21 1975
INSTANTANEOUS PEAK STAGE	9.36b	Jul 21 1975
INSTANTANEOUS LOW FLOW	1.0a	Sep 6 1995

a Water years 1973-1995.
b 1973 to current year.



01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1965, 1967, 1979 to September 1997 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
06...	1330	E37	--	7.0	11.5	767	10.2	--	E1.2	110	80	27
JAN 1997												
16...	1100	E75	117	7.0	1.5	743	13.3	97	<1.0	80	140	30
APR												
08...	1100	71	144	6.7	12.0	760	10.0	93	E2.4	<20	<10	33
JUN												
16...	1100	44	122	6.8	22.5	760	7.4	86	2.9	20	10	36
AUG												
13...	1330	11	133	7.9	25.0	755	6.5	79	3.1	50	40	38

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
06...	5.9	2.9	5.5	3.0	11	12	11	.1	5.5	66	55	5
JAN 1997												
16...	6.7	3.3	5.6	2.7	6.7	17	13	<.1	6.4	76	64	11
APR												
08...	7.6	3.5	11	2.3	7.5	19	21	.1	4.1	76	79	9
JUN												
16...	8.0	4.0	7.4	2.2	13	16	14	.1	2.6	79	66	8
AUG												
13...	8.2	4.3	6.9	2.5	15	17	14	.1	4.9	87	68	5

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
06...	.009	.43	.22	.16	.6	.39	1.0	.82	.04	<.01	5.2	.9
JAN 1997												
16...	.011	1.2	<.03	<.03	.5	.30	1.7	1.5	.06	.03	3.7	1.1
APR												
08...	.006	1.2	<.03	<.03	.4	.25	1.6	1.5	.05	<.01	3.2	1.2
JUN												
16...	.011	.85	<.03	<.03	.7	.60	1.5	1.4	<.01	<.01	4.4	.8
AUG												
13...	.006	.17	.10	.08	.8	.41	.95	.58	.03	<.01	4.4	.7

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
06...	1330	14	<1	<10	20	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
06...	860	<1	180	<.1	2	<1	<10

01464000 ASSUNPINK CREEK AT TRENTON, NJ

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

DRAINAGE AREA.--90.6 mi^2.

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

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

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

REMARKS.--Records good. Records include water diverted from outside the basin since February 1954 for municipal supply which returns to Assunpink Creek through Ewing-Lawrence Sewerage Authority Treatment Plant, 2.4 mi above station (records given herein). In addition there is an average inflow of about 2.0 ft^3/s from industrial use of water that originates outside the basin. Some diversion for irrigation in headwater area during summer months. Flow regulated by several flood-control reservoirs upstream from gage since mid-1970's. Several measurements of water temperature were made during the year. National Weather Service gage-height telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 8	2200	1,150	6.42	Dec. 7	2300	1,590	7.51
Oct. 19	1900	*2,770	*10.47	Dec. 14	1030	1,950	8.40
Nov. 26	1115	1,180	6.50	Jan. 25	0515	1,140	6.38
Dec. 2	0830	1,940	8.39	May 25	1945	1,120	6.33
Dec. 6	1000	1,340	6.92	July 9	2230	953	5.87

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	123	312	148	243	129	629	182	91	39	66	37
2	143	119	1100	143	216	134	598	179	380	40	58	36
3	140	109	610	143	194	147	448	267	465	47	51	37
4	121	103	434	136	180	220	352	322	259	40	71	33
5	109	98	356	134	629	208	271	200	173	36	163	32
6	103	95	835	129	509	219	225	197	133	34	78	29
7	99	93	829	118	385	176	210	165	110	64	56	29
8	370	98	920	110	315	152	172	135	95	39	48	28
9	578	200	635	110	280	133	150	279	85	189	44	28
10	435	140	536	146	232	271	132	209	77	251	41	27
11	309	121	480	139	202	238	122	161	71	81	39	106
12	223	107	450	120	184	185	222	139	65	56	37	81
13	187	103	596	109	171	154	329	119	176	46	37	43
14	165	103	1590	101	378	274	210	108	233	42	40	36
15	145	100	821	94	496	460	164	97	128	38	35	34
16	132	90	590	438	376	292	141	87	100	36	51	32
17	124	92	500	371	295	221	132	79	83	34	64	30
18	117	102	459	233	238	188	314	74	94	32	58	29
19	1610	85	459	167	211	163	323	77	362	33	45	28
20	1190	82	394	139	184	150	250	74	117	28	140	26
21	737	78	304	119	167	138	205	68	81	28	214	25
22	618	76	251	118	163	130	172	62	84	89	82	24
23	525	74	222	162	145	115	151	59	79	56	63	25
24	435	71	249	146	133	107	163	56	64	446	55	24
25	376	71	365	705	121	101	145	392	61	565	50	24
26	273	660	260	490	118	177	129	488	53	345	46	24
27	190	440	227	380	132	133	117	301	48	237	42	23
28	162	295	204	554	119	117	402	199	44	169	59	24
29	144	215	191	464	---	115	288	146	42	158	147	65
30	131	170	179	336	---	134	203	133	40	96	47	33
31	121	---	164	268	---	492	---	105	---	78	39	---
TOTAL	10164	4313	15522	6970	7016	5873	7369	5159	3893	3472	2066	1052
MEAN	328	144	501	225	251	189	246	166	130	112	66.6	35.1
MAX	1610	660	1590	705	629	492	629	488	465	565	214	106
MIN	99	71	164	94	118	101	117	56	40	28	35	23
(†)	19.2	16.1	30.0	20.6	23.0	20.7	21.8	18.3	16.6	14.6	13.6	12.8

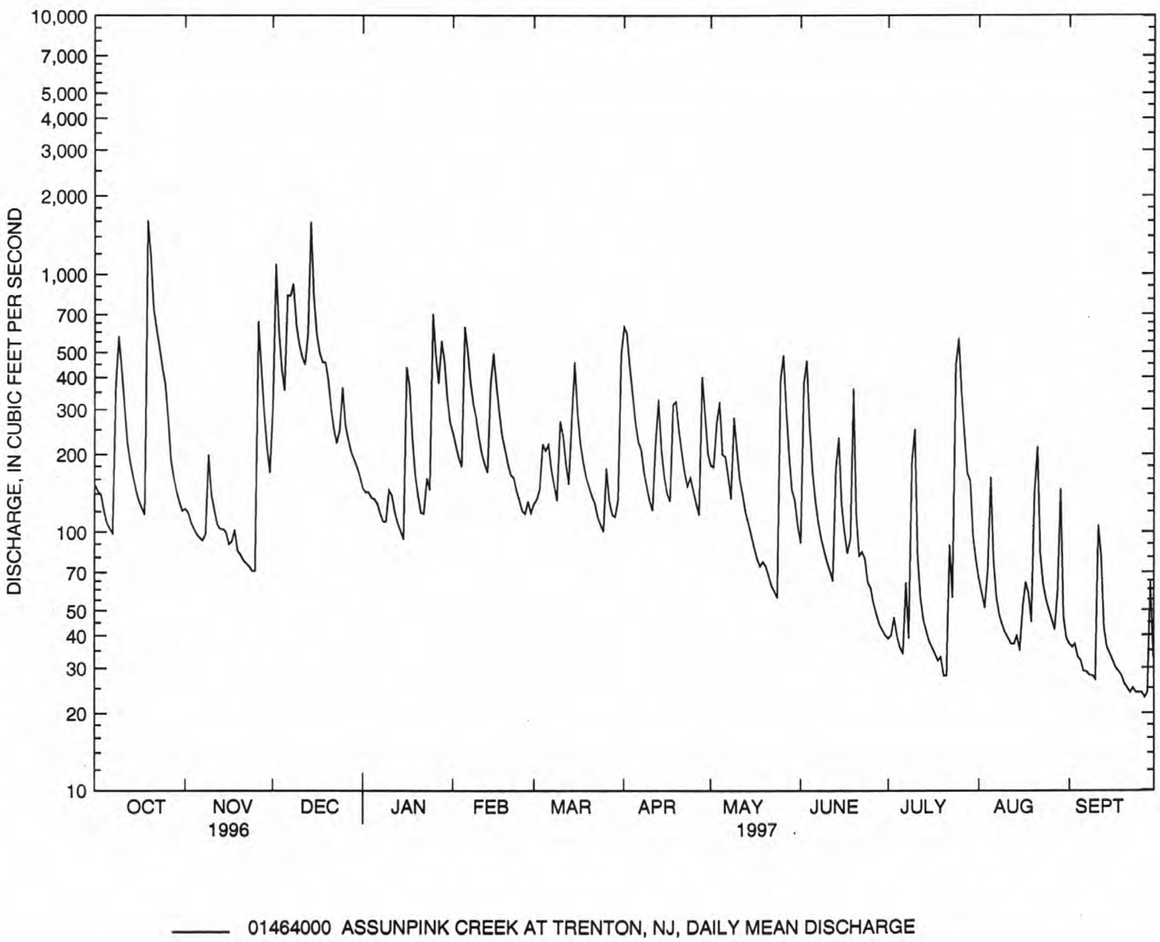
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	81.7	115	149	167	185	210	181	130	100	102	92.1	89.7
MAX	328	331	501	498	395	554	494	340	371	545	355	327
(WY)	1997	1973	1997	1979	1939	1994	1983	1989	1996	1975	1971	1938
MIN	19.1	27.6	42.1	44.2	52.0	76.7	65.2	40.0	25.9	17.2	17.3	15.8
(WY)	1931	1932	1944	1981	1934	1985	1963	1941	1942	1955	1966	1943

01464000 ASSUNPINK CREEK AT TRENTON, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1924 - 1997	
ANNUAL TOTAL	97268		72869			
ANNUAL MEAN	266		200		133	
(†)	21.0		18.9			
HIGHEST ANNUAL MEAN					233	1984
LOWEST ANNUAL MEAN					69.2	1931
HIGHEST DAILY MEAN	1940	Jun 13	1610	Oct 19	4050	Jul 21 1975
LOWEST DAILY MEAN	57	Jun 2	23	Sep 27	4.0	Jul 21 1929
ANNUAL SEVEN-DAY MINIMUM	66	Jun 5	24	Sep 22	9.6	Aug 25 1944
INSTANTANEOUS PEAK FLOW			2770	Oct 19	5450	Jul 21 1975
INSTANTANEOUS PEAK STAGE			10.47	Oct 19	14.61a	Jul 21 1975
INSTANTANEOUS LOW FLOW			18	Sep 27	1.0	Aug 21 1931
10 PERCENT EXCEEDS	608		454		273	
50 PERCENT EXCEEDS	168		136		88	
90 PERCENT EXCEEDS	81		37		33	

a From high-water mark in gage house.
† Inflow from outside basin, equivalent in cubic feet per second, 2.4 mi upstream of station through plant of Ewing-Lawrence Sewerage Authority.



01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ

LOCATION.--Lat 40°08'15", long 74°36'02", Mercer County, Hydrologic Unit 02040201, on right bank upstream from highway bridge in Extonville, 0.5 mi upstream from Pleasant Run, and 0.7 mi downstream from Mercer-Monmouth County line.

DRAINAGE AREA.--81.5 mi^2.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 24.94 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated occasionally by lakes above station. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0600	*2,320	*10.71	Feb. 6	0415	937	7.75
Dec. 8	1515	1,420	9.04	Apr. 2	0915	800	7.19
Dec. 14	2115	1,710	9.64	May 26	1915	800	7.19
Jan. 26	0100	927	7.71	July 26	0215	777	7.09

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	125	e377	147	186	141	624	174	94	32	e78	43
2	93	139	e476	144	178	160	737	164	126	32	e66	40
3	83	137	e294	147	162	163	380	170	187	39	e55	39
4	71	124	e245	140	151	229	222	215	169	41	e52	35
5	62	117	e348	136	471	245	185	181	136	32	e80	30
6	58	114	e600	134	771	237	168	160	118	27	e85	26
7	55	116	726	125	307	211	170	156	106	26	e68	29
8	67	133	1190	124	209	181	153	143	91	25	e57	28
9	397	190	763	122	195	165	137	161	84	26	e56	29
10	337	204	386	157	183	196	128	168	74	56	e55	30
11	235	169	260	176	169	236	128	140	68	41	e58	36
12	165	149	304	158	164	187	138	127	61	32	e56	48
13	130	133	283	164	160	165	209	122	99	29	e55	40
14	128	123	1110	180	215	165	198	119	189	27	e54	35
15	114	117	1170	157	417	385	166	111	111	26	e55	32
16	101	112	526	248	306	261	150	101	84	25	e57	30
17	91	109	290	470	207	188	141	91	74	24	e56	28
18	85	109	231	232	182	174	289	85	67	22	e60	29
19	567	115	236	e184	168	160	618	81	64	22	74	30
20	1830	119	271	e180	156	150	318	76	59	21	58	28
21	700	e114	200	e160	146	142	204	71	53	19	224	34
22	315	e112	177	e134	147	133	174	64	47	45	183	33
23	208	e107	172	e148	139	126	156	59	51	75	115	29
24	186	e106	176	163	128	125	179	54	56	130	83	28
25	162	e198	245	601	126	124	209	104	50	511	68	28
26	143	e345	201	648	131	157	174	639	47	572	58	27
27	132	e168	193	233	143	202	152	439	41	183	50	27
28	133	e146	194	284	149	167	284	194	35	131	45	27
29	132	e131	180	382	---	152	410	145	34	e104	50	43
30	127	e149	172	209	---	159	210	113	33	e91	51	53
31	129	---	160	184	---	273	---	99	---	e79	48	---
TOTAL	7146	4230	12156	6671	6066	5759	7411	4726	2508	2545	2210	994
MEAN	231	141	392	215	217	186	247	152	83.6	82.1	71.3	33.1
MAX	1830	345	1190	648	771	385	737	639	189	572	224	53
MIN	55	106	160	122	126	124	128	54	33	19	45	26
CFSM	2.83	1.73	4.81	2.64	2.66	2.28	3.03	1.87	1.03	1.01	.87	.41
IN.	3.26	1.93	5.55	3.04	2.77	2.63	3.38	2.16	1.14	1.16	1.01	.45

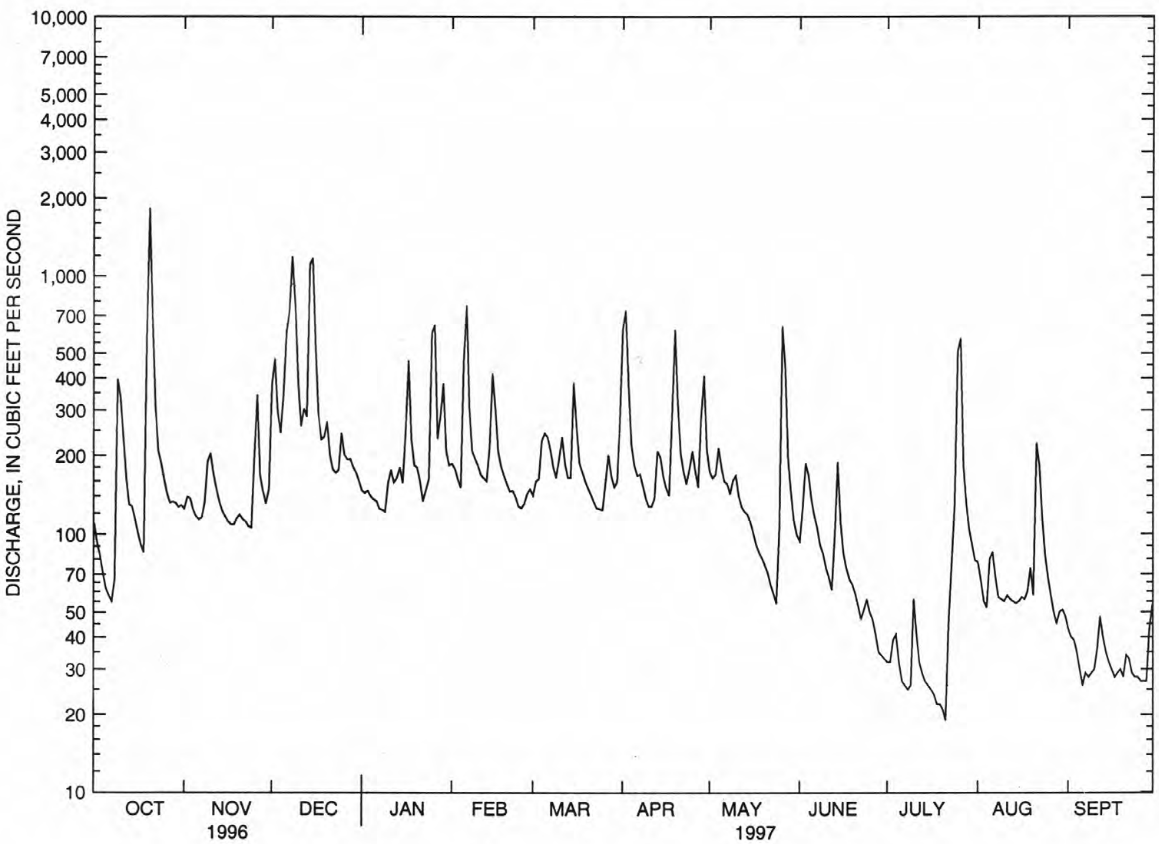
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	90.2	129	163	176	179	201	174	131	97.4	101	94.3	88.3
MAX	231	406	392	452	416	476	388	319	251	390	299	284
(WY)	1997	1973	1997	1978	1979	1994	1983	1984	1968	1989	1971	1971
MIN	32.9	36.7	46.2	62.1	82.9	86.1	68.4	60.8	39.8	25.8	25.4	28.3
(WY)	1966	1966	1966	1981	1992	1985	1985	1955	1965	1955	1966	1995

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	72334		62422			
ANNUAL MEAN	198		171		135	
HIGHEST ANNUAL MEAN					225	1978
LOWEST ANNUAL MEAN					69.9	1995
HIGHEST DAILY MEAN	2650	Jan 20	1830	Oct 20	3930	Aug 28 1971
LOWEST DAILY MEAN	36	Sep 6	19	Jul 21	11	Sep 3 1995
ANNUAL SEVEN-DAY MINIMUM	42	Sep 2	23	Jul 15	12	Sep 3 1995
INSTANTANEOUS PEAK FLOW			2320	Oct 20	4860	Sep 1 1978
INSTANTANEOUS PEAK STAGE			10.71	Oct 20	14.18	Sep 1 1978
INSTANTANEOUS LOW FLOW			18	Jul 21	10	Sep 3 1995
ANNUAL RUNOFF (CFSM)	2.42		2.10		1.66	
ANNUAL RUNOFF (INCHES)	33.02		28.49		22.51	
10 PERCENT EXCEEDS	358		310		250	
50 PERCENT EXCEEDS	133		136		93	
90 PERCENT EXCEEDS	62		33		41	

e Estimated.



—— 01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ, DAILY MEAN DISCHARGE

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to September 1997 (discontinued).

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

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1996												
31...	1130	129	151	7.4	12.0	754	8.6	81	<1.0	330	50	49
JAN 1997												
30...	1200	205	111	7.0	1.5	770	12.5	88	<1.0	90	30	32
APR												
07...	1200	172	138	7.3	14.0	754	8.6	84	E1.1	20	20	43
JUN												
16...	1200	83	144	7.2	18.0	759	7.6	81	2.1	1300	210	48
JUL												
31...	1100	E79	142	7.2	21.0	768	7.4	82	<1.0	1100	350	46

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1996												
31...	15	2.8	6.1	3.0	27	19	14	.2	11	94	89	6
JAN 1997												
30...	9.3	2.1	5.9	2.0	12	16	12	.1	7.6	80	65	9
APR												
07...	13	2.6	6.8	2.1	18	19	14	.2	7.5	86	79	4
JUN												
16...	15	2.7	6.7	2.7	24	17	13	.2	8.9	100	83	14
JUL												
31...	14	2.6	6.7	2.6	21	20	13	.2	9.5	103	84	15

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
31...	.006	.35	<.03	<.03	.3	.20	.65	.55	.08	<.01	5.8	1.5
JAN 1997												
30...	.008	.58	.11	.10	.4	.30	.98	.88	.07	<.01	3.5	1.1
APR												
07...	.005	.60	<.03	<.03	.3	.18	.93	.78	.08	<.01	3.9	1.0
JUN												
16...	.015	.54	<.03	<.03	.5	.22	1.0	.75	.11	<.01	5.7	1.1
JUL												
31...	.006	.44	.11	<.03	.7	.27	1.1	.71	--	<.01	5.6	.5

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
OCT 1996											
31...	1130	--	19	--	--	--	<1	--	<10	30	<1
31...	1130	6.5	--	<.2	100	1700	--	15	--	--	--

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)
OCT 1996										
31...	--	<1.0	--	--	1	--	2500	--	1	--
31...	<1	--	7	10	--	3.0	--	70000	--	20

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)
OCT 1996										
31...	60	--	<.1	--	3	--	<1	--	<10	--
31...	--	100	--	<.01	--	10	--	<1	--	140

DATE	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)
OCT 1996										
31...	--	--	--	--	--	--	--	--	--	--
31...	.4	2.2	2	<1	<.1	1	1	.4	.4	<.3

DATE	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1996										
31...	--	--	--	--	--	--	--	--	--	--
31...	<.1	<.1	<.1	<.1	<.1	<.8	<.1	<1	<10	.6

01464515 DOCTORS CREEK AT ALLENTOWN, NJ

LOCATION.--Lat 40°10'37", long 74°35'57", Monmouth County, Hydrologic Unit 02040201, at bridge on Breza Road in Allentown, and 0.8 mi downstream from Conines Millpond dam.

DRAINAGE AREA.--17.4 mi^2.

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

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites."

COOPERATION.--Field data and samples for laboratory analyses provided by staff of the New Jersey Department of Environmental Protection. Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
07...	1100	30	--	7.3	10.5	762	9.9	--	E1.9	790	80	51
JAN 1997												
16...	1100	41	198	7.4	1.5	747	13.3	97	E1.8	220	490	41
APR												
09...	1200	29	181	7.5	12.5	761	10.6	100	2.1	80	10	47
JUN												
12...	1210	12	174	7.3	22.0	756	7.0	81	4.1	1700	500	49
JUL												
31...	1100	13	149	7.0	22.5	768	6.6	76	E1.5	2400	240	41

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
07...	12	5.0	7.9	3.8	23	18	20	.2	11	106	96	12
JAN 1997												
16...	9.7	4.1	12	2.6	15	20	28	.1	9.2	110	102	9
APR												
09...	11	4.7	12	2.8	15	21	26	.2	5.7	104	98	<1
JUN												
12...	12	4.8	9.0	2.9	20	17	19	.2	7.7	109	90	1
JUL												
31...	9.6	4.1	8.5	3.3	16	17	18	.2	7.9	102	82	9

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
07...	E.010	.75	.47	.47	.7	.63	1.5	1.4	.07	.01	2.6	.8
JAN 1997												
16...	.018	1.6	.27	.27	.7	.52	2.3	2.1	.06	<.01	2.2	1.2
APR												
09...	.009	1.2	.26	.25	.5	.47	1.7	1.7	.04	.02	2.3	.5
JUN												
12...	.029	1.0	.64	.63	1.0	.97	2.0	2.0	.12	.02	4.0	.5
JUL												
31...	.020	.84	.37	.34	.5	.65	1.3	1.5	.12	.02	4.1	.5

01464515 DOCTORS CREEK AT ALLENTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
NOV 1996											
07...	1100	--	<10	--	--	--	<1	--	<10	30	<1
07...	1100	6.8	--	<.2	200	1200	--	11	--	--	--

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
NOV 1996											
07...	--	<1.0	--	--	1	--	1100	--	<1	--	120
07...	<1	--	10	<5	--	10	--	40000	--	40	--

DATE	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
NOV 1996										
07...	--	<.1	--	3	--	<1	--	<10	--	--
07...	230	--	.03	--	<10	--	<1	--	90	.1

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)
NOV 1996										
07...	--	--	--	--	--	--	--	--	--	--
07...	4.9	3	<1	<.1	2	E1.3	2.2	2.2	.3	<.1

DATE	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
NOV 1996										
07...	--	--	--	--	--	--	--	--	--	--
07...	<.1	<.1	<.1	<.1	<4.4	<.1	<1	<10	1	2

01464598 DELAWARE RIVER AT BURLINGTON, NJ

LOCATION.--Lat 40°04'42", long 74°52'28", Burlington County, Hydrologic Unit 02040201, on left bank at the intake canal of the Public Service Electric and Gas Company, 0.3 mi downstream from Burlington-Bristol Bridge, 1.4 mi downstream from Assiscunk Creek, and at river mile 117.54.

DRAINAGE AREA.--7,160 mi^2.

PERIOD OF RECORD.--July 1964 to current year. March 1921 to July 1926, January 1931 to November 1939, August 1951 to June 1954, July 1957 to June 1964, in files of Philadelphia District Corps of Engineers.

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

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

REMARKS.--Summaries for months with short periods of no gage-height record have been estimated with little or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (---) lines. Gage height satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 8.78 ft, Dec. 11, 1992; minimum recorded, -6.86 ft, Nov. 21, 1989.

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

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 8.10 ft, Oct. 19; minimum recorded, -4.56 ft, Apr. 1.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	8.10	7.06	7.89	7.08	6.64	6.61	7.03	6.49	7.03	6.38	6.99	6.33
high tide	Date	19	10	15	10	9	4	25	6	5	25	21	18
Minimum	Elevation	-2.85	-3.38	-2.89	-4.14	-3.43	-4.00	-4.56	-3.46	-3.04	-3.36	-3.08	-3.36
low tide	Date	11	27	21	13	20	7	1	7	24	19	17	21
Mean high tide		5.75	5.55	6.15	---	5.10	5.29	5.62	5.36	5.66	5.34	5.37	5.23
Mean water level		2.27	2.06	2.88	---	1.62	1.80	2.04	1.64	1.96	1.62	1.72	1.66
Mean low tide		-1.56	-1.74	-.64	---	-2.12	-1.98	-1.90	-2.37	-2.14	-2.47	-2.28	-2.25

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ

LOCATION.--Lat 39°56'22", long 74°45'50", Burlington County, Hydrologic Unit 02040202, at bridge on Lumberton-Vincentown Road at Vincentown, 2.9 mi southeast of Lumberton, and 3.1 mi upstream from Southwest Branch.

DRAINAGE AREA.--64.5 mi^2.

PERIOD OF RECORD.--Water years 1925, 1959-62, 1975 to September 1997 (discontinued).

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
14...	0923	86	80	6.3	5.5	773	10.3	80	<1.0	130	<10	21
JAN 1997												
29...	0932	250	82	6.1	1.5	775	12.2	86	<1.0	33	120	20
MAR												
25...	0930	88	80	6.4	7.5	773	11.0	90	<1.0	2	<10	19
MAY												
27...	1005	110	85	6.0	16.5	766	7.4	75	2.2	>2400	510	21
JUL												
31...	0942	56	90	6.2	22.5	767	6.8	78	E1.1	17	100	21

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
14...	5.7	1.6	4.5	1.6	5.7	9.7	8.3	<.1	6.7	58	43	5
JAN 1997												
29...	5.4	1.7	4.6	1.9	4.9	13	9.1	<.1	4.9	64	46	4
MAR												
25...	5.3	1.5	4.7	1.3	4.6	13	8.7	<.1	2.9	56	42	<1
MAY												
27...	5.7	1.6	4.6	2.0	4.0	13	8.6	<.1	4.6	70	44	11
JUL												
31...	5.6	1.6	5.7	1.9	4.8	15	9.8	<.1	5.5	69	50	9

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
14...	.007	.41	.05	.06	.5	.39	.91	.8	.08	.04	13	.5
JAN 1997												
29...	.004	.53	.10	.11	.6	.43	1.1	.96	.07	.02	8.1	.6
MAR												
25...	.008	.41	.08	.10	.4	.31	.81	.72	.05	.04	7.0	.4
MAY												
27...	.008	.34	.10	.11	.9	.65	1.2	.99	.17	.05	13	1.6
JUL												
31...	.005	.45	.16	.07	.6	.28	1.0	.73	--	.06	7.7	.9

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
NOV 1996								
14...	0923	38	<1	<10	30	<1	<1.0	1

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1996							
14...	1300	2	30	<.1	2	<1	10

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ
(Hydrologic bench-mark station)

LOCATION.--Lat 39°53'05", long 74°30'20", Burlington County, Hydrologic Unit 02040202, on right bank in Lebanon State Forest, 25 ft upstream from Butterworth Road Bridge, 3.4 mi upstream from confluence with Cooper Branch, and 7.0 mi southeast of Browns Mills.

DRAINAGE AREA.--2.35 mi^2.

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records fair except for estimated daily discharges, which are poor. Gage-height record is collected above concrete control and discharge record, which includes leakage around control, is measured at site 785 ft downstream. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7.0 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	0945	*7.9	*1.75	Dec. 14	2200	7.7	1.74

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.0	1.8	2.7	2.6	2.5	5.3	3.0	2.1	1.4	1.3	1.2
2	1.4	2.0	2.8	2.7	2.5	2.5	4.7	2.9	2.3	1.4	1.3	1.2
3	1.4	2.0	3.2	2.7	2.5	2.7	4.0	2.8	2.4	1.4	1.2	1.2
4	1.4	1.9	3.0	2.7	2.4	3.3	3.5	2.9	2.3	1.4	1.2	1.1
5	1.4	1.9	2.6	2.6	3.6	3.4	3.2	2.7	2.1	1.4	1.3	1.1
6	1.4	1.9	2.7	2.6	4.0	3.2	3.0	2.6	2.1	1.4	1.3	1.1
7	1.4	1.9	3.2	2.5	3.4	2.9	3.0	2.6	2.0	1.4	1.2	1.1
8	1.6	1.9	5.2	2.5	3.0	2.6	2.8	2.5	2.0	1.4	1.2	1.1
9	2.0	2.1	4.4	2.5	2.8	2.5	2.7	2.7	1.9	1.4	1.2	1.1
10	1.9	2.0	3.4	2.7	2.7	2.8	2.6	2.6	1.9	1.4	1.2	1.1
11	1.7	1.9	2.9	2.6	2.6	2.8	2.6	2.5	1.9	1.3	1.2	1.2
12	1.7	1.9	2.7	2.5	2.5	2.7	2.8	2.4	1.8	1.3	1.2	1.1
13	1.7	1.9	3.0	2.5	2.5	2.6	3.6	2.4	1.8	1.3	1.2	1.1
14	1.6	1.9	6.0	2.5	3.0	2.7	3.2	2.4	1.8	1.3	1.2	1.1
15	1.6	1.8	6.1	2.5	3.6	3.1	2.9	2.3	1.8	1.3	1.2	1.1
16	1.5	1.8	4.2	3.0	3.7	3.1	2.8	2.3	1.7	1.3	1.2	1.1
17	1.5	1.8	3.6	e2.9	3.2	2.8	2.7	2.3	1.7	1.3	1.2	1.1
18	1.5	1.8	3.4	e2.6	2.9	2.6	3.5	2.2	1.7	1.3	1.2	1.1
19	3.7	1.8	3.5	e2.3	2.8	2.5	3.9	2.2	1.7	1.2	1.2	1.1
20	6.3	1.8	3.4	e2.2	2.7	2.5	3.6	2.2	1.6	1.2	1.4	1.1
21	4.5	1.7	3.2	e2.1	2.6	2.5	3.1	2.2	1.6	1.2	2.1	1.1
22	3.3	1.7	3.0	e2.2	2.6	2.5	2.9	2.1	1.6	1.3	1.6	1.1
23	2.8	1.7	2.9	e2.3	2.5	2.4	2.8	2.1	1.5	1.3	1.4	1.1
24	2.6	1.7	2.9	e2.4	2.5	2.3	3.1	2.1	1.5	1.6	1.3	1.1
25	2.4	1.7	3.0	3.2	2.4	2.3	3.0	2.3	1.5	2.2	1.3	1.1
26	2.3	1.9	2.9	3.0	2.4	2.5	2.9	3.3	1.5	1.9	1.3	1.1
27	2.2	1.9	3.1	2.6	2.5	2.4	2.7	2.6	1.5	1.6	1.2	1.0
28	2.2	1.8	3.0	2.9	2.4	2.4	3.7	2.3	1.4	1.5	1.2	1.1
29	2.1	1.7	3.0	2.8	---	2.8	3.8	2.2	1.4	1.4	1.2	1.2
30	2.1	1.7	2.9	2.6	---	3.7	3.3	2.1	1.4	1.3	1.2	1.1
31	2.0	---	2.8	2.5	---	4.4	---	2.1	---	1.3	1.2	---
TOTAL	66.6	55.5	103.8	80.4	78.9	86.0	97.7	75.9	53.5	43.4	39.6	33.4
MEAN	2.15	1.85	3.35	2.59	2.82	2.77	3.26	2.45	1.78	1.40	1.28	1.11
MAX	6.3	2.1	6.1	3.2	4.0	4.4	5.3	3.3	2.4	2.2	2.1	1.2
MIN	1.4	1.7	1.8	2.1	2.4	2.3	2.6	2.1	1.4	1.2	1.2	1.0
CFSM	.91	.79	1.42	1.10	1.20	1.18	1.39	1.04	.76	.60	.54	.47
IN.	1.05	.88	1.64	1.27	1.25	1.36	1.55	1.20	.85	.69	.63	.53

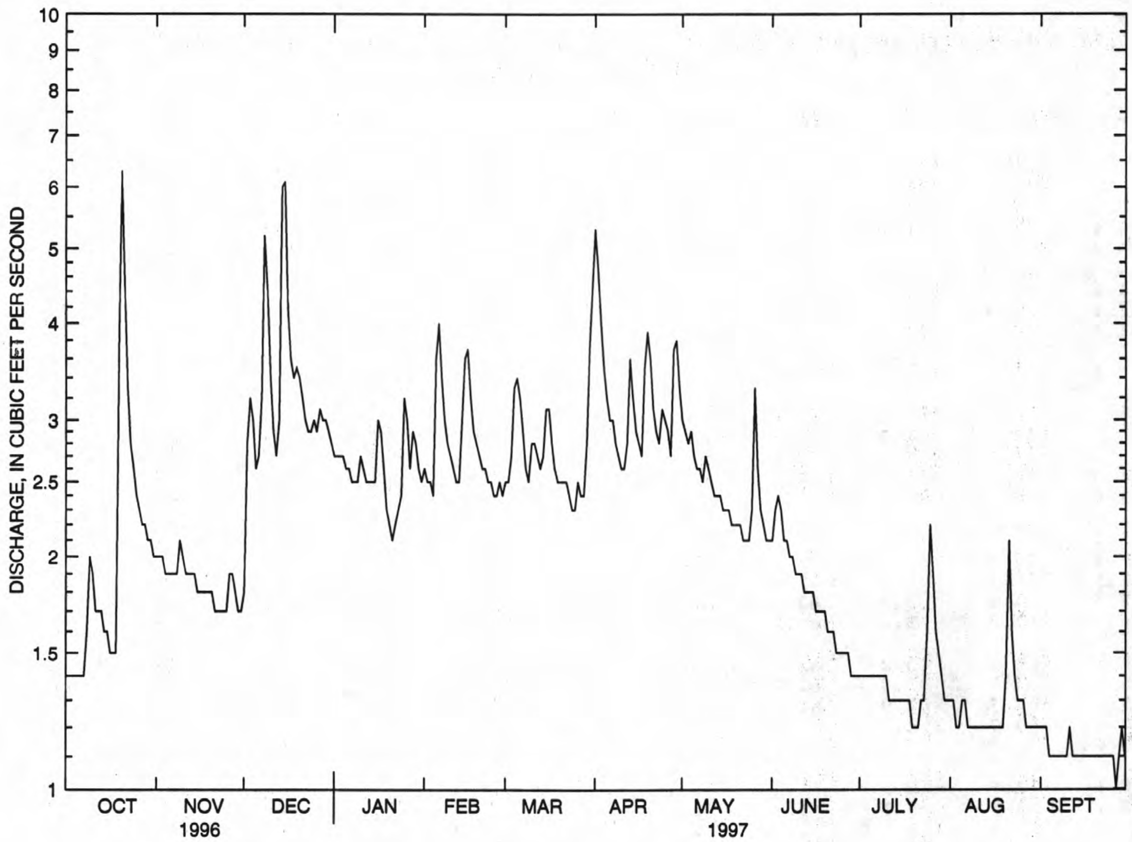
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.59	1.75	2.10	2.32	2.43	2.90	2.95	2.61	2.18	1.87	1.85	1.66
MAX	4.45	4.82	5.75	4.78	5.69	5.67	5.74	5.65	5.35	4.15	5.65	4.31
(WY)	1959	1973	1973	1973	1973	1979	1984	1958	1979	1958	1958	1958
MIN	.80	.95	1.00	.98	1.13	1.25	1.24	1.17	1.05	1.00	.91	.71
(WY)	1996	1986	1966	1981	1989	1966	1985	1995	1995	1977	1995	1995

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

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	837.8		814.7			
ANNUAL MEAN	2.29		2.23		2.18	
HIGHEST ANNUAL MEAN					3.85	1973
LOWEST ANNUAL MEAN					1.17	1995
HIGHEST DAILY MEAN	7.1	Jan 20	6.3	Oct 20	20	Feb 28 1958
LOWEST DAILY MEAN	1.3	Jan 1	1.0	Sep 27	.50	Oct 13 1995
ANNUAL SEVEN-DAY MINIMUM	1.4	Jan 5	1.1	Sep 21	.58	Oct 8 1995
INSTANTANEOUS PEAK FLOW			7.9	Oct 20	35	Aug 25 1958
INSTANTANEOUS PEAK STAGE			1.75	Oct 20	2.33	Aug 25 1958
INSTANTANEOUS LOW FLOW			1.0	Sep 26	.49	Oct 13 1995
ANNUAL RUNOFF (CFSM)	.97		.95		.93	
ANNUAL RUNOFF (INCHES)	13.26		12.90		12.62	
10 PERCENT EXCEEDS	3.1		3.2		3.6	
50 PERCENT EXCEEDS	2.1		2.2		1.9	
90 PERCENT EXCEEDS	1.4		1.2		1.1	

e Estimated.



——— 01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ, DAILY MEAN DISCHARGE

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ

LOCATION.--Lat 39°58'10", long 74°41'05", Burlington County, Hydrologic Unit 02040202, on right bank at downstream side of bridge on Hanover Street in Pemberton, 12 mi upstream from confluence with South Branch Rancocas Creek.

DRAINAGE AREA.--118 mi^2.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder above concrete dams. Datum of gage is 31.19 ft above sea level. Prior to June 9, 1923, nonrecording gage and June 9, 1923 to Aug. 9, 1951, water-stage recorder at site 600 ft downstream at datum 6.54 ft lower.

REMARKS.--Records good. Flow regulated occasionally by cranberry bogs and ponds above station. Water diverted for water supply at Fort Dix army base upstream from gage. Several measurements of water temperature, other than those published, were made during the year. Gage-height telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 20	1230	727	2.61	Dec. 15	0645	*775	*2.68

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	212	181	249	281	195	393	296	163	70	94	67
2	130	226	309	234	254	202	471	274	166	71	80	83
3	121	193	349	228	242	215	452	272	214	76	75	111
4	123	172	330	218	237	291	398	272	192	69	70	91
5	115	160	281	210	322	309	344	256	179	64	79	74
6	106	155	354	190	408	318	309	239	168	63	76	65
7	112	160	367	186	421	308	293	222	155	63	67	62
8	148	171	543	180	378	285	273	205	148	71	63	57
9	259	225	553	171	342	260	242	209	125	75	59	55
10	296	216	484	191	319	265	211	212	118	81	58	55
11	293	177	419	203	297	280	194	209	118	72	62	57
12	237	178	381	202	273	268	192	235	113	64	58	56
13	198	170	389	193	253	244	225	212	112	63	71	57
14	179	159	672	183	260	250	234	176	124	60	103	55
15	169	154	761	172	310	313	233	162	115	58	75	55
16	152	148	631	224	352	318	221	154	104	58	64	54
17	139	141	525	292	352	292	218	147	99	57	60	53
18	165	137	473	286	324	266	308	141	100	54	73	52
19	453	138	447	245	298	248	389	137	103	52	75	54
20	712	138	413	216	273	233	402	132	97	52	88	54
21	647	134	360	195	250	220	360	137	91	52	264	58
22	508	134	316	182	238	198	365	107	95	70	232	58
23	435	127	293	195	229	214	321	107	106	69	193	57
24	369	124	284	206	213	204	317	101	91	136	169	52
25	324	120	314	296	174	182	308	110	86	299	130	52
26	292	190	301	358	170	198	284	247	81	353	105	52
27	265	204	302	348	187	215	252	296	77	247	91	50
28	242	191	295	327	191	225	304	276	74	194	84	49
29	236	178	285	347	---	246	340	233	70	152	79	58
30	210	172	278	335	---	251	325	195	69	127	75	53
31	195	---	265	309	---	290	---	177	---	110	70	---
TOTAL	7972	5004	12155	7371	7848	7803	9178	6148	3553	3102	2942	1806
MEAN	257	167	392	238	280	252	306	198	118	100	94.9	60.2
MAX	712	226	761	358	421	318	471	296	214	353	264	111
MIN	106	120	181	171	170	182	192	101	69	52	58	49
CFSM	2.18	1.41	3.32	2.02	2.38	2.13	2.59	1.68	1.00	.85	.80	.51
IN.	2.51	1.58	3.83	2.32	2.47	2.46	2.89	1.94	1.12	.98	.93	.57

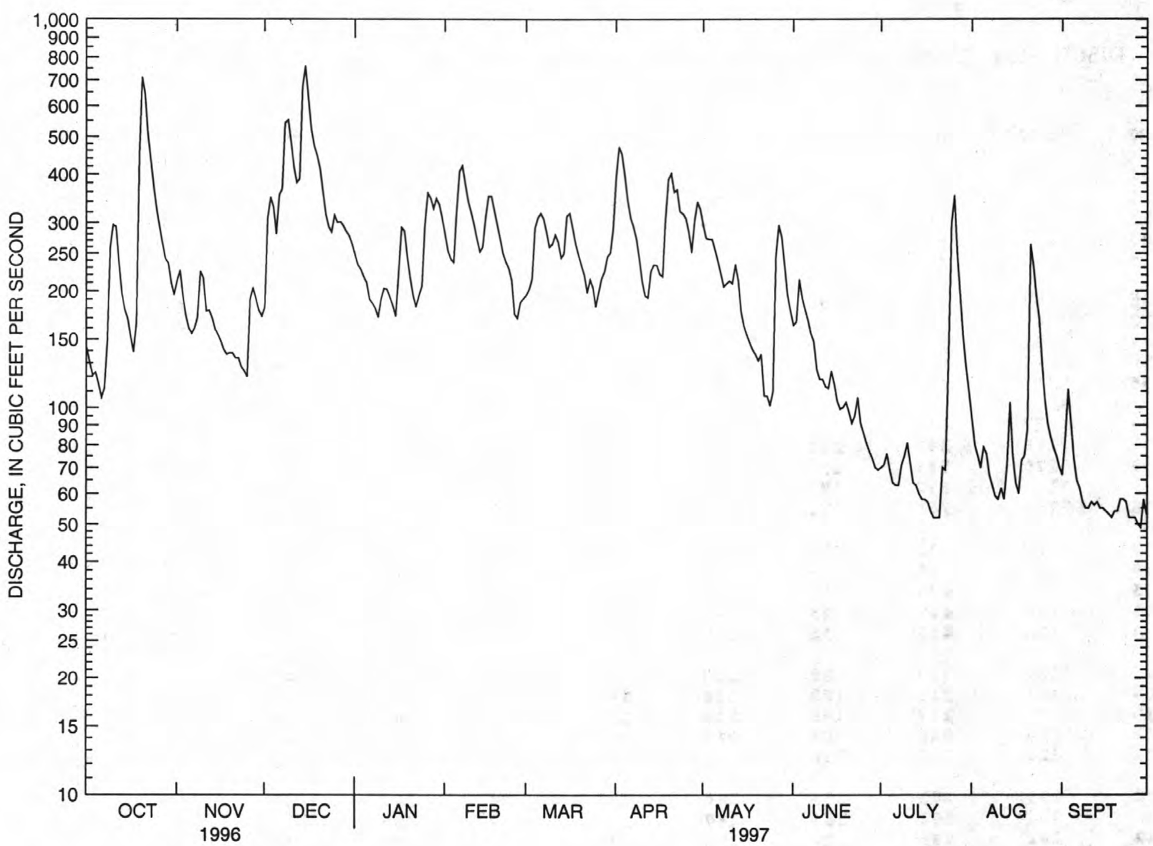
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	119	152	175	200	215	247	239	194	142	123	132	116
MAX	365	430	434	479	445	472	475	397	297	401	426	341
(WY)	1928	1973	1973	1979	1939	1994	1984	1958	1968	1938	1958	1971
MIN	38.7	45.7	54.4	62.1	92.2	105	85.4	72.0	54.1	44.1	35.6	36.5
(WY)	1923	1923	1966	1981	1931	1985	1985	1992	1995	1957	1995	1995

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

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	86611		74882			
ANNUAL MEAN	237		205		171	
HIGHEST ANNUAL MEAN					286	1978
LOWEST ANNUAL MEAN					92.3	1995
HIGHEST DAILY MEAN	761	Dec 15	761	Dec 15	1690	Aug 21 1939
LOWEST DAILY MEAN	64	Sep 8	49	Sep 28	9.0	Sep 29 1932
ANNUAL SEVEN-DAY MINIMUM	86	Sep 8	52	Sep 24	27	Oct 2 1922
INSTANTANEOUS PEAK FLOW			775	Dec 15	1730	Aug 21 1939
INSTANTANEOUS PEAK STAGE			2.68	Dec 15	10.77a	Aug 21 1939
INSTANTANEOUS LOW FLOW			46	Sep 27	9.0	Sep 29 1932
ANNUAL RUNOFF (CFSM)	2.01		1.74		1.45	
ANNUAL RUNOFF (INCHES)	27.30		23.61		19.69	
10 PERCENT EXCEEDS	400		352		312	
50 PERCENT EXCEEDS	202		194		141	
90 PERCENT EXCEEDS	117		62		63	

a From high-water mark, site and datum then in use.



01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ, DAILY MEAN DISCHARGE

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1958, 1962-69, 1975 to September 1997 (discontinued).

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
14...	1150	170	54	5.3	6.5	773	10.1	81	<1.0	<2	<10	9
JAN 1997												
29...	1155	347	58	4.6	2.5	775	12.0	86	<1.0	<2	<10	8
MAR												
25...	1135	180	56	4.9	7.0	771	10.9	89	<1.0	--	--	8
MAY												
27...	1237	298	52	5.0	17.5	767	7.5	78	E1.6	540	130	8
JUL												
31...	1155	111	56	5.3	23.0	767	7.0	81	<1.0	40	20	9

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
14...	2.1	.86	4.4	.9	1.4	7.6	6.8	<.1	5.2	38	29	4
JAN 1997												
29...	1.9	.80	4.0	.8	<1.0	8.5	6.3	<.1	4.3	40	--	<1
MAR												
25...	1.9	.81	4.1	.7	<1.0	8.8	6.5	<.1	3.1	35	--	1
MAY												
27...	1.9	.85	3.9	.9	1.2	7.7	6.2	<.1	3.2	42	25	9
JUL												
31...	2.2	.88	4.8	1.0	1.9	8.7	7.4	<.1	4.8	44	31	3

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
14...	.003	.095	.04	.06	.3	.19	.40	.28	.02	<.01	8.1	.8
JAN 1997												
29...	<.003	.081	.04	.05	.3	.18	.38	.26	<.01	<.01	6.8	.6
MAR												
25...	.005	.076	<.03	<.03	.2	.19	.28	.27	<.01	<.01	5.4	.3
MAY												
27...	.003	<.050	.03	<.03	.5	.17	--	--	.04	<.01	10	1.3
JUL												
31...	<.003	<.050	.05	.03	.4	.16	--	--	<.01	<.01	7.0	1.7

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
14...	1150	24	<1	<10	20	<1	2.0	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
14...	1500	4	30	<.1	1	<1	10

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ

LOCATION.--Lat 39°57'07", long 74°58'10", Burlington County, Hydrologic Unit 02040202, at bridge on Kings Highway, 200 ft downstream from outlet of Strawbridge Lake, 0.6 mi northwest of Moorestown Mall, 0.8 mi southeast of Lenola, and 1.8 mi southwest of Moorestown.

DRAINAGE AREA.--12.8 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
13...	1400	5.9	298	7.2	6.0	775	11.2	88	2.2	460	30	83
JAN 1997												
28...	1400	160	261	6.9	5.5	762	12.1	96	2.4	1700	440	54
MAR												
25...	1300	6.4	367	6.9	9.0	772	10.3	88	E1.5	<2	<10	91
MAY												
27...	1300	7.8	226	7.1	21.0	768	7.9	88	3.5	5400	510	56
JUL												
23...	1315	13	292	7.0	23.5	766	5.0	59	3.8	5400	740	75

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
13...	23	6.3	16	5.2	25	50	34	.2	12	166	163	8
JAN 1997												
28...	15	4.1	26	2.8	14	32	43	.1	6.2	134	140	15
MAR												
25...	25	7.0	28	4.1	16	61	53	.2	11	208	201	12
MAY												
27...	16	4.1	16	3.6	21	31	28	.1	5.6	134	118	29
JUL												
23...	20	5.8	20	4.9	30	35	39	.2	5.2	182	151	20

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
13...	.010	.28	.04	.05	.4	.23	.68	.51	.04	<.01	--	--
JAN 1997												
28...	.011	.43	.13	.15	.6	.36	1.0	.79	.12	<.01	3.0	1.2
MAR												
25...	.018	.50	.21	.21	.6	.47	1.1	.97	.09	.03	1.9	1.3
MAY												
27...	.021	.43	.18	.15	.9	.46	1.3	.88	.14	<.01	5.0	1.2
JUL												
23...	.035	.46	.32	.33	1.7	.83	2.2	1.3	.19	<.01	6.5	1.7

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
13...	1400	15	<1	<10	60	<1	<1.0	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
13...	2200	<1	230	<.1	10	<1	20

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ

LOCATION.--Lat 39°56'30", long 75°00'05", Camden County, Hydrologic Unit 02040202, on left bank on downstream wingwall of bridge on Mill Road in Cherry Hill, 1.1 mi south of Maple Shade and 3.8 mi upstream from confluence with the North Branch Pennsauken Creek.

DRAINAGE AREA.--8.98 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NJ-82-2: Drainage area. WDR NJ-90-1: 1968 (P), 1970 (P), 1971 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 8.12 ft above sea level.

REMARKS.--Records good. Diurnal fluctuations from unknown source. Several measurements of water temperature, other than those published, were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1630	517	8.65	Dec. 7	2200	313	7.33
Dec. 6	0745	353	7.66	Dec. 14	0530	*548	*8.81

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	30	83	12	21	36	91	15	7.3	4.4	5.5	5.1
2	6.4	18	158	13	13	24	33	22	69	4.4	5.2	5.2
3	6.2	8.6	33	13	12	55	16	60	28	14	5.2	5.2
4	5.4	6.9	14	11	13	75	13	23	12	4.6	9.2	4.7
5	5.5	7.0	9.6	11	146	35	11	11	8.5	3.9	45	4.6
6	5.4	7.6	200	11	41	45	12	14	7.6	3.9	18	4.5
7	5.8	7.9	122	9.9	21	18	16	11	7.6	4.0	7.1	4.6
8	76	10	121	9.5	23	14	9.7	8.6	7.2	4.1	6.0	4.8
9	76	53	28	18	33	12	8.9	41	7.1	8.1	5.5	5.1
10	25	12	15	42	20	70	10	11	6.6	14	5.0	5.2
11	12	8.5	21	22	15	28	11	8.9	6.2	4.3	4.9	20
12	9.0	7.7	23	13	14	15	27	8.3	6.1	3.9	5.4	16
13	6.9	7.1	133	9.6	14	12	33	7.9	14	4.8	28	5.7
14	6.8	7.2	369	8.6	73	56	11	8.4	9.1	3.8	42	4.9
15	6.4	6.9	72	8.2	69	72	9.1	7.8	5.6	3.8	7.4	4.8
16	6.6	6.9	38	104	27	20	8.7	7.1	5.3	3.9	5.6	4.4
17	6.6	7.4	37	33	18	14	14	6.9	5.6	3.9	5.9	4.2
18	6.6	7.7	27	15	14	12	110	6.8	6.1	3.8	47	4.5
19	322	14	62	10	13	11	31	9.6	12	3.6	9.2	4.3
20	52	7.9	36	9.3	12	11	14	7.3	5.9	3.4	54	4.4
21	25	7.0	18	8.3	11	10	11	6.2	5.5	3.7	79	4.1
22	16	7.1	15	13	14	10	11	5.5	4.8	45	12	4.0
23	13	8.8	15	38	12	8.8	9.7	5.1	4.8	33	7.7	4.2
24	13	6.1	33	13	9.1	8.0	32	5.0	4.6	101	6.3	4.3
25	11	5.8	71	154	8.2	7.9	16	51	4.6	96	5.5	4.6
26	10	142	25	33	10	61	9.6	76	4.6	16	5.2	4.5
27	9.6	33	27	18	22	16	8.8	13	4.5	7.9	5.0	4.0
28	13	12	18	85	9.4	11	100	9.7	4.3	6.9	19	4.8
29	13	9.0	18	34	---	10	18	8.2	4.4	6.2	42	21
30	9.0	7.9	16	18	---	11	11	8.2	4.3	5.6	7.4	4.7
31	8.8	---	14	15	---	108	---	7.8	---	5.5	5.6	---
TOTAL	794.8	481.0	1871.6	812.4	707.7	896.7	716.5	491.3	283.2	431.4	515.8	182.4
MEAN	25.6	16.0	60.4	26.2	25.3	28.9	23.9	15.8	9.44	13.9	16.6	6.08
MAX	322	142	369	154	146	108	110	76	69	101	79	21
MIN	5.4	5.8	9.6	8.2	8.2	7.9	8.7	5.0	4.3	3.4	4.9	4.0
CFSM	2.86	1.79	6.72	2.92	2.81	3.22	2.66	1.76	1.05	1.55	1.85	.68
IN.	3.29	1.99	7.75	3.37	2.93	3.71	2.97	2.04	1.17	1.79	2.14	.76

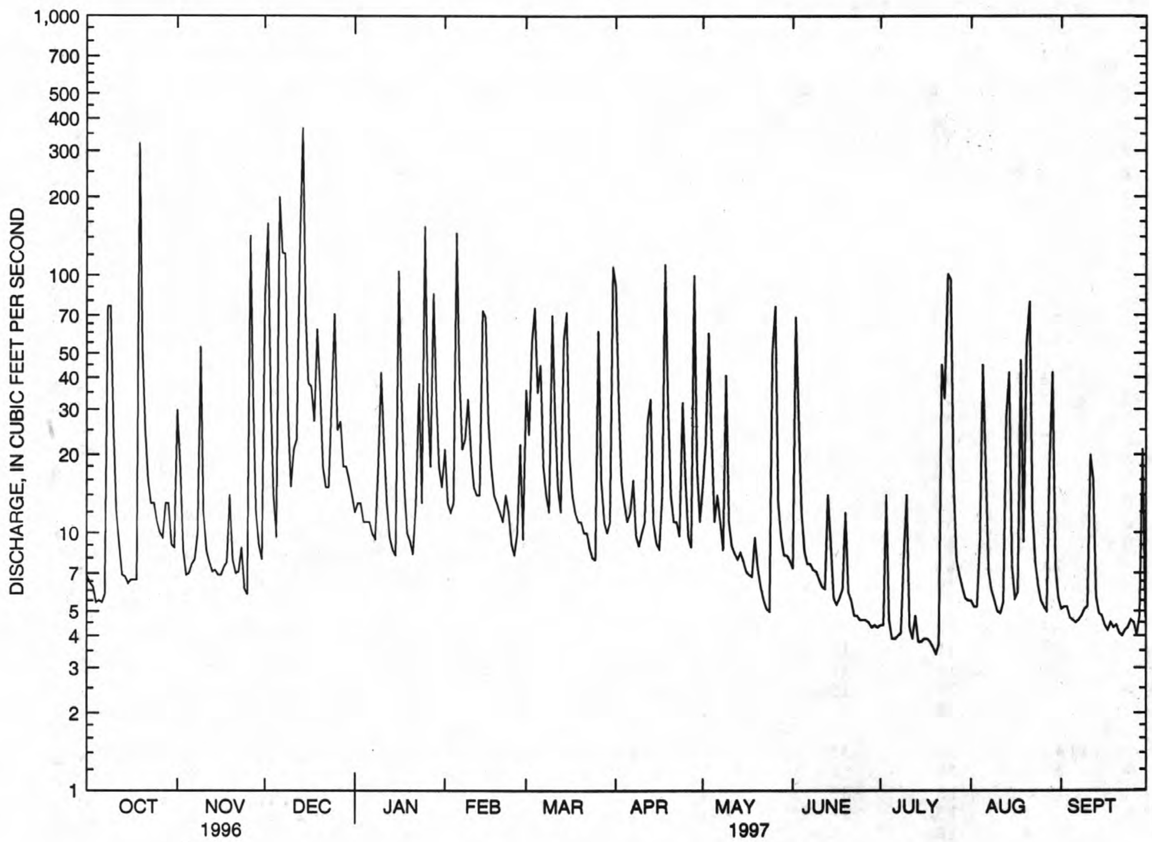
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.6	17.4	22.9	22.8	20.1	23.8	22.3	19.2	15.1	17.9	16.5	13.9
MAX	26.0	48.8	60.4	50.5	44.7	46.5	49.8	47.0	33.4	46.5	58.2	38.8
(WY)	1990	1973	1997	1979	1979	1994	1983	1989	1989	1989	1978	1975
MIN	5.83	6.99	7.05	6.55	9.19	9.29	8.08	8.24	6.50	6.92	4.17	4.71
(WY)	1995	1977	1981	1981	1968	1985	1985	1993	1995	1982	1995	1968

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1968 - 1997	
ANNUAL TOTAL	9568.4		8184.8			
ANNUAL MEAN	26.1		22.4		18.9	
HIGHEST ANNUAL MEAN					27.3	1978
LOWEST ANNUAL MEAN					11.6	1995
HIGHEST DAILY MEAN	434	Jan 19	369	Dec 14	551	Jul 5 1989
LOWEST DAILY MEAN	4.4	Jun 16	3.4	Jul 20	2.3	Jul 12 1991
ANNUAL SEVEN-DAY MINIMUM	5.4	Jun 6	3.7	Jul 15	2.5	Aug 30 1995
INSTANTANEOUS PEAK FLOW			548	Dec 14	1500	Jul 14 1994
INSTANTANEOUS PEAK STAGE			8.81	Dec 14	11.63a	Jul 14 1994
INSTANTANEOUS LOW FLOW			2.6	Jul 20	1.8	Oct 22 1992
ANNUAL RUNOFF (CFSM)	2.91		2.50		2.10	
ANNUAL RUNOFF (INCHES)	39.64		33.91		28.56	
10 PERCENT EXCEEDS	61		54		36	
50 PERCENT EXCEEDS	12		10		9.8	
90 PERCENT EXCEEDS	6.0		4.6		5.0	

a From high-water marks.



01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ, DAILY MEAN DISCHARGE

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1975 to September 1997 (discontinued).

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
14...	1100	7.5	360	7.4	6.5	775	9.8	78	E1.6	500	<100	92
JAN 1997												
28...	1030	118	224	7.2	6.0	759	11.3	91	4.9	500	1500	50
MAR												
25...	1015	7.7	375	7.2	7.0	773	11.8	96	E1.0	130	20	95
MAY												
27...	1030	12	393	7.1	15.5	767	6.4	64	6.5	>240000	300	100
JUL												
23...	1100	44	157	7.0	21.0	766	6.4	71	6.7	92000	28000	37

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
14...	25	7.2	25	8.2	46	42	36	.3	14	198	198	9
JAN 1997												
28...	14	3.6	20	3.0	23	21	31	.1	5.4	122	116	73
MAR												
25...	25	7.9	29	6.3	41	49	50	.2	11	213	212	7
MAY												
27...	31	6.2	19	5.0	20	32	32	.2	9.3	260	210	13
JUL												
23...	11	2.6	9.8	3.3	14	19	15	.1	3.5	100	78	26

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
14...	.159	2.5	1.30	.90	1.9	1.7	4.4	4.2	.40	<.01	4.1	.5
JAN 1997												
28...	.024	.97	E.55	E.51	1.4	.82	2.4	1.8	.51	.04	4.0	4.2
MAR												
25...	.072	1.9	.30	.30	.8	.77	2.7	2.7	.26	<.01	3.1	.3
MAY												
27...	.357	13	3.17	3.09	4.5	3.8	18	17	.22	.07	4.8	.3
JUL												
23...	.078	.95	.93	.93	2.0	1.7	2.9	2.7	.26	.05	6.9	1.8

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
14...	1100	11	<1	<10	100	<1	<1.0	3

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
14...	2400	<1	120	<.1	6	<1	20

01467150 COOPER RIVER AT HADDONFIELD, NJ

LOCATION.--Lat 39°54'11", long 75°01'19", Camden County, Hydrologic Unit 02040202, on right bank of Wallworth Lake in Pennypacker Park, 200 ft upstream from bridge on State Highway 41 (Kings Highway) in Haddonfield, 0.6 mi upstream from North Branch Cooper River, and 7.7 mi upstream from mouth.

DRAINAGE AREA.--17.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WRD-NJ 1969: 1967(M). WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 9.29 ft above sea level.

REMARKS.--Records good. Bypass gates were installed on both ends of the dam in August 1987. No gate openings this year. Occasional regulation at low flow from Kirkwood Lake, other small lakes and wastewater treatment plants (prior to summer 1987). Several measurements of water temperature were made during the year. Gage-height telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1215	*916	*3.31	Dec. 7	2215	510	2.73
Dec 6	0930	593	2.86	Dec. 14	0600	788	3.14

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	22	86	23	27	40	109	25	16	9.6	8.8	7.4
2	13	17	194	27	24	31	45	27	66	9.5	8.6	8.3
3	13	13	42	26	21	90	27	65	39	21	8.4	13
4	12	13	27	25	21	93	25	41	22	10	8.6	8.9
5	11	13	22	23	216	38	24	24	16	9.6	17	7.4
6	11	13	288	22	59	38	26	24	15	9.6	22	7.0
7	12	14	175	20	32	24	29	20	14	9.5	12	6.8
8	92	15	184	19	30	22	22	17	15	9.3	9.9	6.5
9	114	47	45	25	33	20	20	35	14	14	9.1	6.7
10	38	21	33	37	30	66	18	21	13	13	8.5	6.9
11	19	14	32	30	23	29	18	17	13	9.2	8.5	14
12	15	13	31	23	21	23	30	15	13	8.9	8.5	10
13	14	13	144	19	21	20	37	15	20	8.8	19	8.7
14	13	13	606	19	82	72	22	14	16	9.2	41	7.8
15	14	13	120	18	84	83	18	14	14	11	16	7.2
16	13	13	48	141	38	29	18	14	13	11	12	6.8
17	12	13	43	47	27	22	28	13	13	10	12	6.5
18	15	13	37	25	23	21	130	14	13	11	36	6.6
19	477	16	64	20	21	21	53	15	16	10	14	6.6
20	101	14	42	18	21	21	28	15	14	10	60	6.7
21	36	12	30	19	21	21	24	14	13	10	109	6.6
22	24	12	27	23	23	20	23	13	12	32	19	6.5
23	21	13	26	40	22	19	22	13	11	29	11	7.1
24	20	12	41	26	20	18	44	13	11	129	8.6	6.5
25	18	12	83	216	20	19	30	54	11	159	8.0	6.5
26	16	134	34	47	21	55	23	93	9.7	33	8.6	6.5
27	13	39	33	29	27	26	21	26	9.4	16	7.6	6.3
28	18	22	29	106	22	22	134	18	9.1	12	16	7.4
29	17	19	28	44	---	23	42	16	9.0	11	16	18
30	16	18	26	28	---	23	27	16	9.0	9.6	8.3	7.8
31	13	---	25	24	---	147	---	16	---	9.0	7.7	---
TOTAL	1236	616	2645	1209	1030	1196	1117	737	479.2	663.8	559.7	239.0
MEAN	39.9	20.5	85.3	39.0	36.8	38.6	37.2	23.8	16.0	21.4	18.1	7.97
MAX	477	134	606	216	216	147	134	93	66	159	109	18
MIN	11	12	22	18	20	18	18	13	9.0	8.8	7.6	6.3
CFSM	2.35	1.21	5.02	2.29	2.16	2.27	2.19	1.40	.94	1.26	1.06	.47
IN.	2.70	1.35	5.79	2.65	2.25	2.62	2.44	1.61	1.05	1.45	1.22	.52

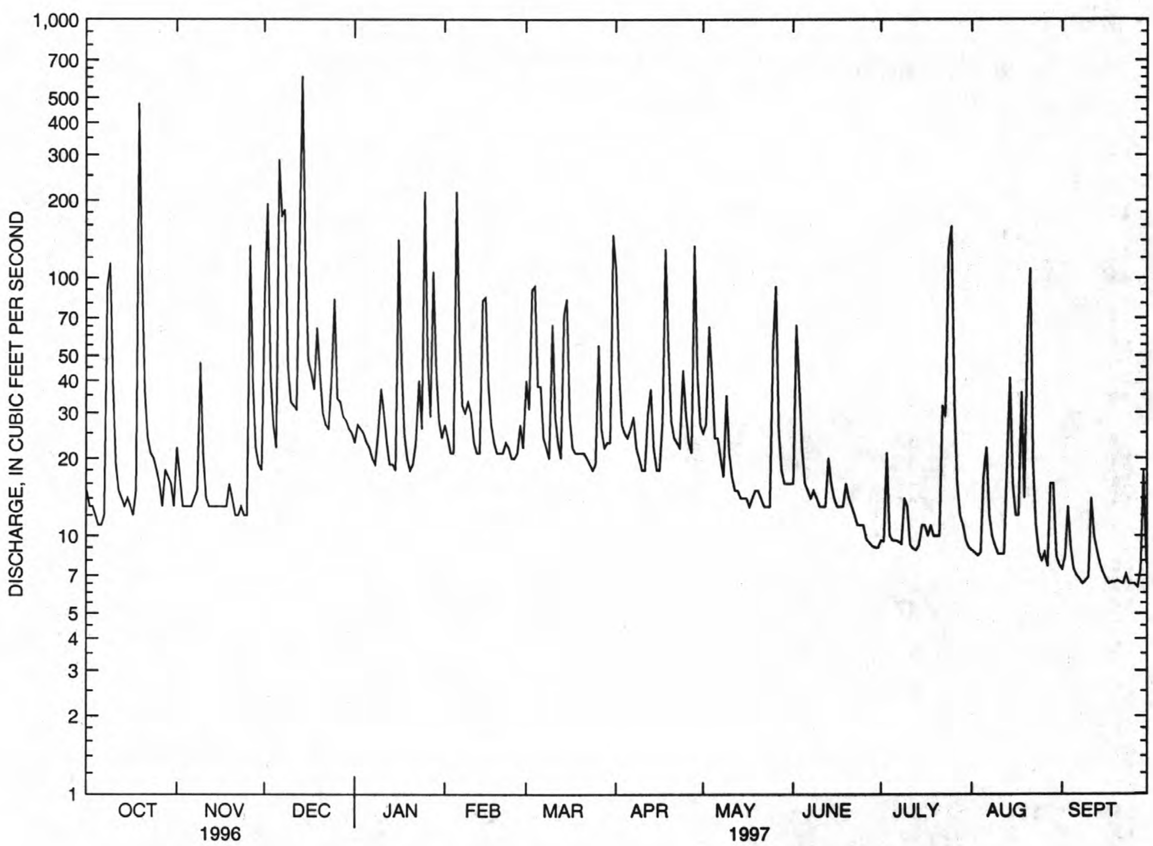
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	27.0	31.6	38.9	39.3	37.1	42.3	41.4	36.3	28.9	32.0	29.6	26.0
MAX	46.8	79.6	85.3	97.8	76.1	78.9	99.4	66.7	54.9	66.8	97.6	65.8
(WY)	1976	1973	1997	1978	1979	1984	1983	1983	1972	1975	1971	1975
MIN	9.26	11.0	14.3	14.6	18.9	23.2	15.1	14.2	10.9	12.9	7.79	7.97
(WY)	1966	1992	1966	1992	1992	1981	1992	1965	1988	1993	1966	1997

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	15043.5		11727.7			
ANNUAL MEAN	41.1		32.1		34.2	
HIGHEST ANNUAL MEAN					50.6	1973
LOWEST ANNUAL MEAN					19.2	1995
HIGHEST DAILY MEAN	606	Dec 14	606	Dec 14	1510	Aug 28 1971
LOWEST DAILY MEAN	9.5	Jun 16	6.3	Sep 27	1.2	Jun 27 1964
ANNUAL SEVEN-DAY MINIMUM	10	Aug 30	6.6	Sep 21	5.6	Aug 24 1966
INSTANTANEOUS PEAK FLOW			916	Oct 19	3300	Aug 28 1971
INSTANTANEOUS PEAK STAGE			3.31	Oct 19	5.46	Aug 28 1971
INSTANTANEOUS LOW FLOW			6.3	Many days	.80a	Nov 13 1972
ANNUAL RUNOFF (CFSM)	2.42		1.89		2.01	
ANNUAL RUNOFF (INCHES)	32.92		25.66		27.34	
10 PERCENT EXCEEDS	82		62		59	
50 PERCENT EXCEEDS	22		19		23	
90 PERCENT EXCEEDS	12		8.7		12	

a Regulation from unknown source.



—— 01467150 COOPER RIVER AT HADDONFIELD, NJ, DAILY MEAN DISCHARGE

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-79, 1991 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: March 1968 to August 1969.
SUSPENDED SEDIMENT DISCHARGE: March 1968 to September 1969.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
18...	0952	13	224	6.8	5.0	762	11.3	89	E1.4	50	20	56
JAN 1997												
28...	1045	138	197	7.2	5.5	760	11.9	95	2.6	>24000	1700	47
MAR												
26...	1000	122	232	7.2	10.5	756	10.0	90	3.5	170	840	55
MAY												
29...	1044	16	202	7.2	17.0	771	8.9	91	<1.0	1700	390	54
AUG												
04...	1131	8.4	221	7.2	23.5	759	7.5	89	3.8	800	500	60

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
18...	15	4.6	13	3.9	29	25	27	.2	13	126	121	10
JAN 1997												
28...	13	3.5	17	2.7	21	20	28	.1	7.8	112	107	46
MAR												
26...	15	4.3	16	3.2	22	25	34	.2	8.4	139	122	19
MAY												
29...	15	4.1	12	3.6	29	21	24	.2	11	126	109	15
AUG												
04...	17	4.6	12	4.4	27	26	27	.2	15	140	124	19

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
18...	.008	.27	.17	.17	.4	.27	.67	.54	.13	<.01	2.4	.7
JAN 1997												
28...	.011	.51	.31	.24	.6	.41	1.1	.92	.23	.02	3.3	2.0
MAR												
26...	.012	.57	.22	.20	.8	.62	1.4	1.2	.23	<.01	3.0	1.5
MAY												
29...	.010	.28	.11	.07	.7	.32	.96	.60	.27	<.01	3.6	.9
AUG												
04...	.012	.27	.15	.11	.3	.32	.56	.59	.36	<.01	2.6	2.2

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV 1996								
18...	0952	10	2	<10	50	<1	<1.0	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996							
18...	3800	3	130	<.1	6	<1	20

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ

LOCATION.--Lat 39°48'05", long 75°04'27", Gloucester County, Hydrologic Unit 02040202, at bridge on Blackwood-Clementon Road at Blackwood Terrace, 1,000 ft upstream from Bull Run, and 2.0 mi northeast of Fairview.

DRAINAGE AREA.--19.1 mi^2.

PERIOD OF RECORD.--Water years 1976 to September 1997 (discontinued).

REMARKS.--Additional water-quality data collected as part of the LINJ NAWQA study are listed in the section entitled "Water Quality at Miscellaneous Sites." For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Analyses of the split and concurrent replicate samples were performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
NOV 1996									
06...	1015	ENVIRONMENTAL	E30	170	7.2	10.0	771	10.2	89
JAN 1997									
21...	0930	ENVIRONMENTAL	E35	192	6.7	0.5	774	13.7	94
MAR									
25...	1128	ENVIRONMENTAL	E35	170	7.3	9.0	774	11.7	100
25...	*1128*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
25...	*1129*	*CONCURRENT REPLICATE*	--	--	--	--	--	--	--
JUN									
02...	1231	ENVIRONMENTAL	E45	148	7.2	18.5	760	8.0	86
AUG									
04...	0930	ENVIRONMENTAL	E20	153	7.1	24.0	759	6.4	76

DATE	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV 1996										
06...	<1.0	110	200	44	13	2.9	11	2.8	27	13
JAN 1997										
21...	E1.6	280	10	42	12	3.0	15	2.3	22	15
MAR										
25...	<1.0	9	70	39	11	2.8	11	2.4	23	16
25...	--	--	--	*45*	*13*	*3.0*	*E13*	*3.0*	*25*	*16*
25...	--	--	--	*45*	*13*	*3.0*	*E13*	*3.0*	*24*	*16*
JUN										
02...	3.4	9200	8000	40	11	2.7	9.5	2.4	27	11
AUG										
04...	<1.0	50	250	36	10	2.7	12	2.7	24	10

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 1996									
06...	19	<.1	8.3	98	91	1	.022	.98	.20
JAN 1997									
21...	26	<.1	7.4	108	101	2	.008	1.4	.39
MAR									
25...	19	<.1	5.2	90	87	4	.016	1.2	.11
25...	*20*	*<.1*	--	*98*	--	*5*	*<.025*	*1.16*	*.22*
25...	*20*	*<.1*	--	*95*	--	*5*	*<.025*	*1.22*	*.22*
JUN									
02...	15	.1	5.6	91	78	9	.034	.85	.12
AUG									
04...	19	<.1	6.2	100	82	10	.015	1.0	.07

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996									
06...	.18	.4	.32	1.4	1.3	.05	<.01	2.9	.5
JAN 1997									
21...	.37	.7	.61	2.1	2.0	.03	<.01	2.3	.5
MAR									
25...	.13	.4	.35	1.6	1.5	.05	<.01	2.4	.3
25...	*.21*	*.75*	*.44*	*1.9*	*1.6*	*.06*	*<.05*	*2.3*	--
25...	*.21*	*.49*	*.42*	*1.7*	*1.6*	*.06*	*<.05*	*2.5*	--
JUN									
02...	.14	.7	.48	1.5	1.3	.10	.01	4.1	1.7
AUG									
04...	.05	.3	.25	1.3	1.2	.08	.08	3.8	.8

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
NOV 1996											
06...	1015	ENVIRONMENTAL	--	<10	--	--	--	<1	--	<10	60
06...	1015	BED MATERIAL	6.9	--	<.2	100	870	--	4	--	--
JUN 1997											
02...	*1229*	*SAMPLER BLANK*	--	--	--	--	--	--	--	--	--
02...	*1230*	*SPLITTER BLANK*	--	--	--	--	--	--	--	--	--
02...	1231	ENVIRONMENTAL	--	20	--	--	--	1	--	<10	50
02...	*1231*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV 1996												
06...	<1	--	<1.0	--	--	<1	--	--	1300	--	1	--
06...	--	<1	--	7	<5	--	--	6	--	17000	--	--
JUN 1997												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	<1	--	1.7	--	--	1	--	--	1700	--	2	--
02...	--	--	--	--	--	--	*<1*	--	--	--	--	*<1*

DATE	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996												
06...	--	30	--	<.1	--	--	1	--	--	<1	--	<10
06...	60	--	37	--	--	.01	--	--	<10	--	<1	--
JUN 1997												
02...	--	--	--	--	--	--	--	*<1*	--	--	--	--
02...	--	--	--	--	--	--	--	*3*	--	--	--	--
02...	--	50	--	<.1	--	--	2	--	--	<1	--	<10
02...	--	--	--	--	*<.1*	--	--	*4*	--	--	--	--

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)
NOV 1996												
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	30	.7	4.1	12	<1	.4	8	2.2	1.9	.2	2.6
JUN 1997												
02...	.8	--	--	--	--	--	--	--	--	--	--	--
02...	.8	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	.6	--	--	--	--	--	--	--	--	--	--	--

DATE	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
NOV 1996											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<.1	<.1	<.1	<.1	<.1	<1.3	<.1	<1	<10	.8	1
JUN 1997											
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA

LOCATION.--Lat 39°58'04", long 75°11'20", Philadelphia County, Hydrologic Unit 02040203, on right bank 150 ft upstream from Fairmont Dam, 1,500 ft upstream from bridge on Spring Garden Street in Philadelphia, and 8.7 mi upstream from mouth.

DRAINAGE AREA.--1,893 mi^2.

PERIOD OF RECORD.--October 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, and 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, crest-stage gage, 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 Fairmont Dam at same datum. Nov. 26, 1956, to Oct. 6, 1966, water-stage recorder at site on left bank 40 ft upstream from Fairmont Dam at same datum.

REMARKS.--Records good. 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 ft^3/s, from rating extended above 46,000 ft^3/s. Flood of Mar. 1, 1902 reached a stage of 14.8 ft, discharge, 98,000 ft^3/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	2030	*54,000	*11.86	Dec. 8	0215	23,100	9.19
Nov. 9	1245	21,600	9.03	Dec. 14	1000	47,200	11.39
Nov. 26	1715	20,200	8.87	Jan. 25	1015	24,100	9.30
Dec. 2	1200	34,700	10.36	Mar. 15	0445	18,200	8.63
Dec. 6	1615	26,700	9.57				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1820	2510	5060	3860	3840	2800	8210	2250	1590	906	879	933
2	1710	2340	27600	3700	3860	2960	8130	2230	1880	970	824	904
3	1940	2170	21300	3520	3900	2890	7200	2360	4870	1940	805	863
4	1640	2150	13800	3460	3870	e3240	5320	4030	4780	1470	821	817
5	1480	2120	9950	3320	7980	3730	4630	2730	3710	1110	975	735
6	1350	2050	17900	3420	8990	4360	4190	2250	3020	1030	940	713
7	1320	1960	16200	3190	6190	4200	3940	2250	2570	1030	922	804
8	2530	2070	17700	2810	4990	3690	3510	2230	2220	973	781	815
9	7840	16100	10800	2670	4520	3370	3100	2370	2080	864	759	790
10	5540	15700	8820	2760	4120	3830	2870	2610	1930	1160	700	822
11	4050	10700	7300	2750	3600	4160	2710	2310	1790	1110	714	2350
12	2610	7920	7590	2570	3260	3490	2740	2110	1620	941	661	5310
13	1890	5850	9460	2330	3090	3140	3570	1970	1630	840	844	2450
14	1740	4790	37400	2330	3540	4170	3470	1840	1620	816	1350	1680
15	1560	4150	22100	2290	5580	13800	2790	1760	1580	731	1030	1430
16	1450	3630	15400	3690	4750	8590	2480	1650	1410	721	823	1100
17	1360	3320	12100	4170	3900	6810	2400	1560	1310	683	898	988
18	1380	2980	9780	2530	3470	5820	2760	1510	1270	645	1200	941
19	25800	3110	8860	2040	3290	4900	2690	1550	1910	627	1130	784
20	33700	3160	8100	2020	3400	4180	2550	1550	2000	652	1400	819
21	17300	2780	6290	2300	3420	3800	2490	1510	1520	701	3200	821
22	12300	2440	5470	2360	3350	3500	2350	1430	1330	1030	2290	774
23	9370	2370	5160	3100	3360	3280	2250	1300	1250	1390	1590	727
24	7070	2280	5210	2930	3190	3060	2290	1250	1120	2860	1220	735
25	5020	2210	7900	16000	3070	2800	2230	2130	1080	5390	1070	730
26	4240	10900	5900	8180	2980	3290	2090	6080	1120	2490	983	689
27	3810	9490	4900	5450	2960	3280	2030	2930	981	1690	885	707
28	3540	5270	4550	9280	2910	2840	2820	2170	1060	1420	1080	711
29	3190	4040	4430	9960	---	2660	3310	2030	1010	1510	1360	880
30	2980	3760	4400	5890	---	2650	2540	1770	980	1440	1290	904
31	2810	---	4220	4420	---	5140	---	1650	---	1060	984	---
TOTAL	174340	144320	345650	129300	115380	130430	103660	67370	56241	40200	34408	33726
MEAN	5624	4811	11150	4171	4121	4207	3455	2173	1875	1297	1110	1124
MAX	33700	16100	37400	16000	8990	13800	8210	6080	4870	5390	3200	5310
MIN	1320	1960	4220	2020	2910	2650	2030	1250	980	627	661	689

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1997, BY WATER YEAR (WY)

MEAN	1398	2366	3231	3358	3624	4846	4276	3107	2101	1646	1387	1391
MAX	5624	6272	11150	11400	8136	13320	11620	9943	11640	6434	7980	4863
(WY)	1997	1973	1997	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1932 - 1997	
ANNUAL TOTAL	1842063		1375025			
ANNUAL MEAN	5033		3767		2723	
HIGHEST ANNUAL MEAN					4791	1984
LOWEST ANNUAL MEAN					1014	1965
HIGHEST DAILY MEAN	51800	Jan 20	37400	Dec 14	93400	Jun 23 1972
LOWEST DAILY MEAN	e600	Jan 8	627	Jul 19	.60	Sep 2 1966
ANNUAL SEVEN-DAY MINIMUM	692	Aug 31	680	Jul 15	24	Sep 28 1941
INSTANTANEOUS PEAK FLOW			54000	Oct 19	103000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			11.86	Oct 19	14.65	Jun 23 1972
INSTANTANEOUS LOW FLOW			510	Jul 18a	.00	Sep 2 1966
10 PERCENT EXCEEDS	10600		8030		5880	
50 PERCENT EXCEEDS	3320		2540		1670	
90 PERCENT EXCEEDS	1300		855		428	

a Also Aug. 12.
e Estimated.

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

LOCATION.--Lat 39°44'28", long 75°15'33", Gloucester County, Hydrologic Unit 02040202, on right bank 25 ft downstream from County Bridge Route 607 on Gibbstown-Harrisonville Road (Tomlin Station Road), 1.8 mi west of Mullica Hill, and 2.8 mi east of Swedesboro.

DRAINAGE AREA.--26.9 mi^2.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is sea level. Prior to July 28, 1969, at datum 7.96 ft higher. July 28, 1969 to Sept. 30, 1969, at datum 5.96 ft higher.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 19	1415	781	12.76	Dec. 8	0530	540	11.84
Dec. 2	1115	556	11.92	Dec. 14	1530	*1,050	*13.59
Dec. 6	1500	694	12.46	Feb. 5	2300	378	---

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	38	53	51	e47	e50	e125	e50	27	16	17	13
2	19	39	332	51	e43	e49	e96	e49	62	16	17	13
3	19	34	93	51	e40	e83	e59	e80	62	19	17	14
4	17	33	64	49	e39	e105	e56	e65	37	16	17	13
5	17	33	62	48	e146	e69	e50	e44	30	16	18	12
6	17	33	406	47	e105	e66	e49	41	28	16	18	12
7	17	33	236	44	e55	e53	e52	38	27	16	17	12
8	39	37	388	43	e51	e47	e46	35	26	15	16	12
9	129	84	105	43	e56	e43	e41	46	25	15	16	12
10	57	51	66	53	e50	e84	e38	42	24	14	16	13
11	37	39	58	55	e45	e58	e37	36	21	14	17	18
12	31	35	55	52	e42	e45	e47	34	19	13	17	14
13	30	34	86	47	e41	e41	e54	33	25	13	23	13
14	29	33	760	44	e85	e79	e42	32	25	13	40	12
15	27	32	418	42	e107	e108	e37	31	22	12	18	12
16	26	31	142	115	e64	e61	e37	31	21	12	17	12
17	26	31	99	93	e50	e50	e43	30	20	12	17	12
18	27	32	89	61	e47	e49	e105	30	21	11	17	12
19	455	34	108	51	e44	e48	e90	30	21	15	17	12
20	200	32	90	43	e42	e47	e50	29	20	12	46	15
21	72	31	65	41	e42	e46	e42	28	18	12	82	20
22	53	30	61	42	e44	e45	e41	27	19	29	23	13
23	47	29	63	61	e41	e42	e40	26	19	27	16	13
24	43	30	69	55	e39	e41	e58	26	17	132	14	12
25	39	30	122	120	e37	e38	e54	37	17	94	13	13
26	38	139	69	e79	e39	e61	e43	125	17	38	13	13
27	37	70	68	e44	e43	e51	e40	44	17	25	12	12
28	42	43	63	e94	e38	e42	e118	31	17	21	14	13
29	43	38	60	e71	---	e41	e88	28	17	19	18	18
30	39	37	57	e46	---	e44	e54	27	17	18	15	14
31	36	---	54	e43	---	e112	---	27	---	17	13	---
TOTAL	1730	1225	4461	1779	1522	1798	1732	1232	738	718	631	399
MEAN	55.8	40.8	144	57.4	54.4	58.0	57.7	39.7	24.6	23.2	20.4	13.3
MAX	455	139	760	120	146	112	125	125	62	132	82	20
MIN	17	29	53	41	37	38	37	26	17	11	12	12
CFSM	2.07	1.52	5.35	2.13	2.02	2.16	2.15	1.48	.91	.86	.76	.49
IN.	2.39	1.69	6.17	2.46	2.10	2.49	2.40	1.70	1.02	.99	.87	.55

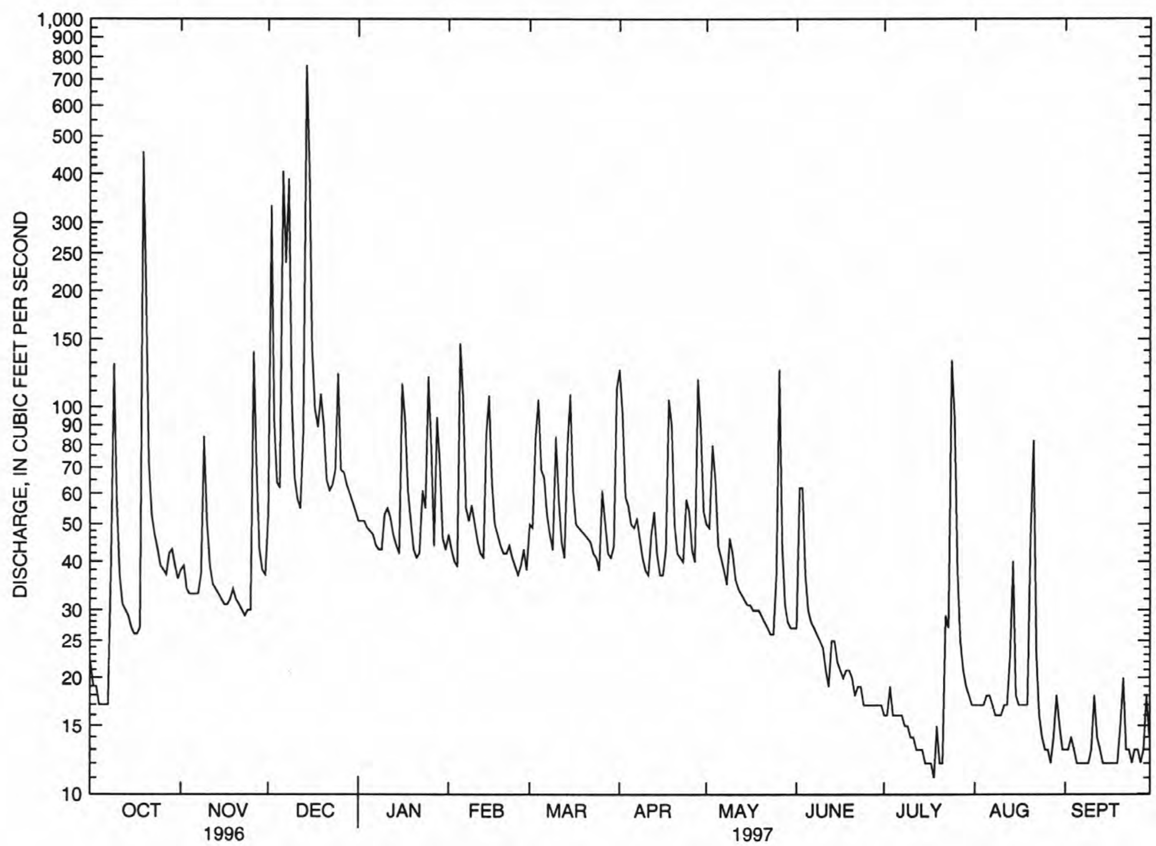
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

MEAN	28.8	34.9	47.3	51.8	50.0	55.3	53.8	42.0	34.0	32.1	29.8	25.2
MAX	65.2	93.9	144	123	115	132	134	72.6	77.7	112	121	71.9
(WY)	1990	1973	1997	1978	1979	1994	1983	1989	1975	1975	1967	1971
MIN	13.0	18.0	18.8	20.7	23.6	22.7	21.3	15.9	10.7	6.01	5.89	11.7
(WY)	1993	1975	1981	1981	1992	1981	1985	1977	1966	1966	1966	1968

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1966 - 1997	
ANNUAL TOTAL	21797		17965			
ANNUAL MEAN	59.6		49.2		40.6	
HIGHEST ANNUAL MEAN					64.7	1973
LOWEST ANNUAL MEAN					22.5	1981
HIGHEST DAILY MEAN	760	Dec 14	760	Dec 14	1260	Aug 28 1971
LOWEST DAILY MEAN	13	Sep 3	11	Jul 18	2.9	Jul 14 1966
ANNUAL SEVEN-DAY MINIMUM	14	Aug 31	12	Sep 13	3.3	Aug 25 1966
INSTANTANEOUS PEAK FLOW			1050	Dec 14	3530	Aug 10 1967
INSTANTANEOUS PEAK STAGE			13.59	Dec 14	17.44a	Aug 10 1967
INSTANTANEOUS LOW FLOW			11	Jul 18	2.9	Jul 14 1966
ANNUAL RUNOFF (CFSM)	2.21		1.83		1.51	
ANNUAL RUNOFF (INCHES)	30.14		24.84		20.50	
10 PERCENT EXCEEDS	98		88		67	
50 PERCENT EXCEEDS	39		38		29	
90 PERCENT EXCEEDS	17		14		14	

a Present datum.
e Estimated.



——— 01477120 RACCOON CREEK NEAR SWEDESBORO, NJ, DAILY MEAN DISCHARGE

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1966 to September 1973.
SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
13...	1218	33	203	7.4	5.5	776	11.3	88	<1.1	1100	20	60
JAN 1997												
28...	1200	E94	151	7.2	4.0	762	12.0	92	2.1	350	550	47
MAR												
20...	1230	E47	184	7.3	7.0	755	11.3	94	E1.4	22	<10	56
JUN												
03...	1227	56	168	7.1	14.5	760	8.4	83	E1.9	7900	7100	54
AUG												
07...	1153	14	212	7.5	20.5	767	8.6	95	<1.0	310	180	68

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
13...	18	3.7	8.3	3.6	31	25	18	.2	11	134	113	9
JAN 1997												
28...	14	2.9	7.5	3.0	18	21	13	.2	7.2	94	85	51
MAR												
20...	16	3.9	7.9	3.2	22	27	16	.2	8.2	111	105	6
JUN												
03...	16	3.6	8.0	3.2	27	21	15	.2	8.2	112	98	8
AUG												
07...	21	3.8	9.7	3.9	41	21	18	.2	11	139	119	4

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
13...	.010	1.4	.07	<.03	.3	.16	1.7	1.6	.12	.02	3.1	.4
JAN 1997												
28...	.015	1.2	.15	.16	.8	.36	2.0	1.6	.32	.01	3.3	3.4
MAR												
20...	.017	2.0	.09	.10	.3	.22	2.3	2.2	.08	.02	2.4	.3
JUN												
03...	.022	1.5	<.03	.06	.5	.40	2.0	1.9	.17	.03	4.8	.9
AUG												
07...	.011	1.3	.05	<.03	.2	.22	1.5	1.5	.13	.05	2.9	.5

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
NOV 1996											
13...	1218	--	15	--	--	--	<1	--	<10	50	<1
13...	1218	7.0	--	<.2	100	1100	--	5	--	--	--

DATE	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)
NOV 1996										
13...	--	<1.0	--	--	<1	--	1900	--	<1	--
13...	<1	--	6	<5	--	2.0	--	35000	--	<10

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)
NOV 1996										
13...	60	--	<.1	--	4	--	<1	--	<10	--
13...	--	120	--	<.01	--	<10	--	<1	--	70

DATE	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)
NOV 1996										
13...	--	--	--	--	--	--	--	--	--	--
13...	<.1	2.1	<1	<1	<.1	<1	E.9	.9	.7	.1

DATE	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
NOV 1996										
13...	--	--	--	--	--	--	--	--	--	--
13...	<.1	<.1	<.1	<.1	<.1	<.8	<.1	<1	<10	.9

01477510 OLDMANS CREEK AT PORCHES MILL, NJ

LOCATION.--Lat 39°41'57", long 75°20'01", Salem County, Hydrologic Unit 02040206, at bridge on Kings Highway in Porches Mill, 150 ft downstream from tributary from outflow of lake at Porches Mill, 1.0 mi north of Seven Stars, and 2.1 mi southeast of Auburn.

DRAINAGE AREA.--21.0 mi^2.

PERIOD OF RECORD.--Water years 1975 to September 1997 (discontinued).

REMARKS.--For the definitions of split and concurrent replicate samples, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories. Analyses of the split and concurrent replicate samples were performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
NOV 1996									
13...	0930	ENVIRONMENTAL	36	220	7.3	4.5	777	10.9	83
JAN 1997									
27...	1010	ENVIRONMENTAL	245	182	7.1	1.5	777	12.6	88
MAR									
25...	1010	ENVIRONMENTAL	48	197	7.1	8.0	772	11.6	97
25...	*1010*	*SPLIT REPLICATE*	--	--	--	--	--	--	--
25...	*1011*	*CONCURRENT REPLICATE*	--	--	--	--	--	--	--
JUN									
03...	1006	ENVIRONMENTAL	66	194	7.3	15.0	761	7.7	76
AUG									
07...	0950	ENVIRONMENTAL	8.9	218	7.4	19.0	767	8.5	91

DATE	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV 1996										
13...	<1.0	170	40	76	22	5.0	6.5	4.3	33	27
JAN 1997										
27...	E1.5	110	150	61	17	4.5	6.5	3.3	17	27
MAR										
25...	<1.0	21	<10	64	18	4.7	6.1	3.3	21	28
25...	--	--	--	*71*	*20*	*5.0*	*E7.0*	*3.0*	*22*	*29*
25...	--	--	--	*71*	*20*	*5.0*	*E7.0*	*3.0*	*22*	*30*
JUN										
03...	E1.9	>24000	11000	68	19	4.7	6.0	3.8	30	23
AUG										
07...	E1.6	490	130	77	23	4.6	5.9	3.9	39	23

DATE	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 1996									
13...	20	.2	12	128	124	2	.009	1.6	.04
JAN 1997									
27...	16	.2	9.3	114	105	19	.016	2.4	.10
MAR									
25...	18	.2	8.7	115	111	<1	.010	2.5	<.03
25...	*18*	*.14*	--	*129*	--	*2*	*<.025*	*2.36*	*<.05*
25...	*18*	*.14*	--	*130*	--	*3*	*<.025*	*2.47*	*<.05*
JUN									
03...	17	.2	9.2	123	109	7	.038	1.5	.11
AUG									
07...	19	.3	11	135	120	8	.015	1.3	.10

01477510 OLDMANS CREEK AT PORCHES MILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN DISSOLVED (MG/L AS N) (00602)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
NOV 1996									
13...	<.03	.2	.20	1.8	1.8	.04	<.01	3.8	.4
JAN 1997									
27...	.13	.5	.32	2.9	2.7	.11	<.01	2.6	1.3
MAR									
25...	<.03	.2	.14	2.7	2.6	.03	<.01	2.2	.3
25...	*<.05*	*.30*	*<.10*	*2.7*	*--*	*.05*	*<.05*	*2.4*	*--*
25...	*<.05*	*.38*	*.28*	*2.8*	*2.8*	*.05*	*<.05*	*2.2*	*--*
JUN									
03...	.15	.6	.44	2.2	2.0	.10	<.01	5.2	.4
AUG									
07...	.07	.4	.27	1.7	1.6	.07	.01	3.1	1.1

DATE	TIME	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOSPHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
NOV 1996											
13...	0930	--	13	--	--	--	<1	--	<10	20	<1
13...	0930	7.4	--	50	4600	4200	--	23	--	--	--
JUN 1997											
03...	1006	--	20	--	--	--	1	--	<10	30	<1

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)
NOV 1996											
13...	--	<1.0	--	--	<1	--	1200	--	<1	--	60
13...	7	--	10	50	--	7	--	75000	--	10	--
JUN 1997											
03...	--	<1.0	--	--	2	--	2100	--	<1	--	130

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) (01068)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) (00686)
NOV 1996										
13...	--	<.1	--	5	--	<1	--	10	--	--
13...	600	--	.06	--	30	--	<1	--	580	.2
JUN 1997										
03...	--	<.1	--	7	--	<1	--	10	--	--

DATE	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) (39519)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOTTOM MATERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOTTOM MATERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOTTOM MATERIAL (UG/KG) (39373)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (UG/KG) (39389)
NOV 1996										
13...	--	--	--	--	--	--	--	--	--	--
13...	58	14	<2	.5	2	E13.0	15.0	3.2	2.3	1.6
JUN 1997										
03...	--	--	--	--	--	--	--	--	--	--

01477510 OLDMANS CREEK AT PORCHES MILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) (39758)	PERTHANE IN BOTTOM MATERIAL (UG/KG) (81886)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
NOV 1996										
13...	--	--	--	--	--	--	--	--	--	--
13...	<.3	<.2	<.2	<.2	<10.0	<.2	<2	<20	39	68
JUN 1997										
03...	--	--	--	--	--	--	--	--	--	--

01482500 SALEM RIVER AT WOODSTOWN, NJ

LOCATION.--Lat 39°38'36", long 75°19'52", Salem County, Hydrologic Unit 02040206, downstream from Memorial Lake Dam at Woodstown, 0.2 mi upstream from small brook, and 0.3 mi downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi^2.

PERIOD OF RECORD.--Water years 1973 to current year.

REMARKS.--For the definition of a field blank sample, refer to "Quality-control data" in the "Explanation of Records" section.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, dissolved nitrite, total ammonia, dissolved ammonia, and BOD performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1996												
13...	1110	12	260	7.3	6.5	775	11.6	93	2.2	3500	120	83
JAN 1997												
28...	0930	42	227	7.2	3.0	759	12.6	94	2.9	600	200	73
MAR												
20...	0945	28	237	7.2	7.0	755	11.3	94	2.0	33	100	74
JUN												
02...	1135	21	250	8.0	21.5	758	8.3	95	4.3	--	--	87
AUG												
06...	1145	8.6	270	8.3	26.5	763	7.8	97	2.1	110	770	94

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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 1996												
13...	18	9.2	8.0	8.0	34	35	23	.1	7.8	150	139	9
JAN 1997												
28...	16	8.1	8.0	5.3	20	33	19	.1	8.1	134	126	13
MAR												
20...	16	8.3	7.7	4.7	22	34	19	.1	7.6	140	129	17
JUN												
02...	19	9.6	7.7	5.1	39	32	21	.2	3.9	163	131	39
AUG												
06...	22	9.7	8.5	7.1	53	28	26	.2	8.9	184	142	39

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 TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV 1996												
13...	.045	2.1	.18	.18	1.1	.72	3.2	2.8	.11	.02	7.4	.9
JAN 1997												
28...	.025	3.7	.33	.26	1.0	.69	4.7	4.4	.13	.01	4.9	1.2
MAR												
20...	.027	4.2	.21	.20	.9	.61	5.1	4.8	.10	.04	4.1	.4
JUN												
02...	.069	1.9	<.03	<.03	1.2	.51	3.0	2.4	.15	.05	5.6	>4
AUG												
06...	.006	<.05	<.03	<.03	2.6	.69	--	--	.38	.06	7.1	3.6

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
NOV 1996											
13...	1110	ENVIRONMENTAL	--	27	--	--	--	1	--	<10	40
13...	1110	BED MATERIAL	7.3	--	7.6	200	270	--	2	--	--
JUN 1997											
02...	1135	ENVIRONMENTAL	--	30	--	--	--	1	--	<10	20
02...	*1135*	*FIELD BLANK*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV 1996												
13...	<1	--	<1.0	--	--	2	--	--	670	--	<1	--
13...	--	<1	--	10	<5	--	--	6	--	7100	--	--
JUN 1997												
02...	<1	--	<1.0	--	--	2	--	--	940	--	2	--
02...	*--*	*--*	*--*	*--*	*--*	*--*	*<1*	*--*	*--*	*--*	*--*	*<1*

DATE	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
NOV 1996												
13...	--	60	--	<.1	--	--	3	--	--	<1	--	<10
13...	30	--	59	--	--	<.01	--	--	<10	--	<1	--
JUN 1997												
02...	--	90	--	<.1	--	--	2	--	--	<1	--	<10
02...	*--*	*--*	*--*	*--*	*<.1*	*--*	*--*	*<1*	*--*	*--*	*--*	*--*

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)
NOV 1996												
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	30	.6	4.8	8	<1	<.1	3	E.3	.5	.4	.4
JUN 1997												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	*<.5*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*

DATE	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG) (81886)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
NOV 1996											
13...	--	--	--	--	--	--	--	--	--	--	--
13...	<.1	<.1	<.1	<.1	<.1	<5.0	<.1	<1	<10	1	2
JUN 1997											
02...	--	--	--	--	--	--	--	--	--	--	--
02...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*

RESERVOIRS IN DELAWARE RIVER BASIN

01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, NY, Hydrologic Unit 02040102, near release chamber at Downsville Dam on East Branch Delaware River, and 1.6 mi east of Downsville. DRAINAGE AREA, 372 mi^2. PERIOD OF RECORD, September 1954 to current year. REVISED RECORDS, WDR NY-90-1: Drainage area. GAGE, water-stage recorder. Datum of gage is sea level (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 15, 1954. Usable capacity 140,190 mil gal between minimum operating level, elevation, 1,152.0 ft and crest of spillway, elevation, 1,280.0 ft. Capacity: at crest of spillway 149,799 mil gal; at minimum operating level, 9,609 mil gal; at sill of diversion tunnel, elevation, 1,143.0 ft, 6,098 mil gal; in dead storage below release outlet, elevation, 1,126.50 ft, 1,898 mil gal. Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see elsewhere in this section), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records provided by New York City Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 154,027 mil gal, Apr. 5, 1960, elevation, 1,282.27 ft; minimum observed (after first filling), 9,575 mil gal, Dec. 26, 1964, elevation, 1,151.92 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 153,952 mil gal, Dec. 2, elevation, 1,282.23 ft; minimum observed, 94,457 mil gal, Sept. 30, elevation, 1,246.04 ft.

01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, NY, Hydrologic Unit 02040101, in emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi southeast of Stilesville. DRAINAGE AREA, 454 mi^2. PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WDR NY-71-1: 1966. GAGE, water-stage recorder. Datum of gage is sea level (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 30, 1963. Usable capacity 95,706 mil gal between minimum operating level, elevation, 1,040.0 ft and crest of spillway, elevation, 1,150.0 ft. Capacity, at crest of spillway, 98,618 mil gal; at minimum operating level, 2,912 mil gal; at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft, 1,892 mil gal; in dead storage below release outlet elevation, 1,020.5 ft, 328 mil gal. Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see elsewhere in this section); is released in Delaware River for downstream low flow augmentation, as directed by the Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to January 29, 1964. Records provided by New York City Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 109,617 mil gal, Mar. 16, 1986, elevation, 1,156.73 ft; minimum observed (after first filling), 11,901 mil gal, Nov. 7, 1968, elevation, 1,066.24 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 106,375 mil gal, Nov. 10, elevation, 1,154.82 ft; minimum observed, 44,077 mil gal, Sept. 30, elevation, 1,107.80 ft.

01428900 PROMPTON RESERVOIR.--Lat 41°35'18", long 75°19'39", Wayne County, PA, Hydrologic Unit 02040103, at dam on West Branch Lackawaxen River, 0.3 mi north of Prompton, 0.4 mi upstream from highway bridge, and 0.5 mi upstream from Van Auken Creek. DRAINAGE AREA, 59.6 mi^2. PERIOD OF RECORD, December 1960 to current year. GAGE, data collection platform (U.S. Army Corps of Engineers datum).

REMARKS.--Reservoir formed by an earth and rockfill dam with ungated bedrock spillway at elevation 1,205.00 ft. Storage began July 1960. Capacity at elevation 1,205.00 ft is 51,700 acre-ft. Ordinary minimum (conservation) pool is 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.

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,080 acre-ft, Nov. 9, elevation, 1,130.44 ft; minimum contents, 2,940 acre-ft, Aug. 13, elevation, 1,123.0 ft.

01429400 GENERAL EDGAR JADWIN RESERVOIR.--Lat 41°36'44", long 75°15'55", Wayne County, PA, Hydrologic Unit 02040103, at dam on Dyberry Creek, 0.4 mi upstream from unnamed tributary, 2.4 mi north of Honesdale, and 2.9 mi upstream from mouth. DRAINAGE AREA, 64.5 mi^2. PERIOD OF RECORD, October 1959 to current year. GAGE, data collection platform (U.S. Army Corps of Engineers datum).

REMARKS.--Reservoir formed by an earth and rockfill dam with ungated concrete spillway at elevation 1,053.00 ft. Storage began 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. Since Oct. 1, 1996, pool elevations below 990 ft NGVD are not recorded.

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,290 acre-ft, Nov. 9, elevation, 995.90 ft; minimum contents, no storage many times.

01431700 LAKE WALLENPAUPACK.--Lat 41°27'35", long 75°11'10", Wayne County, PA, Hydrologic Unit 02040103, at dam on Wallenpaupack Creek at Wilsonville, 1.2 mi south of Hawley, and 1.5 mi upstream from mouth. DRAINAGE AREA, 228 mi^2. 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 in two sections at elevation 1,176.00 ft. Spillway equipped with 14 ft high roller gate on each section. Storage began Nov. 3, 1925; water in reservoir first reached minimum pool elevation January 1926. Total capacity at elevation 1,190.00 ft (top of gates), is 209,300 acre-ft, of which 108,900 acre-ft, above elevation 1,170.00 ft (minimum pool), is controlled storage. Prior to 1984, minimum pool elevation was 1,160.00 ft. Reservoir is used for generation of hydroelectric power. Figures given herein represent usable contents. Records prior to 1984 included additional usable contents of 48,900 acre-ft.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 85,360 acre-ft, June 1, elevation, 1,186.0 ft; minimum contents, 27,800 acre-ft, Oct. 18, elevation 1,175.5 ft.

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'21", long 74°47'00", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi northwest of Fowlersville. DRAINAGE AREA, 116 mi^2, excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. WDR NY-86-1: 1985. WDR NY-90-1: Drainage area. GAGE, nonrecording gage, daily readings at 0900. Datum of gage is sea level (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft.

Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft^3 between elevations 1,010.0 ft, minimum operating pool, and 1,071.2 ft, top of flashboards. Capacity below elevation 1,010.0 ft, minimum operating pool, about 212.7 mil ft^3. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft. Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records provided by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 1,461.6 mil ft^3, Mar. 14, 1977, elevation, 1,071.8 ft; minimum observed (after first filling), -141.4 mil ft^3, Dec. 2, 1938, elevation, 987.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 1,383.3 mil ft^3, Nov. 12, elevation, 1,069.9 ft; minimum observed, 886.1 mil ft^3, Jan. 24, 25, elevation, 1,056.3 ft.

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi southeast of village of Black Lake. DRAINAGE AREA, 22.9 mi^2. PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959 (M). WDR NY-85-1: 1984. WDR NY-86-1: 1985. WDR NY-90-1: Drainage area. GAGE, nonrecording gage, daily readings at 0900. Datum of gage is sea level (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,165.0 ft.

Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity 1,098.2 mil ft^3 between elevations 1,165.0 ft, minimum operating pool, and 1,220.0 ft, top of permanent flashboards. Capacity below elevation 1,165.0 ft, minimum operating pool, about 26.8 mil ft^3. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft. Records provided by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 1,171.2 mil ft^3, July 20, 1945, elevation, 1,222.0 ft; minimum observed (after first filling), -26.8 mil ft^3, Nov. 15, 1928, elevation, 1,144.5 ft.

EXTREMES OF CURRENT YEAR.--Maximum contents observed, 1,112.6 mil ft^3, Jan. 8, elevation, 1,220.4 ft; minimum observed, 191.9 mil ft^3, Sept. 30, elevation, 1,183.8 ft.

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi northwest of Fowlersville. DRAINAGE AREA, 6.46 mi^2, excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WDR NY-75-1: 1974(m). WDR NY-86-1: 1985. GAGE, nonrecording gage, daily readings at 0900. Datum of gage is sea level (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,043.3 ft.

Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft^3 between elevations 1,043.3 ft, minimum operating pool, and 1,072.0 ft, top of permanent flashboards. Capacity below elevation 1,043.3 ft, minimum operating pool, about 6.54 mil ft^3. Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft. Records provided by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 145.44 mil ft^3, July 30, 31, 1945, elevation, 1,073.1 ft; minimum observed (after first filling), about -6.54 mil ft^3, Mar. 16, 1963, elevation, 1,038.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 121.28 mil ft^3, Oct. 21, elevation, 1,070.2 ft; minimum observed, 47.92 mil ft^3, Jan. 24, elevation, 1,058.8 ft.

01435900 NEVERSINK RESERVOIR.--Lat 41°49'27", long 74°38'20", Sullivan County, NY, Hydrologic Unit 02040104, at a gatehouse at Neversink Dam on Neversink River, and 2 mi southwest of Neversink. DRAINAGE AREA, 92.5 mi^2. PERIOD OF RECORD, June 1953 to current year. REVISED RECORDS, WDR NY-85-1: Drainage area. GAGE, nonrecording gage read daily at 0900. Datum of gage is sea level (levels by Board of Water Supply, City of New York). Reservoir is formed by an earthfill rockfaced dam. Storage began June 2, 1953. Usable capacity 34,941 mil gal between minimum operating level, elevation, 1,319.0 ft and crest of spillway, elevation, 1,440.0 ft. Capacity at crest of spillway 37,146 mil gal; at minimum operating level, 2,205 mil gal; dead storage below diversion sill and outlet sill, elevation 1,314.0 ft, 1,680 mil gal. Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see elsewhere in this section); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records provided by New York City Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 37,983 mil gal, Apr. 17, 1993, elevation, 1,441.68 ft; minimum observed (after first filling), 1,985 mil gal, Nov. 25, 1964, elevation, 1,316.98 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 37,340 mil gal, Apr. 8, elevation, 1,440.39 ft; minimum observed, 17,566 mil gal, Sept. 30, elevation, 1,391.74 ft.

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, PA, Hydrologic Unit 02040106, at dam on Lehigh River, 2,200 ft downstream from Bear Creek, and 5.0 mi northeast of White Haven. DRAINAGE AREA, 289 mi^2. PERIOD OF RECORD, February 1961 to current year. GAGE, water-stage recorder (U.S. Army Corps of Engineers datum).

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 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. Flow regulated by three gates and low-flow by-pass system. Reservoir is used for flood control and recreation. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 62,100 acre-ft, Sept. 28, 1985, elevation, 1,417.08 ft; minimum contents (after establishment of conservation pool), 980 acre-ft, July 6, 1982, elevation, 1,287.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,580 acre-ft, Oct. 21, elevation, 1,359.98 ft; minimum contents, 1,300 acre-ft, Dec. 22, elevation, 1,293.24 ft.

01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, PA, 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 mi^2. 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 1,000.00 ft (capacity, 19,980 acre-ft). Storage began October 1958. Reservoir is used for municipal water supply. Regulation by valves on pipe through dam. Figures given herein represent total contents and include diversion since October 1969 from Tunkhannock Creek Basin to Wild Creek Basin. Reservoir out of service all year.

COOPERATION.--Records provided by city of Bethlehem.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 20,800 acre-ft, Apr. 16, 1983, elevation, 1,001.69 ft; minimum contents, 0 acre-ft, many days during 1996 and 1997 water years, elevation, 890.60 ft.

EXTREMES FOR CURRENT YEAR.--No contents all year.

01449700 WILD CREEK RESERVOIR.--Lat 40°53'50", long 75°33'50", Carbon County, PA, 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 mi^2. PERIOD OF RECORD, January 1941 to current year. GAGE, 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 820.00 ft. Storage began January 27, 1941; reservoir first reached minimum contents pool elevation in February 1941. Total capacity at elevation 820.00 ft is 12,500 acre-ft of which 12,000 acre-ft is controlled storage. Reservoir is used for municipal water supply. Regulation by valves on pipe through dam. Figures given herein represent usable contents and include diversion since October 1969 from Tunkhannock Creek Basin to Wild Creek Basin.

COOPERATION.--Records provided by city of Bethlehem.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 12,880 acre-ft, May 23, 1942, elevation, 822.93 ft; minimum contents (after first filling), 2,680 acre-ft, Nov. 15, 1966, elevation, 774.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 12,320 acre-ft, Dec. 2, elevation, 821.08 ft; minimum contents 9,150 acre-ft, Sept. 30, elevation 809.28 ft.

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01449790 BELTZVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, PA, Hydrologic Unit 02040106, at dam on Pohopoco Creek, 0.4 mi upstream from gaging station on Pohopoco Creek, 0.6 mi upstream from Sawmill Run, and 2.3 mi northeast of Parryville. DRAINAGE AREA, 96.3 mi^2. PERIOD OF RECORD, February 1971 to current year. GAGE, water-stage recorder (U.S. Army Corps of Engineers datum).

REMARKS.--Lake formed by an earth and rockfill dam with ungated, partially lined spillway at an elevation of 651.00 ft. Storage began Feb. 8, 1971. Capacity at elevation 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 49,730 acre-ft, Jan. 29, 1976, elevation, 636.30 ft; minimum contents, 15,110 acre-ft, Mar. 31, 1983, elevation, 588.79 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 44,470 acre-ft, Dec. 3, elevation, 631.27 ft; minimum contents, 40,200 acre-ft, Aug. 16, elevation, 626.90 ft.

01455221 MERRILL CREEK RESERVOIR.--Lat 40°43'42", long 75°06'11", Warren County, Hydrologic Unit 02040105, at dam on Merrill Creek in Harmony Township, 4.5 mi northeast of Phillipsburg, and 2.8 mi upstream from mouth. DRAINAGE AREA, 3.13 mi^2. PERIOD OF RECORD, March 1988 to current year. GAGE, measurement from reference point. Datum of gage is sea level.

REMARKS.--Reservoir formed by zoned, compacted, earth-rockfill dam constructed in November 1987. Storage began March 1988. Total capacity at spillway elevation, 16,617,000,000 gal, elevation 929.0 ft. Useable capacity, 15,6654,000,000 gal. Reservoir used for storage of water pumped from the Delaware River through a 57-inch diameter pipe 17,000 ft long. Releases are made into the Delaware River through the same pipe. Reservoir is used to augment low flow in the Delaware River. Conservation release of 3 ft^3/s made to Merrill Creek.

COOPERATION.--Records provided by the Merrill Creek Reservoir Project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 16,710,000,000 gal, Jan. 15, 1990, elevation, 923.3 ft; minimum (after first filling), 14,076,000,000 gal, Jan. 23, 1992, elevation 910.40 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 16,635,000,000 gal, Dec. 14, elevation 922.97 ft; minimum, 16,312,000,000 gal, Sept. 30, elevation 921.44 ft.

01455400 LAKE HOPATCONG.--Lat 40°55'00", long 74°39'50", Morris County, Hydrologic Unit 02040105, in gatehouse of Lake Hopatcong Dam on Musconetcong River at Landing. DRAINAGE AREA, 25.3 mi^2. PERIOD OF RECORD, February 1887 to current year. Monthend contents only prior to October 1950, published in WSP 1302. REVISED RECORDS, WDR NJ-82-2: Drainage area; WDR NJ-83-2: Corrections 1981 (m/m). GAGE, staff gage. Prior to June 24, 1928, daily readings obtained by measuring from high-water mark to water surface converted to gage height, present datum. Datum of gage is 914.57 ft sea level.

REMARKS.--Lake is formed by concrete spillway and earthfill dam completed about 1828. Crest of spillway was lowered 0.11 ft in 1925. Usable capacity, 7,459,000,000 gal between (gage height -2.6 ft, sills of gates and 9.00 ft, crest of spillway). Flow regulated by four gates (3 by 5 ft), also by one 24-inch pipe with gate valve to recreation fountain 250 ft downstream from dam. Dead storage, about 8,117,000,000 gal. Figures given herein represent usable capacity. Lake used for recreation.

COOPERATION.--Records provided by New Jersey Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 8,777,000,000 gal, August 19, 1955, gage height, 10.55 ft; minimum, 1,525,000,000 gal, Dec. 29, 1960, gage height, 0.65 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,391,000,000 gal, Oct. 21, gage height, 10.10 ft; minimum, 5,599,000,000 gal, Sept. 30, gage height, 6.70 ft.

01459350 NOCKAMIXON RESERVOIR.--Lat 40`28'13", long 75`11'10", Bucks County, PA, Hydrologic Unit 02040105, at dam on Tohickon Creek, 6.2 mi upstream from gaging station on Tohickon Creek, 2.9 mi upstream from Mink Run, and 1.3 mi east of Ottsville. DRAINAGE AREA.-- 73.3 mi^2. PERIOD OF RECORD.--December 1973 to current year. GAGE.--Water stage recorder. Datum of gage is sea level (levels by Pennsylvania Department of Environmental Protection).

REMARKS.--Reservoir formed by earthfill dam with concrete spillway at elevation 395.0 ft. Storage began December 1973. Total capacity 66,500 acre-ft at elevation 410 ft. Reservoir is used primarily for recreation, but can be used for water supply and flood control.

COOPERATION.--Records furnished by Pennsylvania Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 44,380 acre-ft, Jan. 20, 1979, elevation, 397.85 ft; minimum contents (after first filling), 15,900 acre-ft, around Dec. 31, 1975, elevation, 372.78 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents 44,140 acre-ft, Oct. 20, elevation, 397.70 ft; minimum contents, 38,940 acre-ft, Mar. 22, elevation, 394.10 ft.

01469200 STILL CREEK RESERVOIR.--Lat 40°51'25", long 75°59'30", Schuylkill County, PA, Hydrologic Unit 02040106, at dam on Still Creek, 1.0 mi upstream from mouth, and 2.3 mi north of Hometown. DRAINAGE AREA, 7.19 mi^2. PERIOD OF RECORD, January 1933 to current year. GAGE, 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 1,182.00 ft. Storage began February 1933. Capacity at elevation 1,182.00 ft is 8,290 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation by valves on pipe through dam.

COOPERATION.--Records provided by the borough of Tamaqua.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 8,570 acre-ft, Oct. 15, 1955, elevation, 1,182.92 ft, but may have been greater during 1950 or 1951 water years; minimum contents (after first filling), 588 acre-ft, Dec. 8, 1944, elevation, 1,136.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,430 acre-ft, Oct. 20, elevation, 1,182.5 ft; minimum contents, 8,150 acre-ft, Sept. 22, elevation, 1,181.5 ft.

01470870 BLUE MARSH LAKE.--Lat 40°22'45", long 76°01'59", Berks County, PA, Hydrologic Unit 02040203, at dam on Tulpehocken Creek, 0.8 mi upstream from gaging station on Tulpehocken Creek (station 01470960), 1.0 mi northeast of Blue Marsh, 1.9 mi upstream from Rebers Bridge, and 5.1 mi southeast of Bernville. DRAINAGE AREA, 175 mi^2. PERIOD OF RECORD, April 1979 to current year. GAGE, water-stage recorder (U.S. Army Corps of Engineers datum).

REMARKS.--Lake formed by earthfill dam with ungated concrete spillway at elevation 307.00 ft. Storage began April 23, 1979. Capacity at elevation 307.00 ft is 50,000 acre-ft. Dead storage is 3,000 acre-ft. Lake is used for flood control, water supply, and recreation. Figures herein represent total contents. Satellite telemetry at station.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 39,480 acre-ft, Apr. 17, 1983, elevation, 301.65 ft; minimum contents (after first filling), 13,150 acre-ft, Mar. 18, 1994, elevation, 279.88 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 26,460 acre-ft, Oct. 20, elevation, 292.95 ft; minimum contents, 16,840 acre-ft, Oct. 24, elevation, 284.18.

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, PA, Hydrologic Unit 02040203, at dam on Perkiomen Creek, 0.4 mi west of Green Lane, and 2.1 mi upstream from Unami Creek. DRAINAGE AREA, 70.9 mi^2. 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 286.00 ft. Storage began December 21, 1956. Capacity at elevation 286.00 ft is 13,430 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation by valves on pipe through dam.

COOPERATION.--Records provided by Philadelphia Suburban Water Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,030 acre-ft, June 23, 1972, elevation, 290.05 ft; minimum contents (after first filling), 1,270 acre-ft, Aug. 25, 1957, elevation, 251.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 14,140 acre-ft, Dec. 6, elevation, 286.80 ft; minimum contents, 13,560 acre-ft, Aug. 19, elevation, 285.02 ft.

01480399 CHAMBERS LAKE RESERVOIR.--40°01'40", long 75°51'03", Chester County, PA, Hydrologic Unit 02040205, at Hibernia Dam on Birch Run, 0.6 mi upstream from gaging station on Birch Run (station 01480400), 0.9 mi upstream from mouth, and 1.4 mi northwest of Wagontown. DRAINAGE AREA, 4.5 mi^2. PERIOD OF RECORD, May 1997 to current year. GAGE, non-recording gage. Manual measurement from top of concrete riser at upstream flank of Hibernia Dam. Datum of gage is sea level (levels by Chester County Water Resources Authority, Chester County Parks and Recreation Department).

REMARKS.--Reservoir formed by earthfill dam with principle spillway at elevation 580 ft and dam crest at elevation 596.5 ft. Total capacity, 1,226 acre feet at elevation 580 ft. Reservoir is used for water supply, flood control, and recreation. Figures given herein represent total contents.

COOPERATION.--Records provided by Chester County Water Resources Authority, in cooperation with City of Coatesville Authority and Chester County Parks and Recreation Department.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,226 acre-ft, May 30, 1997, elevation, 580.1 ft; minimum contents, 1,080 acre-ft, Sept. 30, 1997, elevation, 578.6 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,226 acre-ft, May 30, elevation, 580.1 ft; minimum contents, 1,080 acre-ft, Sept. 30, elevation, 578.6 ft.

01480684 MARSH CREEK RESERVOIR.--Lat 40°03'24", long 75°43'06", Chester County, PA, 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 mi^2. PERIOD OF RECORD, November 1973 to current year. GAGE, Water-stage recorder. Datum of gage is sea level (levels by Pennsylvania Department of Environmental Protection).

REMARKS.--Reservoir formed by earthfill dam with concrete spillway at elevation 359.5 ft. Storage began November 1973. Total capacity, 22,190 acre-ft, elevation 373 ft. Reservoir is used for water supply, flood control, and recreation. Figures given herein represent contents above lowest gate sill at elevation 289.5 ft.

COOPERATION.--Records provided by Pennsylvania Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 16,380 acre-ft, Jan. 25, 1979, elevation, 363.49 ft; minimum contents (after first filling), 10,410 acre-ft, Mar. 3, 1976, elevation, 351.75 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,720 acre-ft, Oct. 20, elevation, 362.30 ft; minimum contents, 12,310 acre-ft, Jan. 6, elevation, 355.80 ft.

MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)*	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)*	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)
	01416900 Pepacton Reservoir			01424997 Cannonsville Reservoir			01428900 Prompton Reservoir		
Sept. 30.........	1,268.39	129,257	--	1,144.35	90,073	--	1,123.49	3,080	--
Oct. 31.........	1,273.79	138,598	+466	1,150.86	100,002	+496	1,125.32	3,590	+ 8.3
Nov. 30.........	1,280.26	150,280	+603	1,151.57	101,145	+59.0	1,125.51	3,640	+ 0.8
Dec. 31.........	1,280.42	150,577	+14.8	1,151.49	101,016	-6.4	1,126.10	3,810	+ 2.8
CAL YR 1996	--	--	+244	--	--	+142	--	--	+ 0.5
Jan. 31.........	1,277.83	145,826	-237	1,150.09	98,763	-112	1,125.26	3,570	- 3.9
Feb. 28..........	1,278.75	147,502	+92.6	1,152.25	102,239	+192	1,125.45	3,630	+ 1.1
Mar. 31.........	1,280.90	151,466	+198	1,151.98	101,805	-21.7	1,126.64	3,960	+ 5.4
Apr. 30.........	1,280.27	150,299	-60.2	1,150.75	99,825	-102	1,125.33	3,590	- 6.2
May 31.........	1,279.92	149,652	-32.3	1,150.35	99,181	-32.1	1,125.08	3,520	- 1.1
June 30.........	1,273.98	138,933	-553	1,145.35	91,544	-394	1,123.80	3,160	- 6.1
July 31.........	1,266.59	126,221	-634	1,128.17	67,925	-1,179	1,123.12	2,970	- 3.1
Aug. 31.........	1,256.82	110,447	-787	1,112.25	48,891	-950	1,123.31	3,030	+ 1.0
Sept. 30..........	1,245.63	93,880	-854	1,107.58	43,846	-260	1,123.40	3,050	+ 0.3
WTR YR 1997	--	--	-150	--	--	-196	--	--	0

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)	Elevation (feet)†	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	01429400 General Edgar Jadwin Reservoir			01431700 Lake Wallenpaupack			01433000 Swinging Bridge Reservoir		
Sept. 30.........	--	0	--	1,178.6	43,200	--	1,065.3	1,202.7	--
Oct. 31.........	--	0	0	1,177.1	34,910	-135	1,065.8	1,221.7	+7.1
Nov. 30.........	--	0	0	1,183.0	67,870	+554	1,065.3	1,202.7	-7.3
Dec. 31.........	--	0	0	1,183.0	67,870	0	1,066.0	1,229.3	+9.9
CAL YR 1996	--	--	0	--	--	+ 13.2	--	--	+10.0
Jan. 31.........	--	0	0	1,178.8	44,440	-381	1,058.4	955.6	-102
Feb. 28..........	--	0	0	1,178.9	45,080	+ 11.5	1,065.7	1,217.9	+108
Mar. 31.........	--	0	0	1,178.8	44,440	- 10.4	1,066.4	1,244.7	+10.0
Apr. 30.........	--	0	0	1,183.3	69,610	+423	1,061.0	1,045.3	-76.9
May 31.........	--	0	0	1,185.9	84,840	+248	1,062.3	1,091.8	+17.4
June 30.........	--	0	0	1,184.5	77,000	-132	1,060.1	1,013.8	-30.1
July 31.........	--	0	0	1,182.0	62,390	-238	1,060.7	1,034.8	+7.8
Aug. 31.........	--	0	0	1,182.1	62,910	+ 8.5	1,060.9	1,041.8	+2.6
Sept. 30..........	--	0	0	1,178.7	43,810	-321	1,060.0	1,010.3	-12.2
WTR YR 1997	--	--	0	--	--	+ 0.8	--	--	-6.1

MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)†	Contents (million ft³)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (million ft³)	Change in contents (equivalent in ft³/s)	Elevation (feet)*	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01433100 Toronto Reservoir			01433200 Cliff Lake			01435900 Neversink Reservoir		
Sept. 30.........	1,208.0	725.2	--	1,066.5	93.71	--	1,414.69	25,866	--
Oct. 31.........	1,206.3	679.2	-17.2	1,066.8	95.78	+0.8	1,423.63	29,583	+186
Nov. 30.........	1,212.7	859.0	+69.4	1,064.4	79.82	-6.2	1,428.52	31,732	+111
Dec. 31.........	1,220.2	1,105.4	+92.0	1,067.4	100.04	+7.5	1,438.09	36,208	+223
CAL YR 1996	--	--	+17.3	--	--	+1.4	--	--	+58.3
Jan. 31.........	1,216.4	974.7	-48.8	1,064.5	80.46	-7.3	1,426.88	31,000	-260
Feb. 28..........	1,211.0	809.3	-68.4	1,065.4	86.30	+2.4	1,424.22	29,837	-64.3
Mar. 31.........	1,214.8	923.0	+42.5	1,066.3	92.33	+2.3	1,434.99	34,720	+244
Apr. 30.........	1,218.4	1,042.4	+46.1	1,061.0	59.36	-12.7	1,437.42	35,884	+60.0
May 31.........	1,220.1	1,101.8	+22.2	1,062.8	69.86	+3.9	1,439.38	36,840	+47.7
June 30.........	1,214.5	913.6	-72.6	1,063.6	74.78	+1.9	1,432.91	33,742	-160
July 31.........	1,199.2	496.8	-156	1,066.0	90.26	+5.8	1,423.78	29,647	-204
Aug. 31.........	1,189.1	282.0	-80.2	1,061.1	59.93	-11.3	1,404.52	21,964	-383
Sept. 30..........	1,183.8	191.9	-34.8	1,060.4	56.12	-1.5	1,391.26	17,411	-235
WTR YR 1997	--	--	-16.9	--	--	-1.2	--	--	-35.8

Date	Elevation (feet)*	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (acre-feet)	Change in contents (equivalent in ft³/s)
	01447780 Francis E. Walter Lake			01449400 Penn Forest Reservoir			01449700 Wild Creek Reservoir		
Sept. 30.........	1,307.25	2,490	--	--	0	--	814.96	10,690	--
Oct. 31.........	1,303.74	2,130	-5.9	--	0	0	817.36	11,350	+10.7
Nov. 30.........	1,301.58	1,940	-3.2	--	0	0	820.22	12,070	+12.1
Dec. 31.........	1,301.87	1,960	+.3	--	0	0	820.31	12,090	+.3
CAL YR 1996	--	--	+.1	--	--	-4.4	--	--	+.2
Jan. 31.........	1,302.89	2,050	+1.5	--	0	0	820.06	12,020	-1.1
Feb. 28..........	1,303.93	2,150	+1.8	--	0	0	820.26	12,080	+1.1
Mar. 31.........	1,306.71	2,430	+4.6	--	0	0	820.26	12,080	0
Apr. 30.........	1,301.27	1,910	-8.7	--	0	0	820.11	12,030	-.8
May 31.........	1,302.41	2,010	+1.6	--	0	0	820.00	12,000	-.5
June 30.........	1,298.25	1,660	-5.9	--	0	0	819.22	11,840	-2.7
July 31.........	1,300.04	1,800	+2.3	--	0	0	815.86	10,940	-14.6
Aug. 31.........	1,302.81	2,050	+4.1	--	0	0	812.41	9,980	-15.6
Sept. 30..........	1,302.93	2,060	+.2	--	0	0	809.28	9,150	-13.9
WTR YR 1997	--	--	-.6	--	--	0	--	--	-2.1

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01449790 Beltzville Lake			01455221 Merrill Creek Reservoir			01455400 Lake Hopatcong		
Sept. 30.........	627.94	41,190	--	922.16	16,471	--	9.16	7,593	--
Oct. 31.........	628.01	41,260	+1.1	922.57	16,550	+3.9	9.44	7,829	+11.8
Nov. 30.........	628.18	41,420	+2.7	922.73	16,584	+1.8	7.24	6,025	-93.0
Dec. 31.........	627.95	41,200	-3.6	922.72	16,582	-.1	7.32	6,088	+3.1
CAL YR 1996	--	--	+.1			+4.0			+1.8
Jan. 31.........	628.05	41,300	+1.6	922.70	16,578	-.2	6.96	5,803	-14.2
Feb. 28..........	627.96	41,210	-1.6	922.68	16,573	-.3	6.98	5,818	+.8
Mar. 31.........	628.23	41,470	+4.2	922.82	16,603	+1.5	8.18	6,783	+48.2
Apr. 30.........	627.97	41,220	-4.2	922.75	16,588	-.8	9.38	7,778	+51.3
May 31.........	627.98	41,230	+.2	922.61	16,559	-1.4	9.18	7,610	-8.4
June 30.........	628.04	41,290	+1.0	922.43	16,521	-2.0	9.00	7,459	-7.8
July 31.........	627.83	41,090	-3.3	922.30	16,493	-1.4	8.84	7,326	-6.6
Aug. 31.........	627.74	41,000	-1.5	921.94	16,417	-3.8	8.74	7,243	-4.1
Sept. 30..........	628.15	41,390	+6.6	921.44	16,312	-5.4	6.70	5,599	-84.8
WTR YR 1997	--	--	+.3			-.7			-8.5

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)	Elevation (feet)†	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)
	01459350 Nockamixon Reservoir			01469200 Still Creek Reservoir			01470870 Blue Marsh Lake		
Sept. 30.........	395.60	41,030	--	1,182.0	8,290	--	290.06	22,970	--
Oct. 31.........	395.10	40,340	-11.2	1,182.5	8,430	+ 2.3	284.98	17,600	- 87.3
Nov. 30.........	397.00	43,100	+46.4	1,182.5	8,430	0	285.46	18,070	+ 7.9
Dec. 31.........	395.00	40,200	-47.2	1,182.5	8,430	0	285.00	17,620	- 7.3
CAL YR 1996	--	--	+ 0.4	--	--	+ 0.2	--	--	- 0.1
Jan. 31.........	394.60	39,630	- 9.3	1,182.1	8,320	- 1.8	284.97	17,590	- 0.5
Feb. 28..........	395.20	40,480	+15.3	1,182.0	8,290	- 0.5	284.94	17,560	- 0.5
Mar. 31.........	394.20	39,080	-22.8	1,182.1	8,320	+ 0.5	285.27	17,880	+ 5.2
Apr. 30.........	395.10	40,340	+21.2	1,182.1	8,320	0	290.04	22,940	+ 85.0
May 31.........	395.40	40,750	+ 6.7	1,182.1	8,320	0	290.18	23,100	+ 2.6
June 30.........	394.80	39,920	-13.9	1,182.1	8,320	0	289.96	22,850	- 4.2
July 31.........	394.90	40,060	+ 2.3	1,182.0	8,290	- 0.5	289.95	22,840	- 0.2
Aug. 31.........	394.60	39,630	- 7.0	1,181.7	8,210	- 1.3	289.89	22,770	- 1.1
Sept. 30..........	394.50	39,490	- 2.4	1,181.5	8,150	- 1.0	289.60	22,440	- 5.5
WTR YR 1997	--	--	- 2.1	--	--	- 0.2	--	--	- 0.7

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)	Elevation (feet)†	Contents (acre-feet)	Elevation (feet)†	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)
	01472200 Green Lane Reservoir			01480399 Chambers Lake Reservoir		01480684 Marsh Creek Reservoir		
Sept. 30.........	286.10	13,520	--			360.44	14,700	--
Oct. 31.........	286.48	13,850	+ 5.4			360.28	14,610	- 1.5
Nov. 30.........	286.09	13,510	- 5.7			360.04	14,480	- 2.2
Dec. 31.........	286.12	13,540	+ 0.5			356.25	12,530	-31.7
CAL YR 1996	--	--	+ 0.2			--	--	- 0.5
Jan. 31.........	286.10	13,520	- 0.3			358.27	13,540	+16.4
Feb. 28..........	286.05	13,480	- 0.7			357.85	13,330	- 3.8
Mar. 31.........	286.24	13,640	+ 2.6			360.44	14,700	+22.3
Apr. 30.........	286.06	13,480	- 2.7			360.18	14,560	- 2.4
May 31.........	285.99	13,420	- 1.0	580.1	1,226	359.93	14,420	- 2.3
June 30.........	285.67	13,130	- 4.9	579.9	1,226	360.13	14,530	+ 1.8
July 31.........	285.75	13,210	+ 1.3	579.8	1,175	359.98	14,450	- 1.3
Aug. 31.........	285.89	13,330	+ 2.0	579.2	1,125	359.74	14,320	- 2.1
Sept. 30..........	285.22	12,740	- 9.9	578.6	1,080	359.43	14,150	- 2.9
WTR YR 1997	--	--	- 1.1	--	--	- 0.8		

DIVERSIONS AND WITHDRAWALS

WITHDRAWALS FROM THE DELAWARE RIVER BASIN

01415200 Diversion from Pepacton Reservoir (see preceding pages) on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 6, 1955. Records provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WDR NY-71-1: 1970. WDR NY-81-1: 1980.

01423900 Diversion from Cannonsville Reservoir (see preceding pages) on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 29, 1964. Records provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WDR NY-81-1: 1980.

01435800 Diversion from Neversink Reservoir (see preceding pages) on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Dec. 3, 1953. Records provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WDR NY-82-1: 1976, 1977.

01436520 Village of Woodridge, NY, diverts water from East Pond Reservoir, tributary to Neversink River, for municipal supply outside of basin. Village of Woodridge has estimated that this year virtually all the withdrawal from East Pond Reservoir was returned to the Neversink River.

01437360 Diversion from Bear Swamp Reservoir, NY, tributary to Neversink River, by the New York State Training School, Otisville, NY, for water supply outside of basin. Records provided by Delaware River Basin Commission.

01447750 Diversion from Bear Creek, PA, tributary to Lehigh River, by Pennsylvania American Water Company for water supply outside of basin. Records provided by Delaware River Basin Commission.

01448830 Diversion from Hazle Creek Watershed by Hazelton Joint Sewerage Authority for municipal water supply. Waste effluent from the municipal water system is released to the Susquehanna River. Records provided by Delaware River Basin Commission.

01460440 Diversion by Delaware and Raritan Canal from Delaware River at Raven Rock, for municipal and industrial use. Water is discharged into the Raritan River at New Brunswick. Records of discharge are collected on the Delaware and Raritan Canal at Port Mercer since Aug. 1, 1990 (see station 01460440). Prior to Aug. 1, 1990, records of discharge were collected at Kingston.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

MONTH	WITHDRAWALS BY CITY OF NEW YORK 01415200 Pepacton Reservoir	01423900 Cannonsville Reservoir	01435800 Neversink Reservoir
October	484	104	191
November	617	127	361
December	245	0	479
CAL YR 1996	496	204	305
January	697	110	471
February	696	384	242
March	678	259	128
April	395	9.2	436
May	497	73.0	246
June	699	317	193
July	586	459	176
August	694	165	386
September	697	0	290
WTR YR 1997	581	166	300

MISCELLANEOUS WITHDRAWALS FROM BASIN, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

MONTH	01437360 Bear Swamp Reservoir	01447750 Bear Creek	01448830 Hazle Creek	01460440 Delaware and Raritan Canal
October	.49	0	6.63	126
November	.49	0	5.18	129
December	.51	0	5.38	122
CAL YR 1996	.43	0	6.42	122
January	.42	0	4.75	143
February	.40	0	4.27	139
March	.39	0	4.78	148
April	.38	0	4.81	147
May	.33	0	4.79	148
June	.40	0	6.70	147
July	.42	0	9.76	143
August	.48	0	9.91	147
September	.44	0	7.53	150
WTR YR 1997	.43	0	6.21	141

DIVERSIONS WITHIN THE DELAWARE RIVER BASIN

01446572 Diversion from Delaware River at Brainards to Merrill Creek Reservoir for storage to augment low flow in the Delaware River. There is a conservation release of 3 ft^3/s to lower Merrill Creek, which eventually reaches the Delaware River. Releases other than the conservation release are designated by a minus (-) sign. Records provided by Merrill Creek Reservoir Project.

01459005 Diversion from the Delaware River at Point Pleasant, PA by Philadelphia Electric Company to Bradshaw Reservoir on the East Branch Perkiomen Creek, tributary to Schuylkill River, to supplement flow to Limerick Power Station. Diversion began August 1989. Records provided by the Delaware River Basin Commission.

01463480 Diversion from the Delaware River at the Morrisville Filtration Plant, by the Borough of Morrisville, PA for municipal supply. The water withdrawn at this site is returned to the basin after treatment, only slightly diminished by consumptive uses and losses in transmission. Records provided by the Borough of Morrisville, PA.

01463490 Diversion from the Delaware River just above the Trenton gaging station by the city of Trenton, NJ for municipal supply. The water being withdrawn is returned to the basin after treatment only slightly diminished by consumptive uses and losses in transmission. Records provided by the City of Trenton. REVISED RECORDS.--WDR NJ-82-2: Station number.

01467030 Diversion from the Delaware River at the Torresdale Intake, by the City of Philadelphia, PA for municipal supply. The water being withdrawn at this intake is returned to the basin after treatment only slightly diminished by consumptive uses and losses in transmission. Records provided by the Delaware River Basin Commission.

01474500 Diversion from the Schuylkill River at the Belmont and Queen Lane Intakes, by the City of Philadelphia, PA for municipal supply. The water being withdrawn at these intakes is returned after treatment within the Delaware River basin only slightly diminished by consumptive uses and losses in transmission. Records provided by the Delaware River Basin Commission.

WITHDRAWALS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

MONTH	01446572 Merrill Creek Reservoir	01459005 Point Pleasant	01463480 Borough of Morrisville	01463490 City of Trenton
October	-3.20	.34	3.37	43.6
November	-3.29	.01	3.32	42.2
December	-11.3	0	3.35	42.1
CAL YR 1996	-2.36	41.8	4.20	47.7
January	-6.39	0	3.70	36.5
February	-4.81	0	3.51	45.5
March	-6.12	0	3.64	37.2
April	-4.55	0	3.85	41.0
May	-3.19	12.6	4.23	41.9
June	-3.10	13.3	4.69	46.8
July	-3.35	20.6	5.76	52.1
August	-3.41	18.0	4.91	48.2
September	-3.22	21.4	4.37	46.1
WTR YR 1997	-4.66	7.2	4.06	43.6

WITHDRAWALS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997--Continued

	City of Philadelphia		
		01474500 Schuylkill River	
MONTH	01467030 Delaware River Torresdale	Belmont	Queen Lane
October	262	70.3	136
November	276	72.7	127
December	297	56.5	118
CAL YR 1996	292	87.2	143
January	308	68.3	119
February	299	76.3	118
March	288	76.4	112
April	286	74.3	110
May	286	75.1	110
June	314	67.8	135
July	323	81.7	139
August	295	73.5	137
September	179	73.3	128
WTR YR 1997	284	72.2	124

DIVERSIONS AND WITHDRAWALS--Continued

DIVERSIONS IMPORTED INTO BASIN

01367630 Water diverted from Morris Lake, tributary to the Wallkill River (Hudson River basin), by the Newton Water and Sewer Authority for municipal use. After use the water is released into the Paulins Kill (Delaware River basin). Records provided by the Delaware River Basin Commission.

01578420 Water diverted from West Branch Octoraro Creek (Susquehanna River basin) at the McCray Plant of the Coatesville Water Authority (formerly Octoraro Water Co.) for municipal use. After use the water is released into the Delaware River basin. Records provided by the Delaware River Basin Commission.

01578450 Water divered from Octoraro Lake (Susquehanna River basin) by Chester Water Authority for municipal use. After use the water is released into the Delaware River basin. Records provided by the Delaware River Basin Commission.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997--Continued

		OCTORARO CREEK	
MONTH	01367630 Morris Lake	01578420 Coatesville Water Authority	01578450 Chester Water Authority
October	1.47	1.62	46.8
November	1.51	1.68	48.9
December	1.65	1.49	48.0
CAL YR 1996	1.51	1.53	49.9
January	1.60	1.04	49.4
February	1.51	1.45	48.7
March	1.42	1.38	47.0
April	1.22	1.64	48.0
May	1.49	1.89	50.8
June	1.40	1.44	57.2
July	1.42	1.61	61.0
August	1.48	1.65	58.5
September	1.52	1.98	57.2
WTR YR 1997	1.47	1.57	51.8

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower stages may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. The gage heights are heights on the upstream side of the bridge, above the dam or at the discontinued continuous-record gaging station unless otherwise noted.

Maximum discharge at crest-stage partial-record stations

			Water year 1997 maximum			Period of record maximum		
Station name and number	Location and drainage area	Period of record	Date	Gage Height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			HACKENSACK RIVER BASIN					
Tenakill Brook at Closter, NJ *(01378385)	Lat 40°58'29", long 73°58'06, Bergen County, Hydrologic Unit 02030103, at bridge on High Street in Closter, 0.7 mi upstream from mouth. Datum of gage is 23.85 ft above sea level. Drainage area is 8.56 mi^2.	1965-97	10-19-96	3.52b	550	5-17-90	3.63bd	930
Metzler Brook at Englewood, NJ (01378590)	Lat 40°54'29", long 73°59'13", Bergen County, Hydrologic Unit 02030103, at bridge on Lantana Avenue in Englewood, and 1.6 mi upstream from mouth. Datum of gage is 43.10 ft above sea level. Drainage area is 1.54 mi^2.	1965-97	10-19-96	2.18b	201	11-08-77	2.84bd	470
			PASSAIC RIVER BASIN					
Passaic River near Bernardsville, NJ (01378690)	Lat 40°44'03", long 74°32'26", Somerset County, Hydrologic Unit 02030103, at bridge on U.S. Route 202, 1.8 mi northeast of Bernardsville, and 3.0 mi upstream from Great Brook. Datum of gage is 238.07 ft above sea level. Drainage area is 8.83 mi^2.	1968-76†, 1977-97	10-20-96	17.01b	2,140	8-28-71	18.56b	3,850
Rockaway River at Warren Street, at Dover, NJ (01379845)	Lat 40°53'08", long 74°33'36", Morris County, Hydrologic Unit 02030103, on left bank, 100 ft upstream from bridge on Warren Street, in Dover, 4.0 mi west of Denville and 6 mi southeast of Lake Hopatcong. Datum of gage is 561.83 ft above sea level. Drainage area is 52.1 mi^2.	1981-97	10-20-96	7.03	2,010	4-06-84	7.20	2,170
Mahwah River near Suffern, NY (01387450)	Lat 41°08'27", long 74°07'01", Rockland County, NY, Hydrologic Unit 02030103, on left bank 13 ft upstream from bridge on U.S. Route 202, 4.8 mi upstream from mouth, and 2.5 mi northeast of Suffern. Datum of gage is 321.57 ft above sea level. Drainage area is 12.3 mi^2.	1959-95† 1996-97	1-19-96 10-20-96	6.87 5.22	1,120 562	11-08-77	9.91	1,840

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum Date	Gage Height (ft)	Discharge (ft^3/s)	Period of record maximum Date	Gage height (ft)	Discharge (ft^3/s)
PASSAIC RIVER BASIN--Continued								
Pond Brook at Oakland, NJ *(01387880)	Lat 41°01'36", long 74°14'04", Bergen County, Hydrologic Unit 02030103, at bridge on Interstate 287/NJ Route 208 in Oakland, 0.2 mi upstream from former site at Franklin Avenue (prior to October 1975), 0.6 mi upstream from mouth, and 1.5 mi northwest of Franklin Lakes. Datum of gage is 276.97 ft above sea level. Drainage area is 6.76 mi^2.	1968-71, 1976-97	12-02-96	1.66	256	5-29-68	11.64c	1,300c
Passaic River below Pompton River, at Two Bridges, NJ (01389005)	Lat40°53'47", long 74°16'10", Passaic County, Hydrologic Unit 02030103, on right bank, in Two Bridges and 400 ft downstream from the Pompton River. Datum of gage is 155.00 ft above sea level. Drainage area is 734 mi^2.	1989-97	10-22-96	10.80	a	5-18-89	12.65	a
Preakness (Singac) Brook near Preakness, NJ (01389030)	Lat 40°56'55", long 74°13'25", Passaic County, Hydrologic Unit 02030103, at bridge on Ratzer Road, 1.0 mi north of Preakness, and 2.0 mi upstream from Naachpunkt Brook. Datum of gage is 230.8 ft above sea level. Drainage area is 3.24 mi^2.	1979-97	10-20-96	h	420	5-16-90	6.32b	1,570
Passaic River above Beatties Dam, at Little Falls, NJ (01389492)	Lat 40°53'04", long 74°14'05", Passaic County, Hydrologic Unit 02030103, at Little Falls, 100 ft upstream of Beatties Dam, 600 ft upstream from bridge on Union Boulevard and 1.5 mi upstream from Peckman River. Datum of gage is 150.00 ft above sea level. Drainage area is 762 mi^2.	1984, 1991-97†	10-22-96	11.61	a	4-07-84	14.0	a
Peckman River at Ozone Avenue, at Verona, NJ (01389534)	Lat 40°50'42", long 74°14'09", Passaic County, Hydrologic Unit 02030103, at bridge on Ozone Avenue in Verona, 4.0 mi west of Clifton and 1.0 mi southwest of Cedar Grove Reservoir. Datum of gage is 300.08 ft above sea level. Drainage area is 4.45 mi^2.	1945, 1979-97	10-19-96	5.00b	1,850	7-23-45	---	3,800e
Molly Ann Brook at North Haledon, NJ (01389765)	Lat 40°57'11", long 74°11'07", Passaic County, Hydrologic Unit 02030103, at bridge on Overlook Avenue in North Haldeon, 1.5 mi west of Hawthorne and 0.5 mi upstream from Oldham Pond Dam. Datum of gage is 209.68 ft above sea level. Drainage area is 3.89 mi^2.	1945, 1979-97	12-02-96	5.87	360	7-23-45	---	3,100f
Fleischer Brook at Market Street, at Elmwood Park, NJ (01389900)	Lat 40°53'57", long 74°06'54", Bergen County, Hydrologic Unit 02030103, at culvert on Market Street in Elmwood Park (formerly East Paterson), and 2.0 mi upstream from mouth. Datum of gage is 33.83 ft above sea level. (Prior to 1995 at datum 1.48 ft higher.) Drainage area is 1.37 mi^2.	1967-97	5-30-95 7-08-96 10-19-96	2.55 2.82 2.66	660 1,600 1,200	7-08-96	2.82	1,600
Saddle River at Upper Saddle River, NJ *(01390450)	Lat 41°03'32", long 74°05'44", Bergen County, Hydrologic Unit 02030103, at culvert on Lake Street in Upper Saddle River, and 1.3 mi downstream from Pine Brook. Datum of gage is 186.11 ft above sea level. Drainage area is 10.9 mi^2.	1966-97	12-02-96	4.19b	1,300	11-08-77	5.25bd	4,150

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage Height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
PASSAIC RIVER BASIN--Continued								
Hohokus Brook at Allendale, NJ (01390810)	Lat 41°01'37", long 74°08'44", Bergen County, Hydrologic Unit 02030103, at bridge on Brookside Avenue in Allendale and 0.2 mi downstream from Valentine Brook. Datum of gage is 277.46 ft above sea level. Drainage area is 9.11 mi^2.	1969-97	10-19-96	5.49	407	11-08-77	8.28	1,380
Ramsey Brook at Allendale, NJ (01390900)	Lat 41°01'44", long 74°08'07", Bergen County, Hydrologic Unit 02030103, at bridge on Brookside Avenue in Allendale and 0.6 mi upstream from Hohokus Brook. Datum of gage is 270.79 ft above sea level. Drainage area is 2.55 mi^2.	1975-97	12-02-96	2.64b	134	11-08-77	5.39b	980
Third River at Bloomfield, NJ (01392170)	Lat 40°47'59", long 74°11'18", Essex County, Hydrologic Unit 02030103, on downstream left wingwall of bridge on entrance ramp at Interchange 148 to the Garden State Parkway in Bloomfield 0.6 mi west of Nutley, and 5.1 mi upstream from Passaic River. Drainage area is 7.71 mi^2.	1988-97	10-19-96	7.34b	990	10-19-96	7.34b	990
RARITAN RIVER BASIN								
Alpaugh Brook at Hampton, NJ (01396570)	Lat 40°42'13", long 74°56'52", Hunterdon County, Hydrologic Unit 02030105, at culvert on State Route 31 at Hampton, 0.1 mi upstream of mouth, 0.6 mi north of Glen Gardner. Drainage area is 0.41 mi^2.	1995-97	10-19-96	2.83	105	10-19-96	2.83	105
Walnut Brook near Flemington, NJ (01397500)	Lat 40°30'55", long 74°52'52", Hunterdon County, Hydrologic Unit 02030105, 1.2 mi northwest of Flemington, and 2.3 mi upstream from mouth. Datum of gage is 267.33 ft above sea level. Drainage area is 2.24 mi^2.	1936-61†, 1963-97	10-19-96	3.91	968	8-28-71	4.61	1,570
Back Brook tributary near Ringoes, NJ (01398045)	Lat 40°25'41", long 74°49'52", Hunterdon County, Hydrologic Unit 02030105, at right upstream wingwall of bridge on Wertsville Road, 2.1 mi east of Ringoes, 1.3 mi upstream from Back Brook, and 2.3 mi southwest of Wertsville. Datum of gage is 161.6 ft above sea level. Drainage area is 1.98 mi^2.	1978-88†, 1989-97	10-19-96	4.01	883	8-03-79	5.05	1,290
Axle Brook near Pottersville, NJ (01399525)	Lat 40°41'40", long 74°43'05", Somerset County, Hydrologic Unit 02030105, on right upstream wingwall of bridge on Black River Road, 1.3 mi, south of Pottersville, and 0.3 mi upstream from mouth. Datum of gage is 172.74 ft above sea level. Drainage area is 1.22 mi^2.	1977-88†, 1988-97	10-19-96	5.28	720	7-26-88	6.13	914
North Branch Raritan River at North Branch, NJ (01399830)	Lat 40°36'00", long 74°40'27", Somerset County, Hydrologic Unit 02030105, on right bank 5 ft upstream from bridge on State Highway 28 in North Branch, 0.1 mi south of River Brook, and 3.6 mi upstream from confluence with South Branch Raritan River. Datum of gage is 56.94 ft above sea level. Drainage area is 174 mi^2.	1977-81†, 1982-95, 1997	10-19-96	18.60	24,600	7-07-84	19.31	27,300

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum Date	Gage Height (ft)	Discharge (ft^3/s)	Period of record maximum Date	Gage height (ft)	Discharge (ft^3/s)
			RARITAN RIVER BASIN--Continued					
North Branch Raritan River at South Branch, NJ (01400010)	Lat 40°33'24", long 74°41'19", Somerset County, Hydrologic Unit 02030105, at bridge on Old York Road, 0.8 mi northeast of South Branch, and 500 ft upstream from confluence with South Branch Raritan River. Datum of gage is 46.03 ft. Drainage area is 190 mi^2.	1993-97	10-19-96	15.60	a	10-19-96	15.60	a
Peters Brook at Mercer Street, at Somerville, NJ (01400360)	Lat 40°34'30", long 74°37'07", Somerset County, Hydrologic Unit 02030105, on the left bank on the downstream side of the bridge on Mercer Street in Somerville, 0.4 mi downstream from Macs Brook and 0.6 mi upstream from Ross Brook. Datum of gage is 42.51 ft above sea level. Drainage area is 7.37 mi^2.	1991-97	10-19-96	9.54b	a	10-19-96	9.54b	a
Millstone River at Southfield Road, near Grovers Mill, NJ (01400630)	Lat 40°18'12", long 74°34'33", Mercer County, Hydrologic Unit 02030105, at bridge on Southfield Road, 0.2 mi southeast at Grovers Mill, 3.5 mi southwest of Cranbury, and 3.0 mi upstream of Bear Brook. Datum of gage is 62.63 ft above sea level. Drainage area is 41.0 mi^2.	1971, 1975, 1979-97	10-20-96	6.47	1,070	12-11-92c	7.22c	1,400c
Millstone River at Plainsboro, NJ (01400730)	Lat 40°19'27", long 74°36'51", Mercer County, Hydrologic Unit 02030105, on left bank 30 ft upstream from railroad bridge on AMTRAK (former Penn Central) mainline, 100 ft downstream from Cranbury Brook, 0.2 mi upstream from Bear Brook, and 0.9 mi southwest of Plainsboro. Datum of gage is 53.41 ft above sea level. Drainage area is 65.8 mi^2.	1965-75†, 1976-87, 1987-89†, 1990-97	10-20-96	6.22	2,130	7-21-75	8.96	3,970
Bear Brook at Route 535, near Locust Corner, NJ (01400775)	Lat 40°16'41", long 74°34'39", Mercer County, Hydrologic Unit 02030105, at bridge on State Route 535, 0.9 mi southwest of Locust Corner, 2.0 mi east of Hightstown, and 4.2 mi above mouth. Datum of gage is 73.75 ft above sea level. Drainage area is 6.69 mi^2.	1971, 1975, 1979-97	10-19-96	6.31b	605	6-10-89	7.95db	1,550
Bear Brook at Route 571, near Grovers Mill, NJ (01400795)	Lat 40°17'41", long 74°35'34", Mercer County, Hydrologic Unit 02030105, at bridge on Route 571 (Princeton-Hightstown Road), 1.2 mi upstream of Grovers Mill Pond, 1.4 mi east of Princeton Junction, and 2.9 mi west of U.S. Route 130 and Hightstown. Datum of gage is 62.48 ft above sea level. Drainage area is 9.28 mi^2.	1986-97	10-19-96	10.06	570	6-10-89	11.90	1,320
Baldwins Creek at Pennington, NJ *(01400930)	Lat 40°20'18", long 74°47'50", Mercer County, Hydrologic Unit 02030105, at bridge on State Route 31, 0.8 mi north of Pennington, and 0.9 mi upstream from Baldwin Lake dam. Datum of gage is 161.69 ft above sea level. Drainage area is 1.99 mi^2.	1960-97	10-19-96	6.59	692	8-27-71	8.46r	1,260
Hart Brook near Pennington, NJ (01400950)	Lat 40°19'17", long 74°45'38", Mercer County, Hydrologic Unit 02030105, at culvert on Federal City Road, 1.6 mi upstream of mouth, and 1.7 mi southeast of Pennington. Datum of gage after July 1, 1975 is 163.32 ft above sea level. Drainage area is 0.57 mi^2.	1968-97	10-19-96	3.98	165	7-14-87	5.27d	470

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum Date	Gage Height (ft)	Discharge (ft^3/s)	Period of record maximum Date	Gage height (ft)	Discharge (ft^3/s)
RARITAN RIVER BASIN--Continued								
Duck Pond Run near Princeton Junction, NJ (01401160)	Lat 40°17'47", long 74°38'47", Mercer County, Hydrologic Unit 02030105, on right bank upstream from bridge on Clarksville Road, 1.5 mi southwest of Princeton Junction, and 4.0 mi south of Princeton. Datum of gage is 72.50 ft above sea level. Drainage area is 1.81 mi^2.	1980-97	10-19-96	5.42	176	6-10-89	6.68	275
Millstone River at Carnegie Lake, at Princeton, NJ (01401301)	Lat 40°22'11", long 74°37'15", Middlesex County, Hydrologic Unit 02030105, at right end of Carnegie Lake dam, 2.5 mi northeast of Princeton. Datum of gage is 50.00 ft above sea level. Drainage area is 159 mi^2.	1971, 1973-74†, 1977-87, 1988-89†, 1990-97	10-20-96	5.32	7,800	8-28-71	7.09	13,000
Rock Brook near Blawenburg, NJ (01401595)	Lat 40°25'47", long 74°41'05", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Hill Road, 0.7 mi upstream from mouth, 1.0 mi northeast of Blawenburg, and 2.8 mi northwest of Rocky Hill. Datum of gage is 63.45 ft above sea level. Drainage area is 9.03 mi^2.	1967-97	10-19-96	8.19b	3,130	8-28-71	10.00	4,530
Beden Brook near Rocky Hill, NJ (01401600)	Lat 40°24'52", long 74°39'02", Somerset County, Hydrologic Unit 02030105, at bridge on U.S. Route 206, 0.7 mi upstream from Pike Run, 1.2 mi northwest of Rocky Hill, and 4.6 mi north of Princeton. Datum of gage is 38.09 ft above sea level. Drainage area is 27.0 mi^2, revised.	1967-97	10-19-96	14.03b	8,170	8-28-71	16.83b	12,100
Six Mile Run near Middlebush, NJ (01401870)	Lat 40°28'12", long 74°32'42", Somerset County, Hydrologic Unit 02030105, at bridge on South Middlebush Road, 1.6 mi upstream from mouth, and 2.1 mi south of Middlebush. Datum of gage is 39.91 ft above sea level. Drainage area is 10.7 mi^2.	1966-97	10-19-96	10.15	5,710	7-14-75	11.77	10,200
Middle Brook at Bound Brook, NJ (01403200)	Lat 40°33'38", long 74°32'56", Middlesex County, Hydrologic Unit 02030105, at bridge on Talmadge Avenue at Bound Brook, 0.6 mi downstream from bridge on State Route 28, and 0.5 mi upstream from mouth. Datum of gage is 21.53 ft above sea level. Drainage area is 17.2 mi^2.	1993-97	10-20-96	13.00bm	a	10-20-96	13.00bm	a
Blue Brook at Seeleys Pond Dam, near Berkeley Heights, NJ (01403395)	Lat 40°40'02", long 74°24'13", Union County, Hydrologic Unit 02030105, on wall on right bank, upstream from Seeleys Pond dam, 300 ft from mouth, 1.0 mi north of Scotch Plains, 1.0 mi west of Mountainside, and 4.5 mi southeast of Berkeley Heights. Datum of gage is 202.05 ft above sea level. Drainage area is 3.59 mi^2.	1973, 1981-97	10-19-96	5.90	759	8-02-73	7.55	2,080
Green Brook at Plainfield, NJ (01403500)	Lat 40°36'53", Long 74°25'55", Union County, Hydrologic Unit 02030105, on left bank at bridge on Sycamore Avenue in Plainfield and 1.0 mi upstream from Stony Brook. Datum of gage is 70.37 ft above sea level. Drainage area is 9.75 mi^2.	1938-84†, 1985-97	10-19-96	5.82b	2,120	7-23-38	5.82b	2,890

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum Date	Gage Height (ft)	Discharge (ft^3/s)	Period of record maximum Date	Gage height (ft)	Discharge (ft^3/s)
	RARITAN RIVER BASIN--Continued							
Stony Brook at North Plainfield, NJ (01403570)	Lat 40°37'19", long 74°26'11, Somerset County, Hydrologic Unit 02030105, at bridge on Green Brook Road, in North Plainfield, 100 ft downstream of Crab Brook, and 1.4 mi upstream of mouth. Datum of gage is 71.59 ft above sea level. Drainage area is 6.88 mi^2.	1975-82, 1991-97	10-19-96	8.35	3,130	7-23-38	10.00	a
Green Brook at Rock Avenue, at Plainfield, NJ (01403600)	Lat 40°36'07", long 74°27'28", Somerset County, Hydrologic Unit 02030105, at bridge on Rock Avenue in Plainfield, 0.3 mi north of West Front Street, and 0.6 mi south of U.S. Route 22. Datum of gage is 45.70 ft above sea level. Drainage area is 18.2 mi^2.	1972-79, 1992-97	10-19-96	11.40b	a	10-19-96 8-02-73	11.40b 10.65b	a 10,400
Bound Brook at Middlesex, NJ (01403900)	Lat 40°35'06", long 74°30'29", Somerset County, Hydrologic Unit 02030105, at bridge on Sebrings Mill Road, 0.4 mi downstream of mouth of Green Brook, and 2.3 mi upstream of mouth. Datum of gage is 26.52 ft above sea level. Drainage area is 48.4 mi^2.	1972-77†, 1992-95, 1996-97†	10-19-96	11.96b	5,230	8-02-73	41.18g	7,000
	SHREWSBURY RIVER BASIN							
Big Brook near Marlboro, NJ (01407290)	Lat 40°19'10", long 74°12'52", Monmouth County, Hydrologic Unit 02030104, downstream side of bridge on Hillsdale Road, 1.7 mi east of Marlboro, and 3.0 mi northwest of Colts Neck. Drainage area is 6.42 mi^2.	1980-97	10-19-96	8.20b	1,200	09-20-89	10.16b	1,370
	MANASQUAN RIVER BASIN							
Mingamahone Brook at Farmingdale, NJ *(01408015)	Lat 40°11'38", long 74°09'42", Monmouth County, Hydrologic Unit 02040301, at bridge on Belmar Road in Farmingdale, and 3.0 mi upstream from mouth. Datum of gage is 48.64 ft above sea level. Drainage area is 6.20 mi^2.	1969-97	10-19-96	--	300n	7-21-75	7.31	425
	GREAT EGG HARBOR RIVER BASIN							
Deep Run at U.S. Route 40, at Buena, NJ (01411120)	Lat 39°30'41", long 74°55'15", Atlantic County, Hydrologic Unit 02040302, downstream left bank of culvert on U.S. Route 40, 0.2 mi upstream of Pennsylvania-Reading-Seashore railroad tracks, 0.3 mi southeast of Buena, and 1.1 mi northwest of Pancoast Lake. Drainage area is 0.33 mi^2.	1997	8-23-97	2.83	20	8-23-97	2.83	20
Deep Run at Route 54, at Landisville, NJ (01411122)	Lat 39°31'20", long 74°55'13", Atlantic County, Hydrologic Unit 02040302, upstream right bank of culvert on State Route 54, 0.4 mi southwest of Pancoast Road, 0.6 mi southeast of Landisville, and 1.0 mi northeast of Pancoast Lake. Drainage area is 1.18 mi^2.	1997	8-23-97	4.18	140	8-23-97	4.18	140

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage Height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
COHANSEY RIVER BASIN								
West Branch Cohansey River at Seeley, NJ (01412500)	Lat 39°29'06, long 75°15'33", Cumberland County, Hydrologic Unit 02040206, on right bank 15 ft upstream from county bridge on County Highway 31 at Seeley, 450 ft upstream from mouth, and 4.1 mi northwest of Bridgeton. Datum of gage is 42.23 ft above sea level. Drainage area is 2.58 mi^2.	1952-67†, 1968-97	12-15-96	3.54	147	6-20-83	11.17	885
DELAWARE RIVER BASIN								
Lapahannock Creek at Ridge Road, at Roxburg, NJ (01446564)	Lat 40°46'06", long 75°06'11", Warren County, Hydrologic Unit 02040105, at bridge on Ridge Road, 0.2 mi south of unnamed pond and 0.8 mi east of State Route 519 at Roxburg. Drainage area is 0.86 mi^2.	1995-97	10-19-96	5.74	139	1-19-96	8.10	285
Delaware River at Riegelsville, NJ (01457500)	Lat 40°35'36", long 75°11'17", Warren County, 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. Drainage area is 6,328 mi^2.	1906-71†, 1972-97	12-03-96	20.53	103,000	8-19-55	38.85	340,000
Delaware River tributary at Byram, NJ (01459010)	Lat 40°25'23", long 75°03'42", Hunterdon County, Hydrologic Unit 02030105, at culvert on State Route 29, south of Byram, 0.1 mi east of the Delaware River, and 0.9 mi north of Bulls Island. Datum of gage is 69.7 ft above sea level. Drainage area is 1.23 mi^2.	1945, 1955, 1995-97	10-19-96	11.41b	666	7-09-45 8-20-55	18.4 28.37k	2,900 a
Moores Creek tributary at Valley Road, near Lambertville, NJ (01462197)	Lat 40°20'12", long 74°54'59", Mercer County, Hydrologic Unit 02030105, at culvert on Valley Road, 2.3 mi south of Lambertville, 0.3 mi east of Belle Mountain, and 0.7 mi upstream of mouth. Drainage area is 0.73 mi^2.	1989, 1995-97	10-19-96	3.45	397	8-15-89	--	1,150j
Shabakunk Creek tributary at Texas Avenue, near Lawrenceville, NJ (01463812)	Lat 40°15'36", long 74°43'38", Mercer County, Hydrologic Unit 02030105, at bridge on Texas Avenue, Lawrenceville, 600 ft west of Brunswick Pike, and 0.2 mi north of Colonial Lake. Drainage area is 0.27 mi^2.	1995-97	6-12-96 10-19-96	4.45br 4.07b	a a	6-12-96	4.45br	a
Stony Ford Brook at New Egypt, NJ (01464405)	Lat 40°04'21", long 74°31'00", Ocean County, Hydrologic Unit 02030105, at bridge on Lakewood Road, 0.7 mi northwest of New Egypt, and 0.9 mi upstream from mouth. Drainage area is 0.99 mi^2.	1979, 1995-97	10-19-96	5.82	62	8-31-79	--	340
Crosswicks Creek tributary at U.S. Route 206, near Bordentown, NJ (01464524)	Lat 40°10'15", long 74°41'59", Burlington County, Hydrologic Unit 02040201, at culvert on U.S. Route 206, 0.4 mi south of Sylvan Glen, and 1.9 mi northeast of Bordentown. Drainage area is 0.43 mi^2.	1995-97	10-19-96	2.29	56	1-20-96	2.56	62

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage Height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
DELAWARE RIVER BASIN--Continued								
Thorton Creek at Bordentown, NJ (01464525)	Lat 40°08'50", long 74°41'46", Burlington County, Hydrologic Unit 02040201, upstream side of abandoned dam, 50 ft upstream of Thorton Lane, 0.4 mi upstream of unnamed pond, 0.9 mi east of Bordentown post office, and 2.5 mi west of Crosswicks. Drainage area is 0.84 mi^2.	1976-77,† 1995-97	10-19-96	3.86	191	10-19-96	3.86	191
Crafts Creek at Route 68, at Georgetown, NJ (01464533)	Lat 40°04'37", long 74°39'48", Burlington County, Hydrologic Unit 02040201, at culvert on State Route 68, 0.5 mi west of Georgetown, 0.7 mi downstream of unnamed pond, and 3.1 mi east of Columbus. Drainage area is 0.58 mi^2.	1995-97	12-14-96	3.57	26	1-19-96	4.27	39
Crafts Creek at Columbus, NJ (01464538)	Lat 40°04'44", long 74°43'07", Burlington County, Hydrologic Unit 02040201, at bridge on Columbus-Mansfield road, 0.4 mi north of Columbus, and 6.0 mi northeast of Mount Holly. Datum of gage is 33.71 ft above sea level. Drainage area is 5.38 mi^2.	1978-97	12-14-96	4.45b	94	7-06-89	10.25b	880
Newton Creek at Collingswood, NJ *(01467305)	Lat 39°54'30", long 75°03'13", Camden County, Hydrologic Unit 02040202, at bridge on Park Avenue in Collingswood, 0.3 mi east of Cuthbert Avenue. Datum of gage is 18.74 ft above sea level. Drainage area is 1.33 mi^2.	1964-97	12-06-96	3.56	174	7-14-94	6.82	328
South Branch Newton Creek at Haddon Heights, NJ (01467317)	Lat 39°52'45", long 75°04'26", Camden County, Hydrologic Unit 02040202, at bridge on 13th Avenue in Haddon Heights, and 2.6 mi south of Collingswood. Datum of gage is 23.34 ft above sea level. Drainage area is 0.63 mi^2.	1964-97	7-23-97	1.66	39	9-01-78	4.62	295
Gravelly Run at Somerdale, NJ (01467357)	Lat 39°46'17", long 75°01'49", Camden County, Hydrologic Unit 02040202, upstream left bank at culvert, on Warwick Road in Somerdale 0.8 mi south of Evesham Road, 0.8 mi north of Sterling High School, and 1.25 mi upstream of mouth, where it feeds Otter Brook. Drainage area is 0.35 mi^2.	1997	10-19-96	3.11	300	10-19-96	3.11	300
Bees Branch at Hurffville, NJ (01475017)	Lat 39°46'17", long 75°06'21", Gloucester County, Hydrologic Unit 02040202, upstream right bank at culvert, on State Route 47, 0.4 mi south of Barnsboro Road, 0.6 mi north of Hurffville, and 0.8 mi southwest of headwater at (unnamed lake). Drainage area is 0.43 mi^2.	1997	12-14-96	4.93	71	12-14-96	4.93	71
Plank Run at Glassboro, NJ (01475033)	Lat 39°42'54", long 75°08'25", Gloucester County, Hydrologic Unit 02040202, upstream right bank at culvert, on State Route 322. 0.4 mi southwest of intersection with State Route 55, 0.6 mi west of Glassboro, and 0.7 mi south of Alcyon Lake. Drainage area is 0.71 mi^2.	1997	10-19-96	2.21	28	10-19-96	2.21	28

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum: Date	Water year 1997 maximum: Gage Height (ft)	Water year 1997 maximum: Discharge (ft^3/s)	Period of record maximum: Date	Period of record maximum: Gage height (ft)	Period of record maximum: Discharge (ft^3/s)
	DELAWARE RIVER BASIN--Continued							
Miery Run near Ewan, NJ (01477102)	Lat 39°42'52", Long 75°11'41", Gloucester County, Hydrologic Unit 02040202, downstream left bank at culvert on State Route 623, 0.3 mi southeast of mouth out Raccoon Creek, 1.2 mi northwest of Ewan, and 1.5 mi southeast of intersection with U.S. Route 322. Drainage area is 0.73 mi^2.	1997	12-14-96	2.31	80	12-14-96	2.31	80
Raccoon Creek tributary No. 3 near Mullica Hill, NJ (01477123)	Lat 39°44'47", long 75°16'05", Gloucester County, Hydrologic Unit 02040202, downstream left bank of culvert, on Mullica Hill Road, 0.3 mi upstream of mouth, 2.0 mi east of Swedesboro, and 2.3 mi northwest of Mullica Hill. Drainage area is 0.47 mi^2.	1997	10-19-96	1.10	22	10-19-96	1.10	22

* Also a low-flow partial-record station.
† Operated as a continuous-record gaging station.
a Discharge not determined.
b Downstream side of bridge.
c Recorded at previous site.
d Not the maximum gage height for period of record.
e Determined at Bradford Avenue, 0.2 mi downstream of gage, adjusted for change in drainage area.
f Determined at Squaw Lake Dam, 0.2 mi upstream of gage.
g Gage height (NGVD 1929) from previous site location approximately 150 ft upstream of current site.
h Peak gage height for the period was less than minimum recordable gage height indicated.
i Peak discharge for the period was less than the minimum recordable discharge.
j Determined at site 0.1 mi downstream (USGS station number 01462198, drainage area 0.80 mi^2), adjusted for change in drainage area.
k Due to backwater from Delaware River.
m Due to backwater from Raritan River.
n Estimated.
r Revised.

Low-flow partial-record stations

Measurements of streamflow in New Jersey made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1997

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		PASSAIC RIVER BASIN				
01379525	Canoe Brook near Millburn, NJ	Lat 40°44'55", long 74°20'14", Essex County, Hydrologic Unit 02030103, at bridge on Parsonage Hill Road, 0.2 mi downstream from Taylor Lake, 1.0 mi upstream from New Jersey-American Water Company pumping station, and 1.4 mi northwest of Millburn.	10.2	1989-97	9-27-96d 7-08-97 9-08-97	2.4 .61 .11
01381200	Rockaway River at Pine Brook, NJ	Lat 40°51'42, long 74°20'53", Morris County, Hydrologic Unit 02030103,at bridge on U.S. Route 46, 0.9 mi west of Pine Brook, and 1.1 mi upstream of Whippany River.	136	1963-73, 1979-81, 1983-97	7-09-97	24
01381550	Malapardis Brook at Whippany, NJ	Lat 40°49'22", long 74°25'08", Morris County, Hydrologic Unit 02030103, at bridge on Parsippany Road at Whippany, 400 ft upstream from mouth, and 2.2 mi south of Parsippany.	5.07	1989-97	9-27-96 7-08-97 9-08-97	2.7 1.5 1.3
01382000	Passaic River at Two Bridges, NJ	Lat 40°53'50", long 74°16'23", Essex County, Hydrologic Unit 02030103, at bridge on Two Bridges Road, just upstream of confluence with Pompton River, 0.3 mi northeast of Two Bridges, and 2.6 mi northwest of Little Falls.	361	1963-68, 1983-84, 1986-93, 1995-97	7-09-97	118
01382550	Pequannock River tributary at Kinnelon, NJ	Lat 41°00'12", long 74°22'08", Morris County, Hydrologic Unit 02030103, at culvert on Kinnelon Road, at Kinnelon, 300 ft upstream from Maple Lake and 1.0 mi west of Butler.	1.18	1992-97	6-26-97 9-09-97	.13 .11
01382700	Stone House Brook at Kinnelon, NJ	Lat 40°59'17", long 74°23'10", Morris County, Hydrologic Unit 02030103, at culvert on Kinnelon Road at Kinnelon, 200 ft downstream from dam on unnamed pond, and 0.3 mi upstream of Butler Reservoir.	3.45	1992-97	7-15-97 9-09-97	.24 .29
01387490	Masonicus Brook at West Mahwah, NJ	Lat 41°05'53", long 74°08'57", Bergen County, Hydrologic Unit 02030103, at bridge on Eastview Avenue, at West Mahwah, 0.3 mi downstream from Winters Pond and 0.4 mi upstream from mouth.	3.84	1982-83, 1992-97	7-15-97 9-09-97	1.6 1.5
01388700	Beaver Dam Brook at Lincoln Park, NJ	Lat 40°55'29", long 74°18'10", Morris County, Hydrologic Unit 02030103, at bridge on Park Avenue, at Lincoln Park, 0.6 mi downstream from East Ditch and 0.7 mi upstream of mouth.	12.3	1992-97	7-15-97 9-08-97	1.2 2.1
01389100	Singac Brook at Singac, NJ	Lat 40°53'57", long 74°15'57", Passaic County, Hydrologic Unit 02030103, at bridge on Fairfield Road, between Interstate 80 and U.S. Route 46, 60 ft upstream from mouth, 1.2 mi northwest of Singac, and 1.8 mi northwest of Little Falls.	11.1	1963-67, 1983-84, 1986-97	7-01-97 9-09-97	15 18
01389140	Deepavaal Brook at Two Bridges, NJ	Lat 40°53'14", long 74°16'00", Essex County, Hydrologic Unit 02030103, at bridge on Little Falls Road, 400 ft upstream from Passaic River, and 0.8 mi southeast of Two Bridges.	7.59	1970, 1983-84, 1988-97	7-15-97 9-08-97	1.4 1.5

Discharge measurements made at low-flow partial-record stations during water year 1997--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		ELIZABETH RIVER BASIN				
01393350	West Branch Elizabeth River near Union, NJ	Lat 40°41'32", long 74°14'38", Union County, Hydrologic Unit 02030104, at bridge on Vauxhall Road, 0.3 mi upstream of mouth, 1.4 mi east of Union, and 2.3 mi northwest of Elizabeth.	2.53	1989-97	9-27-96 7-08-97 9-08-97	.95 .86 .85
		RAHWAY RIVER BASIN				
01394400	Van Winkle Brook at Springfield, NJ	Lat 40°42'12", long 74°18'15", Union County, Hydrologic Unit 02030104, at railroad bridge in Springfield, 0.4 mi upstream from bridge on Mountain Avenue, and 2.3 mi west of Union.	4.85	1989-97	9-27-96d 7-08-97 9-08-97	1.2 .76 .71
01394600	Nomahegan Brook near Mountainside, NJ	Lat 40°40'42", long 74°19'54", Union County, Hydrologic Unit 02030104, at bridge on Springfield Avenue, 0.2 mi downstream of Echo Lake, 1.1 mi upstream of mouth, and 1.4 mi northeast of Mountainside.	3.76	1989-97	9-27-96d 7-08-97 9-08-97	1.9 2.7 1.9
		RARITAN RIVER BASIN				
01396220	Stony Brook at Naughright, NJ	Lat 40°48'11", long 74°45'07", Morris County, Hydrologic Unit 02040105, at bridge on Naughright Road, 0.6 mi northwest of Naughright, 0.7 mi upstream from mouth, and 1.9 mi northeast of Long Valley.	3.34	1963-67, 1973, 1991-97	7-08-97 9-08-97	.20 .71
01396240	Electric Brook at Long Valley, NJ	Lat 40°47'23", long 74°46'36", Morris County, Hydrologic Unit 02030105, at bridge on Fairview Avenue at Long Valley, 0.3 mi upstream of mouth, and 0.8 mi downstream of Camp Washington Pond.	3.17	1991-97	7-16-97 9-17-97	.53 .48
01399190	Lamington (Black) River at Succasunna, NJ	Lat 40°51'03", long 74°38'02", Morris County, Hydrologic Unit 02030105, bridge on Righter Road, 0.7 mi south of Succasunna, and 0.4 mi upstream of Succasunna Brook.	7.37	1977-87a, 1988-97	5-21-97 7-08-97 9-04-97	14 2.5 2.8
01399200	Lamington (Black) River near Ironia, NJ	Lat 40°50'07", long 74°38'40", Morris County, Hydrologic Unit 02030105, at bridge on Ironia Road, 1.0 mi downstream of Succasunna Brook, and 1.3 mi northwest of Ironia.	10.9	1964-72, 1976-87a, 1988-97	5-21-97 7-08-97 9-04-97	20 4.0 4.8
01399295	Tanners Brook near Milltown, NJ	Lat 40°47'17", long 74°43'33", Morris County, Hydrologic Unit 02030105, at bridge on Tanners Brook Road, 0.2 mi upstream of mouth, 0.6 mi north of Milltown, and 1.5 mi west of Chester.	2.78	1991-97	7-08-97 9-08-97	1.1 .78
01399300	Lamington River at Milltown, NJ	Lat 40°47'13", long 74°43'13", Morris County, Hydrologic Unit 02030105, at bridge on New Furnace Road, 0.1 mi downstream from Tanners Brook, and 0.6 mi north of Milltown.	23.2	1988-97	7-08-97 9-08-97	9.3 11
		WHALE POND BROOK BASIN				
01407618	Whale Pond Brook near Oakhurst, NJ	Lat 40°16'35", long 74°00'12", Monmouth County, Hydrologic Unit 02030104, at bridge on Norwood Avenue, 0.6 mi upstream of Lake Takanassee, and 0.8 mi northeast of Oakhurst.	6.20	1989-97	8-27-97 9-16-97	4.0 3.6
		POPLAR BROOK BASIN				
01407628	Poplar Brook near Deal, NJ	Lat 40°15'24", long 74°00'42", Monmouth County, Hydrologic Unit 02030104, at bridge on Monmouth Road, 0.7 mi west of Deal, 1.0 mi south of Oakhurst, and 1.3 mi upstream of mouth.	2.49	1989-97	8-27-97 9-16-97	2.1 2.2

Discharge measurements made at low-flow partial-record stations during water year 1997--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		HARVEY (HOG SWAMP) BROOK BASIN				
01407636	Harvey (Hog Swamp) Brook at West Allenhurst, NJ	Lat 40°14'36", long 74°00'52", Monmouth County, Hydrologic Unit 02030104, at culvert on Monmouth Road at West Allenhurst, 0.7 mi west of Deal, and 1.6 mi upstream of dam on Deal Lake.	1.99	1989-97	8-27-97 9-16-97	1.1 1.1
		SHARK RIVER BASIN				
01407755	Jumping Brook above reservoir, near Neptune City, NJ	Lat 40°12'30", long 74°04'12", Monmouth County, Hydrologic Unit 02030104, at bridge on State Route 33, 0.25 mi upstream of Jumping Brook Reservoir, and 2.3 mi west of Neptune City.	5.58	1989-97	8-27-97 9-16-97	1.5 0
		POLLY POND BROOK BASIN				
01407780	Polly Pond Brook at South Belmar, NJ	Lat 40°10'00", long 74°01'41", Monmouth County, Hydrologic Unit 02030104, at culvert on F Street at South Belmar, 50 ft upstream of Lake Como, and 0.6 mi upstream of mouth.	.99	1989-97	8-27-97 9-16-97	0 0
		WRECK POND BROOK BASIN				
01407806	Hannabrand Brook at Old Mill Road, near Spring Lake Heights, NJ	Lat 40°08'29", long 74°03'43", Monmouth County, Hydrologic Unit 02030104, at bridge on Old Mill Road, 300 ft upstream of mouth, and 1.0 mi southwest of Spring Lake Heights.	3.13	1989-97	8-27-97 9-16-97	3.5 3.1
		MULLICA RIVER BASIN				
01409375	Mullica River near Atco, NJ	Lat 39°47'08", long 74°51'38", Camden County, Hydrologic Unit 02040301, on left bank of small lake 50 ft downstream from bridge on Jackson-Medford Road, 0.7 mi north of intersection of State Route 534 with Jackson-Medford Road, and 1.6 mi east of Atco.	3.22	1974-85b, 1991-97	11-21-96 2-20-97 5-08-97 9-02-97	2.5 4.9 4.9 1.4
01409383	Mullica River at Jackson Road, near Indian Mills, NJ	Lat 39°46'40", long 74°48'01", Burlington County, Hydrologic Unit 02040301, at bridge on Jackson Road (State Route 534), 0.5 mi downstream from Alquatka Branch, 3.2 mi west of Indian Mills, and approximately 3.3 mi east of Jackson.	16.8	1977-78, 1995-97	11-20-96 1-22-97 3-13-97 6-10-97 8-05-97 9-09-97	13 20 32 11 1.9 .56
0140940050	Mullica River at Constable Bridge, near Batsto, NJ	Lat 39°39'33", long 74°39'33", Burlington County, Hydrologic Unit 02040301, at Constable Bridge on unnamed road, 1.0 mi upstream from Sleeper Branch, 1.2 mi northwest of Batsto, and 1.6 mi northeast of Nescochague Lake.	47.0	1995-97	11-20-96 1-22-97 3-13-97 6-10-97 8-05-97 9-09-97	72 117 170 75 35 44
01409401	Hays Mill Creek at Atco, NJ	Lat 39°45'32", long 74°53'02", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30, at outlet of Atco Lake in Atco, and 3.3 mi southeast of Berlin.	3.80	1979, 1991-97	11-21-96 2-20-97 5-08-97 9-02-97	3.0 4.8 6.0 1.5
01409402	Hays Mill Creek near Chesilhurst, NJ	Lat 39°45'02", long 74°50'28", Camden County, Hydrologic Unit 02040301, at bridge on Tremont Avenue in Wharton State Forest, 0.3 mi northeast of Burnt Mill Road and 2.0 mi northeast of Chesilhurst.	7.13	1974-77b, 1991-97	11-21-96 2-20-97 5-08-97 9-02-97	9.8 15 15 6.7
0140940250	Cooper Branch near Chesilhurst, NJ	Lat 39°44'44", long 74°50'25", Camden County, Hydrologic Unit 02040301, at bridge on Burnt Mill Road, 700 ft upstream from mouth, 1.6 mi northeast of Waterford Works, and 2.8 mi southeast of Atco.	1.93	1991-97	11-21-96 2-20-97 5-08-97 9-02-97	1.3 .55 3.9 9.5

Discharge measurements made at low-flow partial-record stations during water year 1997--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		MULLICA RIVER BASIN--Continued				
0140940310	Wildcat Branch near Chesilhurst, NJ	Lat 39°44'20", long 74°49'58", Camden County, Hydrologic Unit 02040301, at bridge on Burnt Mill Road, 0.1 mi downstream from outlet of Beaverdam Lake, 1.4 mi northeast of Waterford Works, and 1.9 mi east of Chesilhurst.	2.27	1991-97	2-20-97 5-08-97 9-02-97	6.5 5.5 2.2
0140940365	Sleeper Branch Diversion (Saltars Ditch) near Atsion, NJ	Lat 39°43'48", long 74°46'09", Camden County, Hydrologic Unit 02040301, at bridge on Burnt House Road, 600 ft downstream of Sleeper Branch, and 2.3 mi west of Atsion.	---	1991-97	11-21-96 2-20-97 5-08-97 9-02-97	2.8 6.4 12 .86
0140940370	Sleeper Branch near Atsion, NJ	Lat 39°43'42", long 74°46'12", Camden County, Hydrologic Unit 02040301, at bridge on Burnt House Road, 500 ft downstream of Sleeper Branch Diversion (Saltars Ditch) and 2.3 mi west of Atsion.	16.1	1991-97	11-21-96 2-20-97 5-08-97 9-02-97	18 31 30 14
0140940480	Clark Branch near Atsion, NJ	Lat 39°42'53", long 74°46'25", Camden County, Hydrologic Unit 02040301, at abandoned railroad bridge, 0.2 mi downstream of Price Branch and 2.8 mi west of Atsion.	6.42	1991-97	11-21-96 2-20-97 5-08-97 9-02-97	3.2 10 8.3 .75
01409408	Pump Branch near Waterford Works, NJ	Lat 39°41'59", long 74°50'40", Camden County, Hydrologic Unit 02040301, at bridge on Old Whitehorse Pike, 0.5 mi downstream from lake at Camp Ha-Lu-Wa-Sa, and 1.6 mi south of Waterford Works.	9.78	1991-97	11-21-96 2-20-97 5-08-97 9-02-97	10 16 18 9.3
0140940950	Blue Anchor Brook at Elm, NJ	Lat 39°40'11", long 74°50'06", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30 (Whitehorse Pike) at Elm, at outlet of unnamed lake, and 1.4 mi upstream of confluence with Pump Branch.	4.86	1991-97	11-21-96 2-20-97 5-08-97 9-02-97	3.0 6.2 6.0 2.6
0140940970	Albertson Branch near Elm, NJ	Lat 39°41'34", long 74°48'24", Camden County, Hydrologic Unit 02040301, at bridge on Fleming Pike, 0.4 mi downstream from confluence of Blue Anchor Brook and Pump Branch, and 1.6 mi northeast of Elm.	17.1	1991-97	11-21-96 2-20-97 5-08-97 9-02-97	16 29 30 18
0140941050	Great Swamp Branch at Elm, NJ	Lat 39°40'18", long 74°49'33", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30, 0.5 mi southeast of Elm, 1.5 mi north of Rosedale, and 2.4 mi northeast of Winslow.	2.83	1991-97	11-21-96 2-20-97 5-08-97 9-02-97	1.3 3.1 3.8 .71
0140941070	Great Swamp Branch below U.S. Route 206, near Hammonton, NJ	Lat 39°41'04", long 74°45'48", Atlantic County, Hydrologic Unit 02040301, 1.0 mi north of Hammonton Municipal Airport, 2.3 mi upstream of mouth, 2.5 mi south of Parkdale, and 3.9 mi northeast of Hammonton.	8.07	1995-97	11-20-96 1-22-97 3-13-97 6-10-97 8-05-97 9-09-97 9-09-97	12 16 21 8.6 4.2 2.7 4.2
01409411	Nescochague Creek at Pleasant Mills, NJ	Lat 39°38'37", long 74°39'48", Atlantic County, Hydrologic Unit 02040301, at bridge on sand road in Pleasant Mills, 0.2 mi upstream from Mullica River, and 0.6 mi west of Batsto.	43.7	1977-78, 1995-97	11-20-96 1-22-97 3-13-97 6-10-97 8-05-97 9-09-97	57 70 89 55 30 35
01409432	Batsto River at Hampton Furnace, NJ	Lat 39°46'15", long 74°40'48", Burlington County, Hydrologic Unit 02040301, 0.1 mi northeast of Hampton Furnace, 0.5 mi upstream from Skit Branch, and 3.8 mi southeast of Indian Mills.	13.7	1995-97	11-20-96 1-24-97 3-13-97 6-10-97 8-05-97 9-09-97	17 31 33 13 8.8 7.4

Discharge measurements made at low-flow partial-record stations during water year 1997--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		MULLICA RIVER BASIN--Continued				
01409439	Skit Branch at Hampton Furnace, NJ	Lat 39°46'01", long 74°40'40", Burlington County, Hydrologic Unit 02040301, at Hampton Furnace, 0.2 mi upstream of mouth, 2.5 mi south of Hampton Gate, and 3.9 mi southeast of Indian Mills.	10.8	1995-97	11-20-96	12
					1-24-97	18
					3-13-97	22
					6-10-97	9.0
					8-05-97	8.0
					9-09-97	6.5
01409455	Springers Brook near Hampton Furnace, NJ	Lat 39°45'19", long 74°41'47", Burlington County, Hydrologic Unit 02040301, at bridge on Hampton Road, 1.3 mi southwest of Hampton Furnace, 1.7 mi downstream from Bard Branch, and 3.7 mi southeast of Indian Mills.	18.3	1977-78, 1995-97	11-20-96	15
					1-24-97	23
					3-13-97	30
					6-10-97	12
					8-05-97	4.1
					9-09-97	1.6
01409470	Batsto River at Quaker Bridge, NJ	Lat 39°42'34", long 74°40'00", Burlington County, Hydrologic Unit 02040301, at Quaker Bridge on sand road, 1.1 mi southeast of Lower Forge, approximately 2.3 mi upstream of Penn Swamp Brook, and 4.7 mi north of Batsto.	55.7	1976-78, 1995-97	11-20-96	72
					1-22-97	102
					3-13-97	133
					6-10-97	63
					8-05-97	39
					9-09-97	38
01409750	West Branch Wading River above Tulpehocken Creek, near Jenkins, NJ	Lat 39°42'56", long 74°33'41", Burlington County, Hydrologic Unit 02040301, 0.3 mi upstream from Tulpehocken Creek, 2.0 mi northwest of Jenkins, and 3.2 mi north of Maxwell.	50.6	1995-97	11-20-96	40
					1-22-97	51
					3-13-97	91
					6-10-97	53
					8-05-97	19
					9-09-97	27
01409780	Tulpehocken Creek near Jenkins, NJ	Lat 39°42'51", long 74°33'58", Burlington County, Hydrologic Unit 02040301, at bridge on Maxwell-Friendship Road, 0.2 mi upstream from mouth, 2.3 mi northwest of Jenkins, and 2.8 mi east of Jemima Mount.	21.8	1977-78, 1995-97	11-20-96	20
					1-22-97	26
					3-13-97	35
					6-10-97	14
					8-05-97	12
					9-09-97	13
		GREAT EGG HARBOR RIVER BASIN				
01410810	Fourmile Branch at New Brooklyn, NJ	Lat 39°41'47", long 74°56'25", Camden County, Hydrologic Unit 02040301, on left bank 70 ft upstream from bridge on Malaga Road, 0.3 mi northeast of New Brooklyn, and 0.3 mi upstream from mouth.	7.74	1972-79, 1989-97	8-22-97	46
01411170	Great Egg Harbor River at Mays Landing, NJ	Lat 39°27'13", long 74°44'04" Atlantic County, Hydrologic Unit 02040302, at bridge on State Route 559, at outlet of Lake Lenape, and 0.4 mi west of intersection of State Route 50 with U.S Route 40 in Mays Landing.	205	1988-93, 1995-97	10-23-96	52
01411220	South River near Belcoville, NJ	Lat 39°26'25", long 74°45'21" Atlantic County, Hydrologic Unit 02040302, at bridge on Walkers Forge Road, 1.1 mi west of Belcoville, and 3.7 mi upstream from mouth.	20.4	1994-97	8-27-97	49
					9-08-97	22
		MAURICE RIVER BASIN				
01411650	Muddy Run near Elmer, NJ	Lat 39°36'48", long 75°11'21" Salem County, Hydrologic Unit 02040206, at bridge on Friendship Church Road, 1.6 mi north of Elmer and 1.8 mi upstream from Elmer Lake.	4.94	1994-97	6-18-97	2.2
					8-27-97	1.7
					9-08-97	.23
01411680	Palatine Branch at Palatine, NJ	Lat 39°33'25", long 75°10'28" Salem County, Hydrologic Unit 02040206, at bridge on Elmer-Palatine Road at Palatine, 0.6 mi upstream from Palatine Lake and 2.5 mi south of Elmer.	5.39	1994-97	8-27-97	2.8
					9-08-97	2.8
01411850	Mill Creek near Millville, NJ	Lat 39°25'33", long 75°05'11" Cumberland County, Hydrologic Unit 02040206, at bridge on dirt road, 1.2 mi upstream from mouth, and 3.3 mi northwest of Millville.	15.1	1973-79, 1993, 1995-97	8-27-97	11
					9-08-97	7.8

Discharge measurements made at low-flow partial-record stations during water year 1997--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		DELAWARE RIVER BASIN				
01443260	East Branch Paulins Kill tributary no. 2 near Woodruffs Gap, NJ	Lat 41°03’42”, long 74°39’37”, Sussex County, Hydrologic Unit 02040105, at culvert on private road, 0.4 mi upstream from bridge on Houses Corner Road and 0.7 mi south of Woodruffs Gap.	2.81	1992-97	3-28-97	3.8
01443275	East Branch Paulins Kill tributary no. 1 near Lafayette, NJ	Lat 41°04’12”, long 74°40’43”, Sussex County, Hydrologic Unit 02040105, at culvert on abandoned railroad bed, 0.5 mi upstream of mouth, 1.2 mi west of Woodruffs Gap, and 2.0 south of Lafayette.	1.81	1992-97	3-28-97	.32
01443510	Blairs Creek at Blairstown, NJ	Lat 40°59’12”, long 74°57’35”, Warren County, Hydrologic Unit 02040105, at bridge on Mill Brook Road, at Blairstown, 300 ft upstream from Blair Lake, 0.4 mi upstream of mouth, and 1.2 mi east of Jacksonburg.	13.1	1989-97	7-16-97 9-16-97	2.0 3.3
01445200	Bear Creek near Johnsonburg, NJ	Lat 40°56’35”, long 74°52’31”, Warren County, Hydrologic Unit 02040105, at bridge on Bear Creek Road, 1.8 mi upstream of Trout Brook, and 1.5 mi south of Johnsonburg.	12.9	1940-42, 1987-97	7-16-97 9-16-97	4.2 3.6
01445490	Furnace Brook at Oxford, NJ	Lat 40°48’15”, long 74°59’42” Warren County, Hydrologic Unit 02040105, at bridge on State Route 31 in Oxford, 2.4 mi upstream from mouth and 3.2 mi north of Washington.	4.29	1965-69b, 1971-72b, 1994-97	7-16-97 9-16-97	2.4 3.4
01445520	Mountain Lake Brook near Pequest, NJ	Lat 40°51’11”, long 74°59’09”, Warren County, Hydrologic Unit 02040105, at bridge on Lake Drive South, at outlet of Mountain Lake, 1.5 mi north of Pequest and 1.7 mi upstream of mouth.	4.35	1991-97	9-26-96d 7-16-97 9-16-97	2.0 0 2.8
01446520	Pophandusing Brook at Belvidere, NJ	Lat 40°49’14”, long 75°04’37”, Warren County, Hydrologic Unit 02040105, at bridge on Knowlton Street, at Belvidere, 0.5 mi upstream of mouth, and 1.8 mi west of Hazen.	5.36	1991-97	7-16-97 9-16-97	.88 .48
01446568	Buckhorn Creek at Hutchinson Road, at Hutchinson, NJ	Lat 40°46’18”, long 75°07’53”, Warren County, Hydrologic Unit 02040105, at bridge on Hutchinson Road at Hutchinson, 50 ft upstream of unnamed tributary, and 800 ft upstream of mouth.	8.38	1991-97	9-16-97	2.6
01455100	Lopatcong Creek at Phillipsburg, NJ	Lat 40°40’38”, long 75°10’13”, Warren County, Hydrologic Unit 02040105, at bridge on Alternate U.S. Route 22 in Phillipsburg, 100 ft upstream of railroad bridge of CONRAIL, and 3,000 ft above mouth.	14.2	1958-64, 1991-97	9-26-96d 7-16-97 9-16-97	12 11 10
01456080	Mine Brook near Hackettstown, NJ	Lat 40°49’58”, long 74°49’23”, Morris County, Hydrologic Unit 02040105, at bridge on State Route 517 (Schooleys Mountain Road), 600 ft upstream of mouth, and 1.0 mi south of Hackettstown.	4.96	1991-97	9-26-96d 7-16-97 9-16-97	.18 .29 .13
01456210	Hances Brook near Beattystown, NJ	Lat 40°48’17”, long 74°51’38”, Warren County, Hydrologic Unit 02040105, at bridge on State Route 57, 600 ft upstream of mouth, and 1.1 mi southwest of Beattystown.	4.13	1991-97	9-26-96d 7-16-97 9-16-97	2.5 1.6 1.2
01467130	Cooper River at Kirkwood, NJ	Lat 39°50’11”, long 75°00’06”, Camden County, Hydrologic Unit 02040202, at outlet of Kirkwood Lake in Kirkwood, 100 ft east of railroad tracks of CONRAIL, and 1.0 mi north of Laurel Springs.	5.10	1964-72, 1988-97	7-11-97 9-05-97	.80 2.0

Discharge measurements made at low-flow partial-record stations during water year 1997--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		DELAWARE RIVER BASIN--Continued				
01467140	Cooper River at Lawnside, NJ	Lat 39°52'14", long 75°00'59", Camden County, Hydrologic Unit 02040202, on right bank at Melrose Avenue at Lawnside, 300 ft downstream of former Lawnside sewage treatment plant, and 2.0 mi upstream of New Jersey Turnpike.	12.7	1964-72, 1988-97	7-11-97 9-05-97	4.8 6.3
01467160	North Branch Cooper River near Marlton, NJ	Lat 39°53'20", long 74°58'08", Burlington County, Hydrologic Unit 02040202, at bridge on Springdale Road, 2.5 mi west of Marlton, and 5.7 mi southwest of Moorestown.	5.34	1965-69, 1971, 1988-97	7-11-97 9-05-97	2.2 2.3
01467180	North Branch Cooper River near Ellisburg, NJ	Lat 39°54'27", long 75°00'42", Camden County, Hydrologic Unit 02040202, at bridge on Brace Road, 0.4 mi south of Ellisburg, and 0.9 mi upstream from confluence with Cooper River.	10.5	1964-69, 1971-72, 1977, 1988-97	7-11-97 9-05-97	4.9 4.2
01467330	South Branch Big Timber Creek at Blackwood, NJ	Lat 39°48'17", long 75°04'33" Camden County, Hydrologic Unit 02040202, at bridge on Lower Landing Road at Blackwood, 3.1 mi southwest of Lindenwold and 3.0 mi from mouth.	19.1	1964-72, 1994-97	6-24-97 9-15-97	26 19
01475020	Mantua Creek at Sewell, NJ	Lat 39°46'22", long 75°08'10",Gloucester County, Hydrologic Unit 02040202, at bridge on Wenonah-Pitman Road, 0.5 mi below Bees Branch, and 0.6 mi east of Sewell.	14.7	1966-72, 1994-97	6-24-97 9-15-97	11 11
01477130	Basgalore Creek at Russell Mill Road, near Swedesboro, NJ	Lat 39°44'14", long 75°17'00" Gloucester County, Hydrologic Unit 02040202, at bridge on Russell Mill Road, 0.8 mi above mouth, and 1.7 mi east-southeast of Swedesboro.	3.30	1957c, 1966c, 1994-97	6-24-97 9-15-97	4.1 2.7
01482510	Nichomus Run near Woodstown, NJ	Lat 39°38'22", long 75°20'59" Salem County, Hydrologic Unit 02040206, at bridge on State Route 45, 1.4 mi southwest of Woodstown, and 1.7 mi above mouth.	3.76	1966-74, 1994-97	6-24-97 9-15-97	.28 .19
01482900	Cool Run near Alloway, NJ	Lat 39°34'43", long 75°18'36" Salem County, Hydrologic Unit 02040206, at highway bridge on Stockton-Pleasant Hill Road, 0.5 mi above mouth, 3.0 mi northeast of Alloway, and 3.3 mi southwest of Daretown.	4.92	1959-63, 1994-97	6-24-97 9-18-97	4.9 3.8
01482950	Cedar Brook near Alloway, NJ	Lat 39°33'31", long 75°20'22" Salem County, Hydrologic Unit 02040206, at highway bridge on secondary road 400 ft downstream from outlet of Sycamore Lake (at Remsterville), 1.3 mi east of Alloway, and 5.3 mi southwest of Daretown.	3.76	1959-63, 1994-97	6-24-97 9-18-97	2.2 1.8

* Active crest-stage partial-record station.

a Operated as a continuous-record gaging station by U.S. Geological Survey.

b Operated as a crest-stage partial-record station.

c Published as Raccoon Creek tributary.

d Not previously published.

e Estimated.

DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES

Measurements of streamflow at points other than gaging stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements: Date	Measurements: Discharge (ft^3/s)
		HUDSON RIVER BASIN				
01367770 Wallkill River	Rondout Creek	Lat 41°11'38", long 74°34'32", Sussex County, Hydrologic Unit 02020007, at bridge on Glenwood Road, 0.6 mi upstream of Papakating Creek, 1.7 mi southwest of Independence Corner, and 2.0 mi southeast of Sussex.	60.8	1977-82, 1985, 1987-96	9-17-97	36
01367910 Papakating Creek	Wallkill River	Lat 41°12'02", long 74°35'59", Sussex County, Hydrologic Unit 02020007, at bridge on State Rooute 23, 2.6 mi southest of Independence Corner, and 3.4 mi northeast of McAfee.	59.4	1977-80, 1982, 1985, 1989-95	9-17-97	6.0
01368000 Wallkill River	Rondout Creek	Lat 41°15'36", long 74°32'56", Sussex County, Hydrologic Unit 02020007, on right bank on downstream side of bridge on the Bassetts Bridge Road, 0.6 mi upstream from small tributary, 2.0 mi south of the New York-New Jersey state line and 3.0 mi south of Unionville.	140	1938-81a, 1991-96	9-17-97	71
		PASSAIC RIVER BASIN				
01379530 Canoe Brook	Passaic River	Lat 40°45'21", long 74°21'43", Essex County, Hydrologic Unit 02030103, just downstream of New Jersey-American Water Company pumping station, 0.5 mi upstream of mouth, and 2.0 mi north of Summit.	11.0	1933-60b, 1961-96c,	11-20-96 2-21-97 4-15-97 6-12-97 7-09-97 9-09-97	3.4 7.3 11 1.8 .86 .17
01381290 Whippany River tributary	Whippany River	Lat 40°47'13", long 74°32'41", Morris County, Hydrologic Unit 02030103, on stone and wooden walk bridge, 0.5 mi upstream of Sunrise Lake, 1.2 mi southeast of Brookside, and 0.9 mi northwest of Sugar Loaf Mountain.	.43	1996	10-19-96@1100 10-19-96@1115 11-09-96 12-02-96 12-14-96	4.4 4.6 .33 1.2 1.6
01381295 Whippany River	Rockaway River	Lat 40°47'23", long 74°32'38", Morris County, Hydrologic Unit 02030103, adjacent to State Route 15.3 mi downstream of bridge on Tingley Road, and 1.4 mi east of Brookside.	8.29	--	6-11-97	9.6
01381499 Whippany River tributary No. 3	Whippany River	Lat 40°46'59", long 74°27'59", Morris County, Hydrologic Unit 02030103, at culvert on Lafayette Avenue exit ramp from Interstate 287 in Morristown, 1,000 ft upstream of mouth, and 1.7 mi southeast of Morris Plains.	.56	1996	10-19-96@1245 10-19-96@1315 11-09-96 11-18-96@0900 11-18-96@1000 11-26-96@0930 11-26-96@1045 12-14-96 9-11-97	48 43 .79 .29 .30 4.5 2.5 22 39
01381505 Whippany River tributary No. 4	Whippany River	Lat 40°48'50", long 74°27'52", Morris County, Hydrologic Unit 02030103, just south of its intersection at culvert on Horse Hill Road, 0.3 mi northeast of Hanover Avenue, 0.8 mi upstream of mouth, 0.9 mi southwest of Cedar Knolls, and 0.9 mi north of Morristown.	.47	1996	10-19-96@0930 10-19-96@0945 11-09-96 11-26-96 12-14-96	18 16 1.1 4.2 15.8

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		PASSAIC RIVER BASIN--Continued				
01381510 Whippany River tributary No. 5	Whippany River	Lat 40°49'07", long 74°26'54", Morris County, Hydrologic Unit 02030103, at culvert on Boulevard Road, in Cedar Knoll, just north of intersection with Cedar Knolls Road, 0.2 mi upstream of mouth, and 3.8 mi northeast of Morristown.	.06	1996	10-19-96@1400 10-19-96@1415 11-09-96 11-26-96 12-14-96	17 19 .09 .89 3.3
01388600 Pompton River	Passaic River	Lat 40°56'36", long 74°16'47", Morris County, Hydrologic Unit 02030103, at bridge on Paterson-Hamburg Turnpike (State Road 504), 1.2 mi west of Packanack Lake, and 2.0 mi downstream of confluence of Ramapo and Pequannock Rivers.	361	1989-96	7-09-97	69
01389110 Passaic River	Newark Bay	Lat 40°53'32", long 74°15'58", Passaic County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at Singac, and 0.6 mi downstream from Pompton River.	745	1996	5-23-96e 7-01-97 9-08-97	1,000 234 228
01389895 Passaic River	Newark Bay	Lat 40°52'45", long 74°07'14", Bergen County, Hydrologic Unit 02030103, at bridge on Outwater Lane in Garfield, 0.4 mi downstream from Dundee Dam, and 1.2 mi upstream from bridge on Passaic Street.	806	1970-71, 1986-87, 1992-96	9-11-97	1,570
		RARITAN RIVER BASIN				
01396280 South Branch Raritan River	Raritan River	Lat 40°45'40", long 74°49'18", Morris County, Hydrologic Unit 02030105, at bridge on Middle Valley Road, at Middle Valley, 200 ft northwest of State Route 513, and 0.2 mi upstream of abandoned railroad bridge.	47.7	1963-67, 1973, 1975, 1982-83, 1985-92, 1994-96	9-04-97	23
01396535 South Branch Raritan River	Raritan River	Lat 40°39'49", long 74°53'52", Hunterdon County, Hydrologic Unit 02030105, at bridge on Arch Street in High Bridge, 0.9 mi northeast of Mariannes Corner, and 4.3 mi northeast of Norton.	68.8	1978-81, 1983, 1985-96	9-16-97	46
01396588 Spruce Run	South Branch Raritan River	Lat 40°40'41", long 74°55'06", Hunterdon County, Hydrologic Unit 02030105, 800 ft downstream of Rocky Run, 0.3 mi upstream of bridge on Van Syckel Road, and 1.6 mi southeast of Glen Gardner.	15.5	1979, 1981-83, 1985-96	9-15-97	5.6
01396855 Sidney Brook	South Branch Raritan River	Lat 40°37'10", long 74°56'15", Hunterdon County, Hydrologic Unit 02030105, at Bridge on Race Street in Grandin, 1.5 mi upstream of South Branch Raritan River, and 2.0 mi southeast of Hensfoot.	3.31	--	12-10-96 9-17-97	18 1.6
01396865 Sidney Brook	South Branch Raritan River	Lat 40°37'06", long 74°55'58", Hunterdon County, Hydrologic Unit 02030105, at bridge on State Route 513 in Grandin, 1.3 mi upstream of South Branch Raritan River, and 1.8 mi northeast of Kingtown.	4.71	--	12-10-96 9-17-97	22 1.3
01397375 Bushkill Brook	South Branch Raritan River	Lat 40°31'05", long 74°50'52", Hunterdon County, Hydrologic Unit 02030105, at unpaved road on grounds of Hunterdon Central High School, 1300 ft downstream from Route 523 (Flemington Junction Road), 0.7 mi northeast of Flemington, 1.3 mi upstream from mouth, and 1.4 mi west of Rockfellows Mills.	2.09	1996	2-21-96g 4-30-96g 8-13-96g 10-19-96 11-06-96 11-09-96	16 2.2 2.3 172 2.3 4.3

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		RARITAN RIVER BASIN--Continued				
01397400 South Branch Raritan River	Raritan River	Lat 40°31'01", long 74°48'10", Hunterdon County, Hydrologic Unit 02030105, at bridge on Main Street in Three Bridges, 1.4 mi downstream from Bushkill Brook, and 3.0 mi northeast of Flemington.	181	1976, 1978-81, 1983, 1985-96	9-16-97	123
01398260 North Branch Raritan River	Raritan River	Lat 40°38'09", long 74°40'56", Morris County, Hydrologic Unit 02030105, at bridge on State Route 24, 0.8 mi upstream from Burnett Brook, and 2.8 mi east of Chester.	7.57	1964-67, 1980-93, 1996	9-25-96e 7-15-97 9-17-97	5.1 2.6 3.4
01399120 North Branch Raritan River	Raritan River	Lat 40°38'09", long 74°40'56", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road, 0.1 mi upstream from Lamington River, 0.3 mi east of Burnt Mills, and 4.0 mi southwest of Far Hills.	63.8	1964, 1975-78, 1981-83, 1985-96	7-15-97 9-24-97	20 32
01399700 Rockaway Creek	Lamington River	Lat 40°37'49", long 74°44'11", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on Lamington Road, 1.4 mi northeast of Whitehouse, and 1.8 mi upstream from mouth.	37.1	1977-96	9-16-97	15
01399780 Lamington River	North Branch Raritan River	Lat 40°38'09", long 74°41'13", Somerset County, Hydrologic Unit 02030105, at bridge on Walsh Road at Burnt Mills, 0.2 mi upstream from North Branch Raritan River, and 4.4 mi southwest of Far Hills.	100	1964, 1973, 1975-78, 1981-83, 1985-96	9-16-97	102
01400540 Millstone River	Raritan River	Lat 40°15'44", long 74°25'13", Monmouth County, Hydrologic Unit 02030105, at bridge on State Route 33, 1.3 mi west of Manalapan, 5.5 mi east of Hightstown, and 8.4 mi upstream of Rocky Brook.	7.37	1960-62, 1964, 1971-72, 1985, 1987-96	11-06-96	9.8
01400650 Millstone River	Raritan River	Lat 40 19'19", long 74 36'31", Mercer County Hydrologic Unit 02030105, at bridge on Millstone Road in Grovers Mill, 0.3 mi upstream from Cranbury Brook, and 2.7 mi north of Dutch Neck.	43.4	1996	11-04-96	50
01401600 Beden Brook	Millstone River	Lat 40 24'52", long 74 39'02", Somerset County, Hydrologic Unit 02030105, at bridge on U.S. Route 206 at State Route 533, 0.7 mi upstream from Pike Run, 1.2 mi northwest of Rocky Hill, and 4.6 mi north of Princeton.	27.6	1959-63, 1976-96	12-10-96	99
01403200 Middle Brook	Raritan River	Lat 40 33'38", long 74 32'56", Middlesex County, Hydrologic Unit 02030105, at bridge on Talmadge Avenue at Bound Brook 0.6mi downstream from bridge on State Route 28, and 0.5 mi upstream from mouth.	17.2	1993-96a	12-16-96	61
01403320 Bound Brook	Raritan River	Lat 40°33'42", long 74°23'54", Middlesex County, Hydrologic Unit 02030105, at bridge on Woodbrook Road, 0.1 mi downstream of Edison Boro boundary and 1.4 mi south of South Plainfield.	5.59	--	1-29-97	13
01403355 Bound Brook tributary	Bound Brook	Lat 40°34'44", long 74°25'29", Middlesex County, Hydrologic Unit 02030105, at bridge on Market Street, at South Plainfield and 800 feet upstream from Bound Brook.	1.62	--	1-29-97	3.3

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements: Date	Measurements: Discharge (ft^3/s)
		RARITAN RIVER BASIN--Continued				
01403360 Bound Brook	Raritan River	Lat 40°34'53", long 74°26'25", Middlesex County, Hydrologic Unit 02030105, at bridge on New Brunswick Avenue, 1.2 mi upstream of dam on New Market Pond and 1.6 mi west of South Plainfield.	18.6	--	1-29-97	34
01403390 Bound Brook	Raritan River	Lat 40°35'01", long 74°30'08", Middlesex County, Hydrologic Unit 02030105, at Middlesex, 100 feet upstream from Green Brook, and 1400 feet downstream from Bound Brook Road (State Route 28).	24.0	--	1-29-97	52
01403392 Green Brook	Bound Brook	Lat 40°40'04", Long 74°24'21", Union County, Hydrologic Unit 02030105, at bridge on Valley Road, 800 feet upstream from Blue Brook, and 1.8 mi east of Berkeley Heights.	2.60	--	1-29-97	6.0
01403393 Blue Brook	Green Brook	Lat 40°40'41", long 74°23'16", Union County, Hydrologic Unit 02030105, at foot bridge in Watchung Reservation, 0.6 mi downstream of Lake Surprise and 1.5 mi west of Mountainside.	2.42	--	1-29-97	6.4
01403800 Green Brook	Bound Brook	Lat 40°35'09", long 74°29'57", Middlesex County, Hydrologic Unit 0130105, 300 feet upstream of former Middlesex Sewage Authority Disposal Plant, 0.4 mi upstream from Bound Brook and 0.4 mi north of Sebrings Mill Road.	23.3	--	1-29-97	62
01405302 Matchaponix Brook	South River	Lat 40°23'22", long 74°22'55", Middlesex County, Hydrologic Unit 02030105, at bridge on Mundy Avenue in Spotswood, 0.2 mi upstream of mouth, 0.5 mi east of DeVoe Lake Dam, and 3.4 mi southeast of Tanners Corners.	44.1	1979-80, 1982, 1986-88, 1990-91, 1993-96	3-18-97	56
01405435 Cedar Brook	Manalapan	Lat 40°23'26", long 74°23'31", Middlesex County, Hydrologic Unit 02030105, 50 ft upstream from mouth in Spotswood, and 4.3 mi south of South River.	3.85	1943, 1949-50, 1957-86d, 1987, 1989-91, 1993-96	10-23-96 12-18-96 3-18-97	15 12 4.6
		TOMS RIVER BASIN				
01408600 Wrangle Brook	Toms River	Lat 39°57'39", long 74°13'42", Ocean County, Hydrologic Unit 02040301, at bridge on Southampton Road in Berkeley Township, 0.5 mi upstream from mouth, and 1.7 mi west of Toms River.	19.5	1993-96	10-09-96 10-19-96 4-22-97 6-03-97 8-19-97 9-23-97	61 200 50 53 22 22
01408620 Davenport Branch	Wrangle Brook	Lat 39°56'29", long 74°17'49", Ocean County, Hydrologic Unit 02040301, at bridge on Pinewald Road, 2.2 mi north of Dover Forge, 2.3 mi east of Keswick Grove, and 3.0 mi northeast of Cedar Crest.	7.41	1994-96	10-09-96 10-19-96 4-22-97 6-03-97 8-19-97 9-23-97	9.2 22 11 11 7.5 3.3
01408728 Long Swamp Creek	Toms River	Lat 39°57'14", long 74°11'19", Ocean County, Hydrologic Unit 02040301, at bridge on Washington Street in Dover Township at Toms River, and 0.3 mi upstream from mouth.	6.53	1994-96	10-09-96 10-19-96 4-22-97 6-03-97 8-19-97 9-23-97	8.9 63 1.0 7.3 1.0 .13

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		MULLICA RIVER BASIN				
01409387 Mullica River	Great Bay	Lat 39°44'25", long 74°43'37", Burlington County, Hydrologic Unit 02040301, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi upstream from Wesickaman Creek..	26.7	1976-96	7-21-97	10
01409416 Hammonton Creek	Mullica River	Lat 39°38'02", long 74°43'05", Atlantic County, Hydrologic Unit 02040301, at bridge on Chestnut Road, 0.4 mi south of Wescoatville, and 1.6 mi upstream of Norton Branch.	9.57	1974, 1978-81, 1983, 1985-96	7-21-97	6.1
		GREAT EGG HARBOR RIVER BASIN				
01411110 Great Egg Harbor River	Great Egg Harbor Bay	Lat 39°30'50", long 74°46'47", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322 in Weymouth, 0.5 mi upstream from Deep Run, and 20.9 mi upstream of mouth.	154	1978-81, 1985-96	7-14-97	84
		COHANSEY RIVER BASIN				
01411790 Parvin Branch	Maurice River	Lat 39°27'37", long 75°03'18", Cumberland County Hydrologic Unit 02040206, at bridge on South Orchard Road, at Vineland, 0.5 mi upstream of Tarklin Branch, and 1.1 mi upstream from mouth.	6.53	--	6-18-97	2.6
01412800 Cohansey River	Delaware Bay	Lat 39 28'21", long 75 15'21", Cumberland County, Hydrologic Unit 02040206, on right bank just downstream from bridge on Silver Lake Road, 0.6 mi south of Seeley, 2.6 mi east of Shiloh, 4.1 mi north of Bridgeton, and 22.5 mi upstream from mouth.	28.0	1975-96	7-16-97	12
		DELAWARE RIVER BASIN				
01443290 Paulins Kill	Delaware River	Lat 41°05'55", long 74°41'28", Sussex County, Hydrologic Unit 02040105, at Lafayette, 920 feet downstream of bridge on Lafayette Meadows Road, and 2.0 mi southeast of Ross Corner.	26.3	--	6-12-97	17
01443440 Paulins Kill	Delaware River	Lat 41°06'20", long 74°45'19", Sussex County, Hydrologic Unit 02040105, at bridge on Kinney Road in Balesville, 2.3 mi upstream from Paulins Kill Lake, and 3.0 mi north of Newton.	67.1	1979-82, 1985, 1988-96	9-18-97	30
01446400 Pequest River	Delaware River	Lat 40°49'45", long 75°04'44", Warren County, Hydrologic Unit 02040105, at bridge on State Route 519, in Belvidere, and 1,400 ft upstream of mouth.	157	1950-53, 1977-82, 1984-96	2-06-97 6-11-97 9-15-97	563 119 84
01455200 Pohatcong Creek	Delaware River	Lat 40°42'57", long 75°04'20", Warren County, Hydrologic Unit 02040105, at bridge on Edison Road, 0.4 mi southeast of New Village, and 4.3 mi upstream of Merrill Creek.	33.3	1960-70a, 1991-96	9-16-97	14
01456200 Musconetcong River	Delaware River	Lat 40°48'48", long 74°50'32", Warren County, Hydrologic Unit 02040105, at bridge on Kings Highway at Beattystown, 1.6 mi upstream from Hances Brook, and 1.8 mi west of Schooleys Mountain.	90.3	1973, 1979-81, 1983, 1985-90, 1993-96	9-16-97 9-18-97	266 220
01457400 Musconetcong River	Delaware River	Lat 40°35'32", long 75°11'11", Warren County, Hydrologic Unit 02040105, at bridge on County Route 627, at Riegelsville, 0.2 mi north of Mount Joy, and 0.2 mi upstream from mouth.	156	1940-55, 1973, 1977, 1987-96	9-23-97	169

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		DELAWARE RIVER BASIN--Continued				
01457500 Delaware River	Delaware Bay	Lat 40°35'36", long 75°11'17", Warren County, Hydrologic Unit 02040105, just upstream from 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).	6,328	1906-71a, 1981, 1989, 1992-93	9-23-97	3,550
01460398 Delaware and Raritan Canal tributary	Deleware and Raritan Canal	Lat 40°15'02", long 74°49'50", Mercer County Hydrologic Unit 02040105, at Wilburtha, just upstream of mouth, 0.8 mi northwest of mouth of Gold Run, 1.9 mi southwest of Mercer County Airport	.29	1996	8-20-96 5-16-97 9-04-97	.25 .38 .004
01462930 Villa Victoria Brook	Delaware River	Lat 40°15'27", long 74°50'30", Mercer County, Hydrologic Unit 02040105, 0.9 mi south of Scudders Falls, 0.2 mi upstream of dam, 1.4 mi northwest of mouth of Gold Run, and 1.9 mi southwest of Mercer County Airport.	1.10	1995-96	6-16-97 9-04-97	.83 .31
01463080 Gold Run	Delaware River	Lat 40°15'55", long 74°48'20", Mercer County, Hydrologic Unit 02040105, 0.5 mi northwest of Fernwood, 0.7 mi east of West Trenton, 0.9 mi southeast of Mercer County Airport, and 1.8 mi northeast of mouth of Gold Run.	.50	1996	9-04-97	.20
01463100 Gold Run	Delaware River	Lat 40°15'20", long 74°48'30", Mercer County, Hydrologic Unit 02040105, 0.9 mi southeast of West Trenton, 1.1 mi northeast of Wilburtha, 1.2 mi northeast of mouth of Gold Run, and 1.4 mi south of Mercer County Airport.	.93	1996	5-16-97 9-04-97	.46 .12
01463120 Gold Run tributary No. 2	Gold Run	Lat 40°15'19", long 74°48'30", Mercer County, Hydrologic Unit 02040105, 15 ft upstream of confluence with Gold Run, 0.9 mi southeast of West Trenton, 1.1 mi northeast of Wilburtha, and 1.4 mi south of Mercer County Airport.	.11	1996	5-16-97 9-04-97	.16 .18
01463150 Gold Run	Delaware River	Lat 40°15'00", long 74°48'50", Mercer County, Hydrologic Unit 02040105, at bridge on Sullivan Way, 0.7 mi northeast of mouth of Gold Run, 0.7 mi east of Wilburtha, and 1.2 mi southeast of West Trenton.	1.36	1996	8-20-96 5-16-97 9-04-97	.74f .92 .35
01463180 Gold Run tributary No. 1	Gold Run	Lat 40°14'55", long 74°48'55", Mercer County, Hydrologic Unit 02040105, 0.6 mi northeast of mouth of Gold Run, 0.7 mi east of Wilburtha, and 1.2 mi southeast of West Trenton.	.39	1996	5-16-97 9-04-97	.11 .09
01463200 Gold Run	Delaware River	Lat 40°14'41", long 74°49'14", Mercer County, Hydrologic Unit 02040105, 80 ft upstream from culvert under Delaware and Raritan Canal, 0.5 mi southeast of Wilburtha, 1.5 mi southwest of Fernwood, and 0.3 mi northwest of Trenton.	1.98	1996	5-16-97 9-04-97	1.5 .67
01463780 West Branch Shabakunk Creek	Shabakunk Creek	Lat 40°15'03", long 74°46'53", Mercer County, Hydrologic Unit 02040105, at bridge on Olden Avenue, 1.7 mi south of Ewingville, and 2.3 mi southeast of West Trenton.	2.74	--	5-16-97 9-04-97	2.0 1.3

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		DELAWARE RIVER BASIN--Continued				
01465850 South Branch Rancocas Creek	Rancocas Creek	Lat 39 56'22", long 74 45'50", Burlington County, Hydrologic Unit 02040202, on left bank 150 ft downstream from highway bridge on Lumberton-Vincentown Road, 0.8 mi west of Vincentown, 2.9 mi south-east of Lumberton, and 3.1 mi upstream from Southwest Branch.	64.5	1925, 1961-75a, 1985-96	11-08-96	79
01465880 Southwest Branch Rancocas Creek	South Branch Rancocas Creek	Lat 39°53'43", long 74°49'26", Burlington County, Hydrologic Unit 02040202, at bridge on Argonne Highway (State Route 541), 0.6 mi south of intersection of Argonne Highway and State Highway 70 at Medford, 5.3 mi upstream from mouth.	47.2	1983-93	7-15-97	18
01467069 North Branch Pennsauken Creek	Pennsauken Creek	Lat 39°57'07", long 74°58'10", Burlington County, Hydrologic Unit 02040202 at bridge on State Route 41 (Kings Highway), and 1.7 mi southwest of Moorestown.	12.8	1975-87, 1990-96	7-15-97	2.2
01467329 South Branch Big Timber Creek	Big Timber Creek	Lat 39°48'05", long 75°04'27", Gloucester County, Hydrologic Unit 02040202, just upstream from Bull Run, 1,000 ft down-stream of Blackwood Avenue, and 0.5 mi southeast of Blackwood Terrace.	19.1	1979-81, 1985-96	7-15-97 9-15-97	17 18
01477510 Oldmans Creek	Delaware River	Lat 39°41'57", long 75°20'01", Salem County, Hydrologic Unit 02040206, at bridge on Kings Highway in Porches Mill, 1.0 mi north of Seven Stars, and 3.1 mi north of Woodstown.	21.0	1979-83, 1987-96	7-16-97	2.8
01482500 Salem River	Delaware River	Lat 39 38'36", long 75 19'52", Salem County Hydrologic Unit 02040206, at Memorial Lake Dam at Woodstown, 0.2 mi upstream from small brook, and 0.3 mi downstream from CONRAIL railroad bridge.	14.6	1973-96	7-16-97	3.4

a Operated as continuous-recording gaging station.
b Discharge records published in reports of the New Jersey Department of Environmental Protection.
c Discharge records on file in U.S. Geological Survey Office, West Trenton, New Jersey.
d Operated as continuous gaging station by Duhernal Water Company.
e Not previously published.
f Revised.
g 1996 water year.

The following table contains annual maximum elevations for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above mean sea level unless otherwise noted. Only the maximum elevation is given. Information on some other high elevations 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 elevation has been determined.

Maximum elevation at tidal crest-stage partial-record stations

Station name and number	Location	Period of record	Water year 1997 maximum Date	Water year 1997 maximum Elevation (ft)	Period of record maximum Date	Period of record maximum Elevation (ft)
Hackensack River at New Milford, NJ (01378500)	Lat 40°56'52", long. 74°01'34", Bergen Country, Hydrologic Unit 02030103, on right bank approx. 50 ft. downstream from New Milford gaging station, on dam wing wall 10 ft. downstream from dam.	1997	1-10-97	3.71	1-10-97	3.71
Raritan River at Perth Amboy, NJ (01406700)	Lat 40°30'31", long 74°17'30", Middlesex County, Hydrologic Unit 02030105, on upstream left bridge pier of Victory Bridge on State Route 35 in Perth Amboy, 0.5 mi downstream from Garden State Parkway bridge, and 1.5 mi upstream from mouth of Raritan River.	1954, 1960, 1967-70†, 1980-97	10-19-96	8.29	12-11-92	10.4
Luppatatong Creek at Keyport, NJ (01407030)	Lat 40°26'08", long 74°12'27", Monmouth County, Hydrologic Unit 02030104, on left bank upstream side of Front Street bridge in Keyport, 0.1 mi upstream from mouth, and 2.0 mi northwest of Matawan.	1960, 1980-97	10-19-96	7.96	9-12-60	10.3
Manahawkin Bay near Manahawkin, NJ (01409145)	Lat 39°40'13", long 74°12'54", Ocean County, Hydrologic Unit 02040301, at west end of State Route 72 bridge over Manahawkin Bay, 2.5 mi northwest of Ship Bottom, and 3.1 mi southeast of Manahawkin.	1965-97	10-19-96	4.02	12-11-92	6.02
Little Egg Harbor at Beach Haven, NJ (01409285)	Lat 39°33'10", long 74°15'07", Ocean County, Hydrologic Unit 02040301, in Beach Haven at U.S. Coast Guard station, 6.0 mi east of Tuckerton and 7.4 mi southwest of Ship Bottom.	1979-97	10-19-96	4.66	12-11-92	6.93
Batsto River at Pleasant Mills, NJ (01409510)	Lat 39°37'55", long 74°38'40", Ocean County, Hydrologic Unit 02040301, on right bank, 1.0 mi southeast of Pleasant Mills, and 0.5 mi upstream from mouth.	1958-97†	8-22-97	4.85	3-07-62	7.2
Mullica River near Port Republic, NJ (01410100)	Lat 39°33'12", long 74°27'46", Atlantic County, Hydrologic Unit 02040301, on right bank on bulkhead piling at south end of U.S. Route 9 and Garden State Parkway bridge over Mullica River, 2.8 mi northeast of Port Republic, and 2.8 mi south of New Gretna.	1962, 1965-97	8-21-97	4.82	3-06-62	7.9
Absecon Creek at Absecon, NJ (01410500)	Lat 39°25'45", long 74°31'16", Atlantic County, Hydrologic Unit 02040302, on right abutment of bridge on Mill Road, 50 ft downstream of former gaging station, 1.0 mi west of Absecon, and 3.4 mi upstream from mouth.	1923-29†, 1933-38†, 1946-84†, 1985-97	8-21-97	7.17	3-29-84	7.77
Tuckahoe River at Head of River, NJ (01411300)	Lat 39°18'25", long 74°49'15", Cape May County, Hydrologic Unit 02040302, downstream right abutment of highway bridge on State Route 49, 0.2 mi upstream from McNeals Branch, 0.4 mi southeast of Head of River, and 3.7 mi west of Tuckahoe.	1979-97†	8-22-97	6.61	12-11-92	7.01
Great Egg Harbor Bay at Ocean City, NJ (01411320)	Lat 39°17'03", long 74°34'41", Cape May County, Hydrologic Unit 02040302, on bulkhead at west end of 7th Street (prior to October 1974, gage was located at 5th Street), Ocean City, and 2.5 mi southeast of Somers Point.	1965-97	8-22-97	5.69	12-11-92	7.89

Maximum elevation at tidal crest-stage partial-record stations--Continued

Station name and number	Location	Period of record	Water year 1997 maximum Date	Water year 1997 maximum Elevation (ft)	Period of record maximum Date	Period of record maximum Elevation (ft)
Lakes Bay at Pleasantville, NJ (01411325)	Lat 39°22'54", long. 74°31'08", Atlantic Country, Hydrologic Unit 02040302, on west shore of Lakes Bay, at east end of East Bayview Ave, on pier on right side of road.	1997	8-21-97	5.81	8-21-97	5.81
Great Channel at Stone Harbor, NJ (01411360)	Lat 39°03'26", long 74°45'53", Cape May County, Hydrologic Unit 02040302, on County pier near east end of bridge at west end of Borough of Stone Harbor, 3.7 mi southeast of Cape May Court House, and 3.9 mi southwest of Avalon.	1965-97	12-13-96	5.19	3-29-84	7.33
Grassy Sound Channel at Nummy Island, near North Wildwood, NJ (01411370)	Lat 39°01'43", long. 74°48'05', Cape May County, Hydrologic Unit 02040302, on pier at Dad's Place Marina at the south end of bridge from Nummy Island, 1.1 mi northwest on North Wildwood, and 1.0 mi west of Hereford Inlet.	1993-96†, 1997	12-13-96	6.68	3-3-94	7.64
Cohansey River at Greenwich, NJ (01413038)	Lat 39°23"02", long 75°20'58", Cumberland County, Hydrologic Unit 02040206, at Greenwich Pier, 0.7 mi southwest of Greenwich, and 5.8 mi southwest of Shiloh.	1951, 1979-97	12-13-96	5.84	11-25-50	8.8
Delaware River at Chester, PA (01477050)	Lat 39°49'52", long 75°19'58", Gloucester County, on left bank on floodgate at mouth of Repaupo Creek 2.2 mi northeast of Bridgeport, 5.5 mi north of Swedesboro, and at mile 84.00, prior to October 1980 located at Reynolds Aluminum Company pier in Chester, PA at mile 82.30.	1972-77†, 1979-85, 1997	10-19-96	6.76	2-26-79	7.53
Salem River at Salem NJ, (01482650)	Lat 39°34'40", long 75°28'37", Salem County, Hydrologic Unit 02040206, on downstream left bank side of State Route 49 bridge at Salem.	1997	12-13-96	5.01	12-13-96	5.01
Alloway Creek at Hancocks Bridge, NJ (01483050)	Lat 39°30'31", long 75°27'39", Salem Country, on left bank at downstream side of Mill Street bridge in Hancocks Bridge, 0.4 mi downstream from Lower Alloway Creek, and 4.0 mi south of Salem.	1980-85, 1993, 1997	06-05-97	5.27	12-11-93	7.57

† Operated as a continuous-record gaging station.

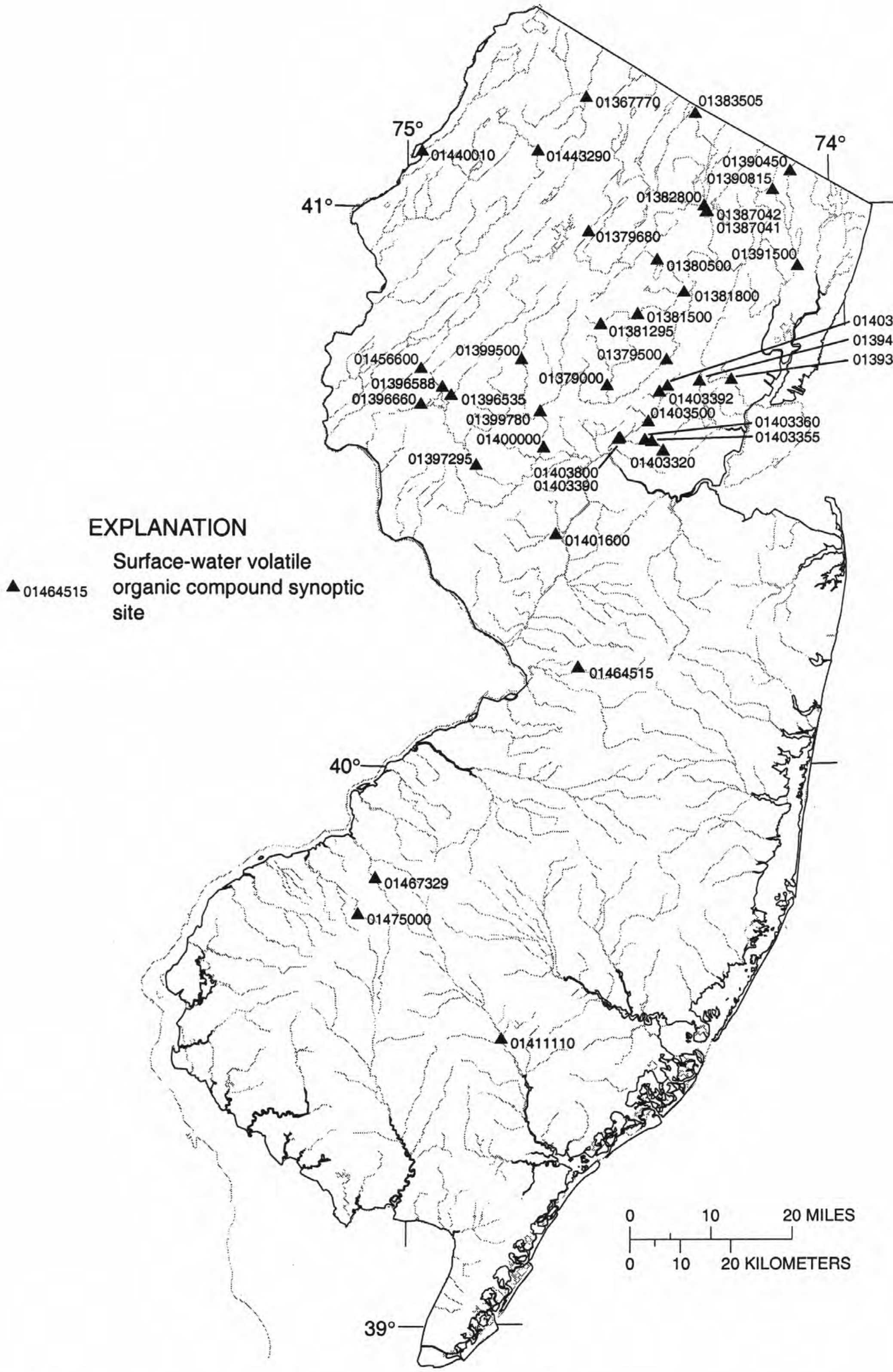


Figure 18. Map showing location of Long Island-New Jersey National Water Quality Assessment Program surface water volatile organic compound synoptic site network, January 28-31, 1997.

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Volatile Organic Compound Synoptic Sampling, January 27-30, 1997

Water-quality miscellaneous sites are locations where chemical-quality data are collected once only, intermittently, or systematically but on limited frequency during one year for use in hydrologic analyses. For additional synoptic data at NAWQA fixed stations 01382000, 01390500, 01398000, 01401000, 01403300, 01403900, and 01410784, see individual station records. For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section. For additional synoptic data at three Long Island, New York stations, refer to Water Resources Data Report - New York, Volume 2, 1997.

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L) (77350)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)
01367770	WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)										
JAN 1997											
27...	1250	ENVIRONMENTAL	150	550	6.7	-3.0	0.0	<.10	<.10	.30	<.10
01379000	PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)										
JAN 1997											
28...	0900	ENVIRONMENTAL	297	260	6.8	5.0	0.5	<.10	<.10	<.10	<.10
28...	*1000*	*FIELD BLANK*	--	--	--	--	--	*<.05*	*<.05*	*<.05*	*<.05*
28...	*1020*	*CANNISTER BLANK*	--	--	--	--	--	*<.05*	*<.05*	*<.05*	*<.05*
01379500	PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)										
JAN 1997											
28...	1050	ENVIRONMENTAL	780	400	7.4	4.5	1.0	<.10	<.10	<.10	<.10
01379680	ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)										
JAN 1997											
27...	1410	ENVIRONMENTAL	80	260	7.6	-1.5	1.0	<.10	<.10	<.10	<.10
01380500	ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)										
JAN 1997											
27...	1520	ENVIRONMENTAL	340	250	7.0	-1.0	0.0	<.10	<.10	E.050	<.10
01381295	WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)										
JAN 1997											
28...	0940	ENVIRONMENTAL	30	270	7.5	4.5	1.5	<.10	<.10	<.10	<.10
01381500	WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)										
JAN 1997											
27...	1710	ENVIRONMENTAL	78	320	7.2	0.0	1.5	<.10	<.10	E.010	<.10
01381800	WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)										
JAN 1997											
27...	1620	ENVIRONMENTAL	495	430	6.8	0.0	0.0	<.10	<.10	E.010	<.10
01382800	PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)										
JAN 1997											
27...	1130	ENVIRONMENTAL	160	190	7.0	-4.0	1.0	<.05	<.05	<.05	<.05
01383505	WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)										
JAN 1997											
27...	1010	ENVIRONMENTAL	71	230	7.0	-4.0	2.0	<.05	<.05	<.05	<.05
01387041	WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)										
JAN 1997											
27...	1300	ENVIRONMENTAL	20	270	6.9	-1.0	1.5	<.05	<.05	E.030	<.05
01387042	PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)										
JAN 1997											
27...	1210	ENVIRONMENTAL	180	220	7.2	-1.0	1.5	<.05	<.05	E.010	<.05
01390450	SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)										
JAN 1997											
28...	*1040*	*CANNISTER BLANK*	--	--	--	--	--	*<.05*	*<.05*	*<.05*	*<.05*
28...	*1050*	*FIELD BLANK*	--	--	--	--	--	*<.05*	*<.05*	*<.05*	*<.05*
28...	1120	ENVIRONMENTAL	184	1700	7.0	5.0	1.5	<.10	<.10	<.10	<.10

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Volatile Organic Compound Synoptic Sampling, January 27-30, 1997

DATE	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L) (77443)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)
01367770 WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)												
JAN 1997												
27...	.24	E.020	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01379000 PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
28...	*<.05*	*<.10*	*<.05*	*<.05*	*<.20*	*<.05*	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*
28...	*<.05*	*<.10*	*<.05*	*<.05*	*<.20*	*<.05*	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*
01379500 PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01379680 ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)												
JAN 1997												
27...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01380500 ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)												
JAN 1997												
27...	E.010	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01381295 WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01381500 WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)												
JAN 1997												
27...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01381800 WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)												
JAN 1997												
27...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	E.030	<.10	<.10
01382800 PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)												
JAN 1997												
27...	<.05	<.10	<.05	<.05	<.20	<.05	<.20	E.007	<.05	<.05	<.05	<.05
01383505 WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)												
JAN 1997												
27...	<.05	<.10	<.05	<.05	<.20	<.05	<.20	<.05	<.05	<.05	<.05	<.05
01387041 WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)												
JAN 1997												
27...	<.05	<.10	<.05	<.05	<.20	<.05	<.20	<.05	<.05	<.05	<.05	<.05
01387042 PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)												
JAN 1997												
27...	<.05	<.10	<.05	<.05	<.20	<.05	<.20	E.009	<.05	<.05	<.05	<.05
01390450 SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)												
JAN 1997												
28...	*<.05*	*<.10*	*<.05*	*<.05*	*<.20*	*<.05*	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*
28...	*<.05*	*<.10*	*<.05*	*<.05*	*<.20*	*<.05*	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10

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DATE	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)
01367770 WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)												
JAN 1997												
27...	<.10	<.10	<.10	<.10	<10	<.10	<10	E1.50	<.10	<.20	<.10	<.10
01379000 PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	<10	<.10	<10	E2.50	<.10	<.20	E.010	<.10
28...	*<.05*	*<.05*	*<.05*	*<.05*	*<5.0*	*<.05*	*<5.0*	*E1.10*	*<.05*	*<.10*	*<.05*	*<.05*
28...	*<.05*	*<.05*	*<.05*	*<.05*	*<5.0*	*<.05*	*<5.0*	*E1.20*	*<.05*	*<.10*	*<.05*	*<.05*
01379500 PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)												
JAN 1997												
28...	<.10	E.010	<.10	<.10	<10	<.10	<10	E3.50	<.10	<.20	<.10	<.10
01379680 ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)												
JAN 1997												
27...	<.10	<.10	<.10	<.10	<10	<.10	<10	E1.60	<.10	<.20	<.10	<.10
01380500 ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)												
JAN 1997												
27...	<.10	<.10	<.10	<.10	<10	<.10	<10	E1.70	<.10	<.20	<.10	<.10
01381295 WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	E.400	<.10	<10	<10	<.10	<.20	E.008	<.10
01381500 WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)												
JAN 1997												
27...	<.10	<.10	<.10	<.10	<10	<.10	<10	E1.70	E.030	<.20	<.10	<.10
01381800 WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)												
JAN 1997												
27...	E.009	<.10	<.10	<.10	<10	<.10	<10	E1.90	<.10	<.20	<.10	<.10
01382800 PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)												
JAN 1997												
27...	<.05	E.010	<.05	<.05	<5.0	<.05	<5.0	<5.0	<.05	<.10	E.006	<.05
01383505 WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)												
JAN 1997												
27...	<.05	<.05	<.05	<.05	<5.0	<.05	<5.0	<5.0	<.05	<.10	<.05	<.05
01387041 WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)												
JAN 1997												
27...	E.009	E.010	<.05	<.05	<5.0	<.05	<5.0	<5.0	E.040	<.10	E.009	<.05
01387042 PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)												
JAN 1997												
27...	<.05	E.020	<.05	<.05	<5.0	<.05	<5.0	E1.30	E.040	<.10	<.05	<.05
01390450 SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)												
JAN 1997												
28...	*<.05*	*<.05*	*<.05*	*<.05*	*<5.0*	*<.05*	*<5.0*	*E.500*	*<.05*	*<.10*	*<.05*	*<.05*
28...	*<.05*	*<.05*	*<.05*	*<.05*	*E.400*	*<.05*	*<5.0*	*<5.0*	*<.05*	*<.10*	*E.010*	*<.05*
28...	<.10	<.10	<.10	<.10	E.500	<.10	<10	E4.60	<.10	<.20	<.10	<.10

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DATE	CHLORO- ETHANE TOTAL (UG/L) (34311)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL- BENZENE TOTAL (UG/L) (34371)	ETHER TERT- BUTYL ETHYL- UNFLTRD RECOVER (UG/L) (50004)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)
01367770 WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)												
JAN 1997												
27...	E.040	E.070	<.40	.73	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.24
01379000 PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)												
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.32
28...	*<.10*	*<.10*	*<.20*	*<.05*	*<.20*	*<.10*	*<.10*	*<.05*	*<.10*	*<.05*	*<.05*	*<.10*
28...	*<.10*	*<.10*	*<.20*	*<.05*	*<.20*	*<.10*	*<.10*	*<.05*	*<.10*	*<.05*	*<.05*	*<.10*
01379500 PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)												
JAN 1997												
28...	<.20	<.20	<.40	E.020	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.84
01379680 ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)												
JAN 1997												
27...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.30
01380500 ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)												
JAN 1997												
27...	<.20	<.20	<.40	E.020	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.38
01381295 WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)												
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	<.20	E.10	<.10	<.20	<.10	<.10	.27
01381500 WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)												
JAN 1997												
27...	<.20	<.20	<.40	.28	<.40	<.20	<.20	<.10	<.20	<.10	E.030	.95
01381800 WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)												
JAN 1997												
27...	<.20	<.20	<.40	E.030	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.96
01382800 PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)												
JAN 1997												
27...	<.10	<.10	<.20	E.040	<.20	<.10	<.10	<.05	<.10	<.05	E.030	.50
01383505 WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)												
JAN 1997												
27...	<.10	<.10	<.20	<.05	<.20	<.10	<.10	<.05	<.10	<.05	E.010	.28
01387041 WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)												
JAN 1997												
27...	<.10	<.10	<.20	E.080	<.20	<.10	.15	<.05	<.10	<.05	E.030	1.7
01387042 PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)												
JAN 1997												
27...	<.10	<.10	<.20	E.050	<.20	<.10	E.04	E.007	<.10	<.05	E.040	.88
01390450 SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)												
JAN 1997												
28...	*<.10*	*<.10*	*<.20*	*<.05*	*<.20*	*<.10*	*<.10*	*<.05*	*<.10*	*<.05*	*<.05*	*<.10*
28...	*<.10*	*<.10*	*<.20*	*<.05*	*<.20*	*<.10*	*<.10*	*<.05*	*<.10*	*<.05*	*<.05*	*<.10*
28...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.61

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Volatile Organic Compound Synoptic Sampling, January 27-30, 1997

DATE	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
01367770 WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)											
JAN 1997											
27...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	.72	<.20	<.10
01379000 PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)											
JAN 1997											
28...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	<.10
28...	<.05	<.05	<.20	<.05	<.10	<.05	<5.0	<.05	<.05	<.10	E.010
28...	<.05	<.05	<.20	<.05	<.10	<.05	<5.0	<.05	<.05	<.10	<.05
01379500 PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)											
JAN 1997											
28...	<.10	<.10	E.020	<.10	<.20	E.010	<10	<.10	E.100	<.20	E.040
01379680 ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)											
JAN 1997											
27...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	<.10
01380500 ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)											
JAN 1997											
27...	<.10	<.10	E.010	<.10	<.20	E.030	<10	<.10	E.020	<.20	<.10
01381295 WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)											
JAN 1997											
28...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	E.030	<.20	<.10
01381500 WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)											
JAN 1997											
27...	<.10	<.10	E.010	<.10	E.020	E.100	<10	<.10	.91	E.060	E.070
01381800 WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)											
JAN 1997											
27...	<.10	<.10	E.020	<.10	<.20	E.010	<10	<.10	E.100	<.20	E.090
01382800 PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)											
JAN 1997											
27...	<.05	<.05	E.010	<.05	<.10	E.090	<5.0	<.05	.11	<.10	E.010
01383505 WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)											
JAN 1997											
27...	<.05	<.05	E.005	<.05	<.10	E.006	<5.0	<.05	<.05	<.10	<.05
01387041 WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)											
JAN 1997											
27...	<.05	<.05	E.020	<.05	E.030	E.020	<5.0	<.05	E.050	<.10	E.070
01387042 PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)											
JAN 1997											
27...	<.05	<.05	E.020	<.05	E.010	E.080	<5.0	<.05	E.080	<.10	E.030
01390450 SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)											
JAN 1997											
28...	<.05	<.05	<.20	<.05	<.10	<.05	<5.0	<.05	<.05	<.10	E.010
28...	<.05	<.05	<.20	<.05	<.10	<.05	<5.0	<.05	<.05	<.10	E.010
28...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	E.008

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DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L) (77350)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)
01390815	HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)										
JAN 1997											
28...	1220	ENVIRONMENTAL	110	950	7.2	5.5	2.0	<.10	<.10	E.020	E.010
01391500	SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)										
JAN 1997											
28...	1320	ENVIRONMENTAL	584	1400	7.2	6.0	3.5	<.10	<.10	E.020	<.10
28...	*1340*	*CONCURRENT REPLICATE*	--	--	--	--	--	*<.10*	*<.10*	*E.020*	*<.10*
01393400	ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)										
JAN 1997											
28...	1300	ENVIRONMENTAL	49	380	7.5	5.5	4.5	E.010	E.030	E.100	<.10
28...	*1301*	*CONCURRENT REPLICATE*	--	--	--	--	--	*E.010*	*E.020*	*E.100*	*<.10*
01394500	RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)										
JAN 1997											
28...	1200	ENVIRONMENTAL	510	510	7.7	5.5	4.0	<.10	<.10	E.010	<.10
01396535	SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)										
JAN 1997											
28...	1300	ENVIRONMENTAL	600	240	7.3	7.0	2.0	<.05	<.05	E.004	<.05
01396588	SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)										
JAN 1997											
28...	1220	ENVIRONMENTAL	325	160	7.4	5.0	1.0	<.10	<.10	<.10	<.10
01396660	MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)										
JAN 1997											
28...	1350	ENVIRONMENTAL	203	220	7.1	3.5	1.0	<.05	<.05	<.05	<.05
28...	*1356*	*CONCURRENT SPIKE*	--	--	--	--	--	*<.05*	*<.05*	*2.6*	*E.040*
28...	*1357*	*CONCURRENT SPIKE*	--	--	--	--	--	*<.05*	*<.05*	*2.6*	*E.030*
01397295	SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)										
JAN 1997											
28...	1530	ENVIRONMENTAL	1600	240	7.2	3.0	1.5	<.10	<.10	<.10	<.10
01399500	LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)										
JAN 1997											
28...	1510	ENVIRONMENTAL	280	230	7.3	3.0	1.0	<.10	<.10	<.10	<.10
01399780	LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)										
JAN 1997											
28...	1610	ENVIRONMENTAL	2300	190	7.0	3.0	1.0	<.10	<.10	<.10	<.10
01400000	NORTH BRANCH RARITAN RIVER NEAR RARITAN NJ (LAT 40 34 10N LONG 074 40 45W)										
JAN 1997											
28...	1620	ENVIRONMENTAL	3380	200	6.9	4.5	1.0	<.10	<.10	<.10	<.10
01401600	BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)										
JAN 1997											
28...	1550	ENVIRONMENTAL	390	130	7.6	3.0	2.0	<.10	<.10	<.10	<.10

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DATE	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	PREH- NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)
01390815 HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01391500 SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	E.020	<.10	<.10	E.020	<.10
28...	*<.10*	*<.20*	*<.10*	*<.10*	*<.40*	*<.10*	*<.40*	*E.020*	*<.10*	*<.10*	*E.020*	*<.10*
01393400 ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)												
JAN 1997												
28...	E.030	E.070	E.360	.22	<.40	E.10	<.40	.42	E.090	<.10	E.100	<.10
28...	*E.030*	*E.060*	*E.250*	*E.100*	*<.40*	*E.100*	*<.40*	*.31*	*E.070*	*<.10*	*E.100*	*<.10*
01394500 RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	E.040	<.10	<.10	E.030	<.10
01396535 SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)												
JAN 1997												
28...	<.05	<.10	<.05	<.05	<.20	<.05	<.20	<.05	<.05	E.090	<.05	E.008
01396588 SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)												
JAN 1997												
28...	<.05	<.10	<.05	<.05	<.20	<.05	<.20	<.05	<.05	<.05	<.05	<.05
28...	*E.010*	*3.2*	*<.05*	*<.05*	*<.20*	*<.05*	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*
28...	*E.010*	*3.3*	*<.05*	*<.05*	*<.20*	*<.05*	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*
01397295 SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01399780 LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN NJ (LAT 40 34 10N LONG 074 40 45W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01401600 BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10

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DATE	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	METHYL- ISO- BUTYL- KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO- BENZENE TOTAL (UG/L) (34301)
01390815 HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	E.600	<.10	<10	<10	<.10	<.20	<.10	<.10
01391500 SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)												
JAN 1997												
28...	E.010	E.040	<.10	<.10	E2.00	<.10	E.100	E6.30	<.10	<.20	E.020	<.10
28...	*E.010*	*E.040*	*<.10*	*E.004*	*E1.90*	*E.006*	*E.100*	*E6.40*	*<.10*	*<.20*	*<.10*	*<.10*
01393400 ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)												
JAN 1997												
28...	<.10	E.200	<.10	E.040	E1.10	E.09	E.400	E6.60	E.100	<.20	<.10	<.10
28...	*E.010*	*E.200*	*<.10*	*E.030*	*E1.10*	*E.080*	*E.500*	*E6.90*	*E.090*	*<.20*	*<.10*	*<.10*
01394500 RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)												
JAN 1997												
28...	<.10	E.070	<.10	<.10	<10	E.01	E.100	E4.20	<.10	<.20	<.10	<.10
01396535 SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)												
JAN 1997												
28...	E.009	<.05	<.05	<.05	E.200	<.05	<5.0	E2.00	<.05	<.10	<.05	<.05
01396588 SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	<10	<.10	<10	<10	<.10	<.20	<.10	<.10
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)												
JAN 1997												
28...	<.05	<.05	<.05	<.05	E.300	<.05	<5.0	E3.10	<.05	<.10	<.05	<.05
28...	*2.1*	*E.010*	*<.05*	*<.05*	*1.2*	*<.05*	*<5.0*	*E4.40*	*E.030*	*2.5*	*E.040*	*<.05*
28...	*2.2*	*E.010*	*<.05*	*<.05*	*1.3*	*<.05*	*<5.0*	*E4.60*	*E.030*	*2.6*	*E.040*	*<.05*
01397295 SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	E.500	<.10	<10	E3.80	<.10	<.20	<.10	E.040
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	<10	<.10	<10	<10	<.10	<.20	<.10	<.10
01399780 LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	<10	<.10	<10	E4.80	<.10	<.20	<.10	<.10
01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN NJ (LAT 40 34 10N LONG 074 40 45W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	<10	<.10	<10	<10	<.10	<.20	<.10	<.10
01401600 BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	<10	<.10	<10	E2.60	<.10	<.20	<.10	<.10

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DATE	CHLORO-ETHANE TOTAL (UG/L) (34311)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	ETHER TERT-BUTYL ETHYL-UNFLTRD RECOVER (UG/L) (50004)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)
01390815	**HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)**											
JAN 1997												
28...	<.20	<.20	<.40	E.040	<.40	<.20	E.10	<.10	<.20	<.10	<.10	1.1
01391500	**SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)**											
JAN 1997												
28...	<.20	<.20	<.40	E.040	<.40	<.30	E.09	E.010	<.20	<.10	.22	1.4
28...	*<.20*	*<.20*	*<.40*	*E.040*	*<.40*	*<.30*	*E.090*	*E.010*	*<.20*	*<.10*	*E.200*	*1.3*
01393400	**ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)**											
JAN 1997												
28...	<.20	<.20	<.40	E.100	<.40	<.29	<.20	E.060	<.20	<.10	.24	3.2
28...	*<.20*	*<.20*	*<.40*	*E.100*	*<.40*	*<.33*	*<.20*	*E.060*	*<.20*	*<.10*	*.21*	*3.1*
01394500	**RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)**											
JAN 1997												
28...	<.20	<.20	<.40	E.100	<.40	<.20	<.20	E.010	<.20	<.10	E.100	1.6
01396535	**SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)**											
JAN 1997												
28...	<.10	<.10	<.20	<.05	<.20	<.10	<.10	<.05	<.10	<.05	<.05	.24
01396588	**SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)**											
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	<.20	E.10	<.10	<.20	<.10	<.10	E.100
01396660	**MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)**											
JAN 1997												
28...	<.10	<.10	<.20	<.05	<.20	<.10	<.10	<.05	<.10	<.05	<.05	.19
28...	*<.10*	*E3.20*	*E.090*	*<.05*	*<.20*	*<.11*	*<.10*	*2.4*	*<.10*	*E.020*	*<.05*	*2.8*
28...	*<.10*	*E3.10*	*E.100*	*<.05*	*<.20*	*<.12*	*<.10*	*2.5*	*<.10*	*E.020*	*<.05*	*3.0*
01397295	**SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)**											
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.38
01399500	**LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)**											
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	<.20	E.10	<.10	<.20	<.10	<.10	E.100
01399780	**LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)**											
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	E.070	E.02	<.10	<.20	<.10	<.10	.28
01400000	**NORTH BRANCH RARITAN RIVER NEAR RARITAN NJ (LAT 40 34 10N LONG 074 40 45W)**											
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	<.20	E.10	<.10	<.20	<.10	<.10	.33
01401600	**BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)**											
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	E.100

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DATE	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
01390815	HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)										
JAN 1997											
28...	<.10	<.10	E.020	<.10	E.010	.22	<10	<.10	E.100	<.20	E.030
01391500	SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)										
JAN 1997											
28...	<.10	<.10	E.050	<.10	E.020	E.100	<10	<.10	E.020	<.20	E.050
28...	*<.10*	*<.10*	*E.050*	*<.10*	*<.20*	*E.100*	*<10*	*<.10*	*E.020*	*<.20*	*E.050*
01393400	ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)										
JAN 1997											
28...	<.10	E.040	.68	E.009	E.070	.35	<10	<.10	.62	.53	E.100
28...	*<.10*	*E.040*	*.58*	*E.008*	*E.070*	*.34*	*<10*	*<.10*	*.63*	*.51*	*E.100*
01394500	RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)										
JAN 1997											
28...	<.10	<.10	E.070	<.10	E.020	.21	<10	<.10	.21	<.20	E.020
01396535	SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)										
JAN 1997											
28...	<.05	<.05	E.010	<.05	<.10	<.05	<5.0	<.05	<.05	<.10	<.05
01396588	SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)										
JAN 1997											
28...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	<.10
01396660	MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)										
JAN 1997											
28...	<.05	<.05	E.010	<.05	<.10	<.05	<5.0	<.05	<.05	<.10	<.05
28...	*<.05*	*<.05*	*E.010*	*<.05*	*<.10*	*2.2*	*<5.0*	*<.05*	*2.4*	*<.10*	*E.020*
28...	*<.05*	*<.05*	*E.020*	*<.05*	*<.10*	*2.2*	*<5.0*	*<.05*	*2.5*	*<.10*	*E.020*
01397295	SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)										
JAN 1997											
28...	<.10	<.10	<.40	<.10	<.20	E.009	<10	<.10	E.020	<.20	<.10
01399500	LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)										
JAN 1997											
28...	<.10	<.10	<.40	<.10	<.20	E.020	<10	<.10	<.10	<.20	<.10
01399780	LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)										
JAN 1997											
28...	<.10	<.10	E.020	<.10	<.20	<.10	<10	<.10	<.10	<.20	<.10
01400000	NORTH BRANCH RARITAN RIVER NEAR RARITAN NJ (LAT 40 34 10N LONG 074 40 45W)										
JAN 1997											
28...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	<.10
01401600	BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)										
JAN 1997											
28...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	E.030	<.20	E.010

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DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L) (77350)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)
01403320	BOUND BK AT WOODBROOK RD NR S PLAINFIELD NJ (LAT 40 33 42N LONG 074 23 54W)										
JAN 1997											
29...	1310	ENVIRONMENTAL	13	440	7.2	1.0	3.0	<.10	<.10	.26	E.010
01403355	BOUND BROOK TRIB AT SOUTH PLAINFIELD NJ (LAT 40 34 44N LONG 074 25 29W)										
JAN 1997											
29...	1200	ENVIRONMENTAL	3.3	340	7.2	0.5	1.0	E.020	E.020	.34	E.020
01403360	BOUND BK NR SOUTH PLAINFIELD NJ (LAT 40 34 53N LONG 074 26 25W)										
JAN 1997											
29...	1120	ENVIRONMENTAL	34	400	6.9	-0.5	1.0	<.10	<.10	E.100	E.030
01403390	BOUND BROOK US GREEN BK AT MIDDLESEX, NJ (LAT 40 35 01N LONG 074 30 08W)										
JAN 1997											
29...	1140	ENVIRONMENTAL	52	360	7.5	-1.0	1.5	<.10	<.10	E.050	<.10
01403392	GREEN BROOK NR BERKLEY HEIGHTS NJ (LAT 40 40 04N LONG 074 24 21W)										
JAN 1997											
29...	1010	ENVIRONMENTAL	6.0	670	6.9	-2.0	0.5	<.10	<.10	<.10	<.10
01403393	BLUE BROOK NR MOUNTAINSIDE NJ (LAT 40 40 41N LONG 074 23 16W)										
JAN 1997											
29...	0920	ENVIRONMENTAL	6.4	400	7.6	-4.0	1.0	<.10	<.10	<.10	<.10
01403500	GREEN BROOK AT PLAINFIELD NJ (LAT 40 36 53N LONG 074 25 55W)										
JAN 1997											
29...	0940	ENVIRONMENTAL	25	540	8.0	-1.0	0.5	<.10	<.10	<.10	<.10
01403800	GREEN BK AT GREEN BROOK NJ (LAT 40 35 09N LONG 074 29 57W)										
JAN 1997											
29...	1050	ENVIRONMENTAL	62	--	7.6	0.0	0.5	<.10	<.10	<.10	<.10
01411110	GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)										
JAN 1997											
27...	1240	ENVIRONMENTAL	390	63	4.9	2.0	3.0	<.10	<.10	<.10	<.10
01440010	FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)										
JAN 1997											
27...	0940	ENVIRONMENTAL	112	190	7.4	-2.0	0.0	<.10	<.10	<.10	<.10
01443290	PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)										
JAN 1997											
27...	1130	ENVIRONMENTAL	55	570	7.2	-0.5	0.5	<.10	<.10	E.020	<.10
01456600	MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)										
JAN 1997											
28...	1110	ENVIRONMENTAL	310	370	7.3	4.5	2.0	<.10	<.10	<.10	<.10
28...	*1116*	*CONCURRENT SPIKE*	--	--	--	--	--	*<.10*	*<.10*	*2.3*	*E.020*
28...	*1117*	*CONCURRENT SPIKE*	--	--	--	--	--	*<.10*	*<.10*	*2.0*	*E.020*
01464515	DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)										
JAN 1997											
27...	1440	ENVIRONMENTAL	59	150	7.4	1.5	1.5	<.05	<.05	<.05	<.05
27...	*1441*	*CONCURRENT SPIKE*	--	--	--	--	--	*<.05*	*<.05*	*<.05*	*<.05*
27...	*1441*	*CONCURRENT SPIKE*	--	--	--	--	--	*<.05*	*<.05*	*<.05*	*<.05*

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DATE	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L) (77443)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)
01403320 BOUND BK AT WOODBROOK RD NR S PLAINFIELD NJ (LAT 40 33 42N LONG 074 23 54W)												
JAN 1997												
29...	E.100	E.100	<.10	<.10	<.40	<.10	<.40	<.10	<.10	E.040	<.10	<.10
01403355 BOUND BROOK TRIB AT SOUTH PLAINFIELD NJ (LAT 40 34 44N LONG 074 25 29W)												
JAN 1997												
29...	E.100	.51	E.100	E.070	<.40	E.10	<.40	.37	E.090	<.10	E.100	<.10
01403360 BOUND BK NR SOUTH PLAINFIELD NJ (LAT 40 34 53N LONG 074 26 25W)												
JAN 1997												
29...	E.050	E.100	E.020	<.10	<.40	E.02	<.40	E.040	E.010	E.010	E.030	<.10
01403390 BOUND BROOK US GREEN BK AT MIDDLESEX, NJ (LAT 40 35 01N LONG 074 30 08W)												
JAN 1997												
29...	<.10	E.020	E.020	<.10	<.40	<.10	<.40	E.030	<.10	<.10	E.030	<.10
01403392 GREEN BROOK NR BERKLEY HEIGHTS NJ (LAT 40 40 04N LONG 074 24 21W)												
JAN 1997												
29...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01403393 BLUE BROOK NR MOUNTAINSIDE NJ (LAT 40 40 41N LONG 074 23 16W)												
JAN 1997												
29...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01403500 GREEN BROOK AT PLAINFIELD NJ (LAT 40 36 53N LONG 074 25 55W)												
JAN 1997												
29...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01403800 GREEN BK AT GREEN BROOK NJ (LAT 40 35 09N LONG 074 29 57W)												
JAN 1997												
29...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)												
JAN 1997												
27...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01440010 FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)												
JAN 1997												
27...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01443290 PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)												
JAN 1997												
27...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
01456600 MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)												
JAN 1997												
28...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	<.10	<.10	<.10
28...	*<.10*	*2.6*	*<.10*	*<.10*	*<.40*	*<.10*	*<.40*	*<.10*	*<.10*	*<.10*	*<.10*	*<.10*
28...	*<.10*	*2.5*	*<.10*	*<.10*	*<.40*	*<.10*	*<.40*	*<.10*	*<.10*	*<.10*	*<.10*	*<.10*
01464515 DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)												
JAN 1997												
27...	<.05	<.10	<.05	<.05	<.20	<.05	<.20	<.05	<.05	<.05	<.05	<.05
27...	*<.05*	*<.10*	*<.05*	*<.05*	*<.20*	*<.05*	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*
27...	*<.05*	*<.10*	*<.05*	*<.05*	*<.20*	*<.05*	*<.20*	*<.05*	*<.05*	*<.05*	*<.05*	*<.05*

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DATE	BENZENE 1,4-DI-CHLORO- WATER UNFLTRD REC (UG/L) (34571)	META/ PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)
01403320 BOUND BK AT WOODBROOK RD NR S PLAINFIELD NJ (LAT 40 33 42N LONG 074 23 54W)												
JAN 1997												
29...	E.010	E.030	<.10	<.10	<10	<.10	<10	E3.10	<.10	<.20	<.10	E.030
01403355 BOUND BROOK TRIB AT SOUTH PLAINFIELD NJ (LAT 40 34 44N LONG 074 25 29W)												
JAN 1997												
29...	<.10	E.300	<.10	E.020	<10	E.10	<10	50	<.10	E.030	<.10	<.10
01403360 BOUND BK NR SOUTH PLAINFIELD NJ (LAT 40 34 53N LONG 074 26 25W)												
JAN 1997												
29...	E.008	E.070	<.10	<.10	10	E.01	<10	10	<.10	<.20	<.10	E.020
01403390 BOUND BROOK US GREEN BK AT MIDDLESEX, NJ (LAT 40 35 01N LONG 074 30 08W)												
JAN 1997												
29...	<.10	E.060	<.10	<.10	E1.10	<.10	E.100	E6.50	<.10	<.20	<.10	.25
01403392 GREEN BROOK NR BERKLEY HEIGHTS NJ (LAT 40 40 04N LONG 074 24 21W)												
JAN 1997												
29...	<.10	<.10	<.10	<.10	<10	<.10	<10	E1.90	<.10	<.20	<.10	<.10
01403393 BLUE BROOK NR MOUNTAINSIDE NJ (LAT 40 40 41N LONG 074 23 16W)												
JAN 1997												
29...	<.10	<.10	<.10	<.10	<10	<.10	<10	E2.40	<.10	<.20	<.10	<.10
01403500 GREEN BROOK AT PLAINFIELD NJ (LAT 40 36 53N LONG 074 25 55W)												
JAN 1997												
29...	<.10	<.10	<.10	<.10	<10	<.10	<10	E2.10	<.10	<.20	<.10	<.10
01403800 GREEN BK AT GREEN BROOK NJ (LAT 40 35 09N LONG 074 29 57W)												
JAN 1997												
29...	<.10	<.10	<.10	<.10	<10	<.10	<10	E2.30	<.10	<.20	<.10	<.10
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)												
JAN 1997												
27...	<.10	<.10	<.10	<.10	<10	<.10	<10	<10	<.10	<.20	<.10	<.10
01440010 FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)												
JAN 1997												
27...	<.10	<.10	<.10	<.10	<10	<.10	<10	E1.50	E.030	<.20	<.10	<.10
01443290 PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)												
JAN 1997												
27...	<.10	<.10	<.10	<.10	<10	<.10	<10	E2.00	<.10	<.20	<.10	<.10
01456600 MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)												
JAN 1997												
28...	<.10	<.10	<.10	<.10	<10	<.10	<10	E4.00	<.10	<.20	<.10	<.10
28...	*1.9*	*<.10*	*<.10*	*<.10*	*E1.10*	*<.10*	*<10*	*E3.90*	*<.10*	*2.4*	*E.040*	*<.10*
28...	*1.7*	*<.10*	*<.10*	*<.10*	*E1.20*	*<.10*	*<10*	*E4.10*	*<.10*	*2.1*	*E.030*	*<.10*
01464515 DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)												
JAN 1997												
27...	<.05	<.05	<.05	<.05	<5.0	<.05	<5.0	<5.0	<.05	<.10	<.05	<.05
27...	*<.05*	*<.05*	*<.05*	*<.05*	*<5.0*	*<.05*	*<5.0*	*<5.0*	*<.05*	*<.10*	*E.010*	*<.05*
27...	*<.05*	*<.05*	*<.05*	*<.05*	*<5.0*	*<.05*	*<5.0*	*<5.0*	*<.05*	*<.10*	*E.010*	*<.05*

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DATE	CHLORO-ETHANE TOTAL (UG/L) (34311)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	ETHER TERT-BUTYL ETHYL-UNFLTRD RECOVER (UG/L) (50004)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)
01403320 BOUND BK AT WOODBROOK RD NR S PLAINFIELD NJ (LAT 40 33 42N LONG 074 23 54W)												
JAN 1997												
29...	<.20	<.20	<.40	1.0	<.40	<.20	<.20	<.10	<.20	<.10	<.10	16
01403355 BOUND BROOK TRIB AT SOUTH PLAINFIELD NJ (LAT 40 34 44N LONG 074 25 29W)												
JAN 1997												
29...	<.20	<.20	<.40	1.0	<.40	<.20	<.20	E.070	<.20	<.10	E.100	1.5
01403360 BOUND BK NR SOUTH PLAINFIELD NJ (LAT 40 34 53N LONG 074 26 25W)												
JAN 1997												
29...	<.20	<.20	<.40	.57	<.40	<.23	E.10	E.020	<.20	<.10	E.100	6.1
01403390 BOUND BROOK US GREEN BK AT MIDDLESEX, NJ (LAT 40 35 01N LONG 074 30 08W)												
JAN 1997												
29...	<.20	<.20	<.40	E.100	<.40	.30	<.20	<.10	<.20	<.10	E.100	3.4
01403392 GREEN BROOK NR BERKLEY HEIGHTS NJ (LAT 40 40 04N LONG 074 24 21W)												
JAN 1997												
29...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	E.100
01403393 BLUE BROOK NR MOUNTAINSIDE NJ (LAT 40 40 41N LONG 074 23 16W)												
JAN 1997												
29...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.20
01403500 GREEN BROOK AT PLAINFIELD NJ (LAT 40 36 53N LONG 074 25 55W)												
JAN 1997												
29...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.26
01403800 GREEN BK AT GREEN BROOK NJ (LAT 40 35 09N LONG 074 29 57W)												
JAN 1997												
29...	<.20	<.20	<.40	E.010	<.40	<.20	<.20	<.10	<.20	<.10	<.10	1.4
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)												
JAN 1997												
27...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	E.020	<.10	E.030	1.6
01440010 FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)												
JAN 1997												
27...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	E.020	E.070
01443290 PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)												
JAN 1997												
27...	<.20	<.20	<.40	E.030	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.49
01456600 MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)												
JAN 1997												
28...	<.20	<.20	<.40	<.10	<.40	<.20	<.20	<.10	<.20	<.10	<.10	.26
28...	*<.20*	*E2.10*	*E.100*	*<.10*	*<.40*	*<.20*	*<.20*	*2.1*	*<.20*	*<.10*	*<.10*	*2.6*
28...	*<.20*	*E2.50*	*E.100*	*<.10*	*<.40*	*<.20*	*<.20*	*1.9*	*<.20*	*<.10*	*<.10*	*2.5*
01464515 DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)												
JAN 1997												
27...	<.10	<.10	E.080	<.05	<.20	<.10	<.10	<.05	<.10	<.05	E.070	.24
27...	*<.10*	*<.10*	*E.070*	*<.05*	*<.20*	*<.10*	*<.10*	*<.05*	*<.10*	*<.05*	*E.070*	*.24*
27...	*<.10*	*<.10*	*E.070*	*<.05*	*<.20*	*<.10*	*<.10*	*<.05*	*<.10*	*<.05*	*E.070*	*.24*

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Volatile Organic Compound Synoptic Sampling, January 27-30, 1997

DATE	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
01403320 BOUND BK AT WOODBROOK RD NR S PLAINFIELD NJ (LAT 40 33 42N LONG 074 23 54W)											
JAN 1997											
29...	<.10	<.10	<.40	<.10	E.100	.63	<10	<.10	.35	E.060	E.040
01403355 BOUND BROOK TRIB AT SOUTH PLAINFIELD NJ (LAT 40 34 44N LONG 074 25 29W)											
JAN 1997											
29...	E.040	E.050	.23	<.10	<.20	.36	<10	E.010	2.2	<.20	E.100
01403360 BOUND BK NR SOUTH PLAINFIELD NJ (LAT 40 34 53N LONG 074 26 25W)											
JAN 1997											
29...	<.10	<.10	E.040	<.10	E.090	E.100	<10	<.10	.43	<.20	E.050
01403390 BOUND BROOK US GREEN BK AT MIDDLESEX, NJ (LAT 40 35 01N LONG 074 30 08W)											
JAN 1997											
29...	<.10	<.10	E.050	<.10	E.060	E.060	<10	<.10	E.090	<.20	E.040
01403392 GREEN BROOK NR BERKLEY HEIGHTS NJ (LAT 40 40 04N LONG 074 24 21W)											
JAN 1997											
29...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	<.10
01403393 BLUE BROOK NR MOUNTAINSIDE NJ (LAT 40 40 41N LONG 074 23 16W)											
JAN 1997											
29...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	<.10
01403500 GREEN BROOK AT PLAINFIELD NJ (LAT 40 36 53N LONG 074 25 55W)											
JAN 1997											
29...	<.10	<.10	<.40	<.10	<.20	E.100	<10	<.10	<.10	<.20	<.10
01403800 GREEN BK AT GREEN BROOK NJ (LAT 40 35 09N LONG 074 29 57W)											
JAN 1997											
29...	<.10	<.10	<.40	<.10	<.20	E.100	<10	<.10	E.060	<.20	E.020
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)											
JAN 1997											
27...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	E.020
01440010 FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)											
JAN 1997											
27...	<.10	<.10	<.40	<.10	<.20	<.10	<10	<.10	<.10	<.20	<.10
01443290 PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)											
JAN 1997											
27...	<.10	<.10	E.010	<.10	<.20	E.100	<10	<.10	E.010	<.20	E.080
01456600 MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)											
JAN 1997											
28...	<.10	<.10	E.020	<.10	<.20	E.020	<10	<.10	<.10	<.20	<.10
28...	*<.10*	*<.10*	*<.40*	*<.10*	*<.20*	*1.9*	*<10*	*<.10*	*2.1*	*<.20*	*<.10*
28...	*<.10*	*<.10*	*<.40*	*<.10*	*<.20*	*1.7*	*<10*	*<.10*	*1.9*	*<.20*	*<.10*
01464515 DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)											
JAN 1997											
27...	<.05	<.05	E.020	<.05	<.10	<.05	<5.0	<.05	<.05	<.10	E.009
27...	*<.05*	*<.05*	*E.020*	*<.05*	*<.10*	*<.05*	*<5.0*	*<.05*	*<.05*	*<.10*	*E.010*
27...	*<.05*	*<.05*	*E.020*	*<.05*	*<.10*	*<.05*	*<5.0*	*<.05*	*<.05*	*<.10*	*E.010*

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Volatile Organic Compound Synoptic Sampling, January 27-30, 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L) (77350)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)
01467329 SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)											
JAN 1997											
27...	0900	ENVIRONMENTAL	49	140	7.4	-1.0	3.0	<.10	<.10	<.10	<.10
01475000 MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)											
JAN 1997											
27...	1020	ENVIRONMENTAL	18	140	6.8	1.5	3.0	<.05	<.05	E.007	<.05

DATE	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	PREH-NITENE WATER UNFLTRD RECOVER (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L) (77443)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)
01467329 SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)												
JAN 1997												
27...	<.10	<.20	<.10	<.10	<.40	<.10	<.40	<.10	<.10	E.080	E.030	<.10
01475000 MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)												
JAN 1997												
27...	<.05	<.10	<.05	<.05	<.20	<.05	<.20	<.05	<.05	<.05	<.05	<.05

DATE	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	METHYL-ISO-BUTYL-KETONE WAT.WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BENZENE TOTAL (UG/L) (34030)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHLORO-BENZENE TOTAL (UG/L) (34301)
01467329 SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)												
JAN 1997												
27...	E.010	E.060	<.10	<.10	<10	<.10	<10	<10	<.10	<.20	<.10	E.040
01475000 MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)												
JAN 1997												
27...	<.05	<.05	<.05	<.05	<5.0	<.05	<5.0	<5.0	<.05	<.10	E.007	<.05

DATE	CHLORO-ETHANE TOTAL (UG/L) (34311)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHYL-BENZENE TOTAL (UG/L) (34371)	ETHER TERT-BUTYL ETHYL-UNFLTRD RECOVER (UG/L) (50004)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	TOLUENE TOTAL (UG/L) (34010)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)
01467329 SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)												
JAN 1997												
27...	<.20	<.20	<.40	E.020	<.40	<.20	E.10	E.010	<.20	<.10	E.070	.20
01475000 MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)												
JAN 1997												
27...	<.10	<.10	E.080	<.05	<.20	<.10	<.10	<.05	<.10	E.02	E.010	.18

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Volatile Organic Compound Synoptic Sampling, January 27-30, 1997

DATE	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	NAPHTH-ALENE TOTAL (UG/L) (34696)	STYRENE TOTAL (UG/L) (77128)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	CHLORO-FORM TOTAL (UG/L) (32106)
01467329 SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)											
JAN 1997											
27...	<.10	<.10	E.030	<.10	<.20	E.030	2.8	<.10	<.10	<.20	<.10
01475000 MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)											
JAN 1997											
27...	<.05	<.05	E.040	<.05	<.10	E.008	<5.0	<.05	<.05	<.10	E.010

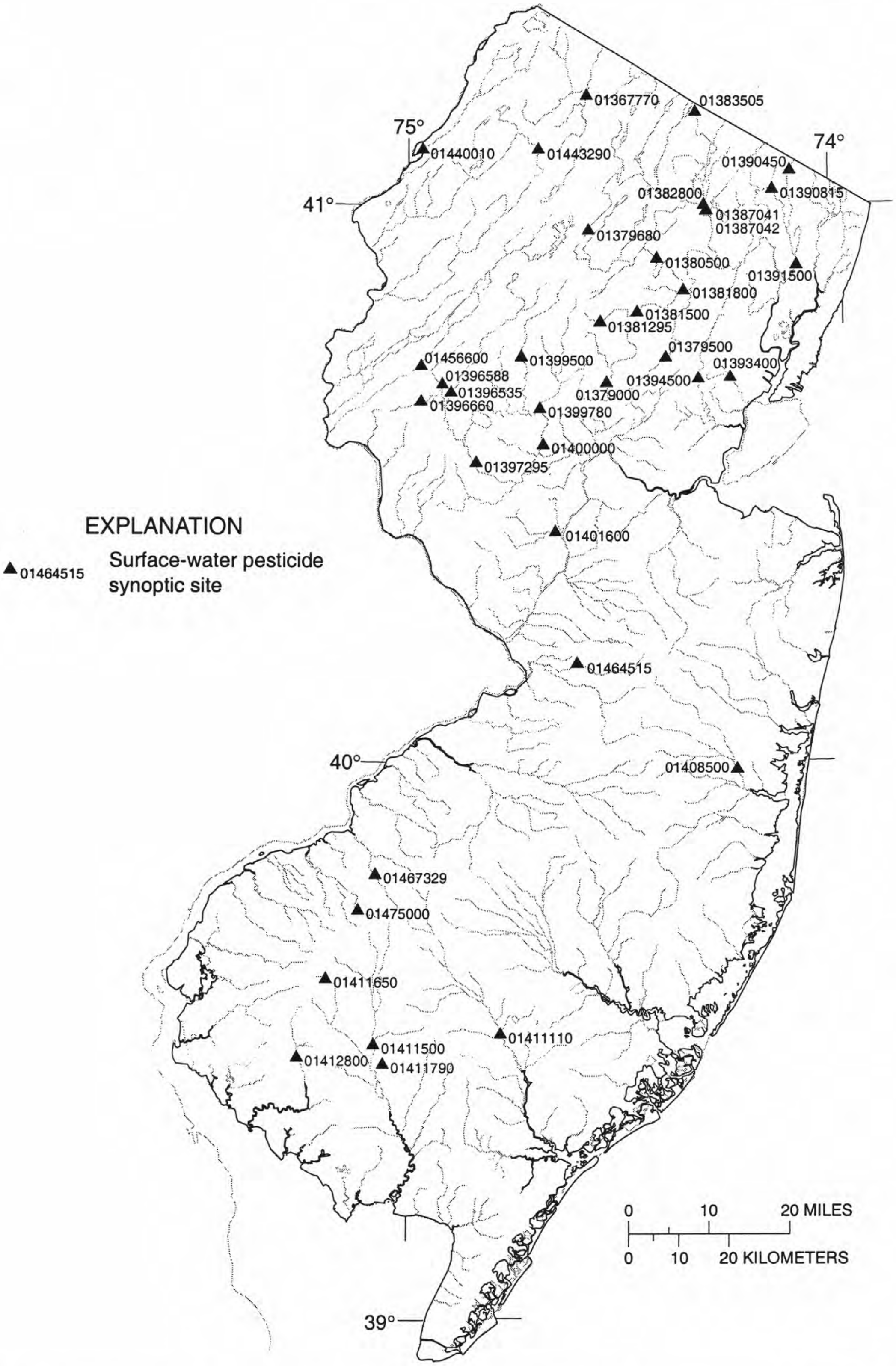

Figure 19. Map showing location of Long Island-New Jersey National Water Quality Assessment Program surface water pesticide synoptic site network, June 6-18, 1997.

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

Water-quality miscellaneous sites are locations where chemical-quality data are collected once only, intermittently, or systematically but on limited frequency during one year for use in hydrologic analyses. For additional synoptic data at NAWQA fixed stations 01382000, 01390500, 01398000, 01401000, 01403300, 01403900, and 01410784, see individual station records. For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-control data" in the "Explanation of Records" section. For additional synoptic data at nine Long Island, New York stations, refer to Water Resources Data Report - New York, Volume 2, 1997.

	DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
01367770	WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)										
	JUN 1997										
	12...	1230	ENVIRONMENTAL	46	570	8.0	25.0	20.5	744	--	--
01379000	PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)										
	JUN 1997										
	11...	0910	ENVIRONMENTAL	28	280	7.2	23.0	20.5	755	5.5	62
01379500	PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)										
	JUN 1997										
	10...	1300	ENVIRONMENTAL	55	460	7.4	26.5	20.5	760	7.4	82
01379680	ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)										
	JUN 1997										
	12...	0910	ENVIRONMENTAL	25	250	7.1	23.0	20.0	736	6.0	68
01380500	ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)										
	JUN 1997										
	11...	*1325*	*FIELD BLANK*	--	--	--	--	--	--	--	--
	11...	1400	ENVIRONMENTAL	100	300	8.0	27.0	22.0	750	8.3	97
01381295	WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)										
	JUN 1997										
	11...	1110	ENVIRONMENTAL	8.3	210	7.8	24.0	18.0	750	9.4	101
01381500	WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)										
	JUN 1997										
	10...	1430	ENVIRONMENTAL	42	390	7.9	28.0	21.5	755	10.6	121
01381800	WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)										
	JUN 1997										
	11...	0940	ENVIRONMENTAL	65	510	7.5	28.0	20.5	756	6.9	77
01382800	PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)										
	JUN 1997										
	10...	0940	ENVIRONMENTAL	23	290	7.7	23.0	16.0	759	9.4	96
	10...	*0941*	*SPLIT REPLICATE*	--	--	--	--	--	--	--	--
01383505	WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)										
	JUN 1997										
	10...	1330	ENVIRONMENTAL	13	180	7.7	30.0	21.5	747	7.6	88
01387041	WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)										
	JUN 1997										
	10...	1050	ENVIRONMENTAL	21	240	7.2	27.0	17.0	759	8.3	86
01387042	PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)										
	JUN 1997										
	10...	1140	ENVIRONMENTAL	44	280	7.4	31.0	17.5	759	9.1	96
01390450	SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)										
	JUN 1997										
	09...	1510	ENVIRONMENTAL	8.9	590	7.3	26.0	17.5	759	9.0	94

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
01367770	WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)											
	JUN 1997											
	12...	200	46	22	33	1.7	210	170	177	16	62	.1
01379000	PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)											
	JUN 1997											
	11...	79	19	7.3	20	1.0	71	58	58	14	41	.1
01379500	PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)											
	JUN 1997											
	10...	100	25	9.1	41	2.1	78	64	68	30	68	<.1
01379680	ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)											
	JUN 1997											
	12...	65	16	6.2	21	.7	61	50	51	9.1	38	<.1
01380500	ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)											
	JUN 1997											
	11...	*--*	*.04*	*<.01*	*<.2*	*<.1*	*--*	*--*	*1.5*	*<.1*	*<.1*	*<.1*
	11...	83	21	7.8	23	1.2	66	54	57	13	46	<.1
01381295	WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)											
	JUN 1997											
	11...	65	16	6.0	13	1.1	44	36	38	11	31	<.1
01381500	WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)											
	JUN 1997											
	10...	100	26	9.1	27	2.0	73	60	62	17	63	<.1
01381800	WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)											
	JUN 1997											
	11...	140	35	12	37	3.2	98	80	81	26	78	<.1
01382800	PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)											
	JUN 1997											
	10...	76	20	6.5	25	1.0	49	40	44	16	47	<.1
	10...	*76*	*20*	*6.5*	*25*	*1.0*	*51*	*42*	*44*	*16*	*47*	*<.1*
01383505	WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)											
	JUN 1997											
	10...	38	10	3.2	17	.7	27	22	24	9.1	32	<.1
01387041	WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)											
	JUN 1997											
	10...	57	16	4.4	20	1.4	41	34	37	16	35	<.1
01387042	PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)											
	JUN 1997											
	10...	70	19	5.7	22	1.2	47	38	42	17	43	<.1
01390450	SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)											
	JUN 1997											
	09...	190	56	13	38	1.2	160	130	131	18	94	<.1

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
01367770	WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)									
JUN 1997										
12...	7.5	321	296	.01	1.4	.04	.4	.4	1.8	1.8
01379000	PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)									
JUN 1997										
11...	13	175	152	.02	.25	.07	.7	.4	.94	.65
01379500	PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)									
JUN 1997										
10...	14	278	240	.03	2.2	.10	.6	.4	2.8	2.6
01379680	ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)									
JUN 1997										
12...	6.6	140	129	<.01	.16	.05	.3	.3	.44	.47
01380500	ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)									
JUN 1997										
11...	*.04*	*<1*	*--*	*<.01*	*<.05*	*<.02*	*<.2*	*<.2*	*--*	*--*
11...	9.9	170	156	<.01	.48	.02	.4	.2	.85	.71
01381295	WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)									
JUN 1997										
11...	17	128	121	<.01	.94	<.02	.2	.1	1.2	1.1
01381500	WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)									
JUN 1997										
10...	16	226	204	.02	1.6	.02	.3	.1	1.9	1.7
01381800	WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)									
JUN 1997										
11...	15	296	269	.14	2.9	.20	.7	.5	3.6	3.3
01382800	PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)									
JUN 1997										
10...	8.3	156	150	<.01	.58	.03	.1	<.03	.68	--
10...	*8.3*	*155*	*152*	*.01*	*.57*	*.03*	*<.2*	*<.2*	*--*	*--*
01383505	WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)									
JUN 1997										
10...	1.1	99	87	<.01	.10	.04	.2	.2	.29	.25
01387041	WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)									
JUN 1997										
10...	4.9	135	120	.01	.51	.16	.2	.1	.70	.58
01387042	PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)									
JUN 1997										
10...	7.0	152	141	.01	.55	.38	.2	.1	.73	.60
01390450	SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)									
JUN 1997										
09...	12	339	312	<.01	.75	<.02	.1	.2	.87	.93

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

DATE	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
01367770 WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)										
JUN 1997										
12...	.02	.03	.01	33	83	110	7.7	.5	24	2.9
01379000 PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)										
JUN 1997										
11...	.12	<.01	.02	77	100	130	7.3	.7	54	4.0
01379500 PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)										
JUN 1997										
10...	.43	.28	.31	110	89	110	5.4	.7	27	4.0
01379680 ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)										
JUN 1997										
12...	<.01	<.01	<.01	19	120	110	4.4	.1	6	.43
01380500 ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)										
JUN 1997										
11...	*<.01*	*<.01*	*<.01*	*<4.0*	*<3*	*<1*	--	--	--	--
11...	.01	<.01	<.01	18	180	38	3.7	.2	4	1.1
01381295 WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)										
JUN 1997										
11...	<.01	<.01	<.01	9.1	56	16	2.1	.2	14	.30
01381500 WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)										
JUN 1997										
10...	.07	.05	.05	50	210	49	2.2	.3	7	.84
01381800 WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)										
JUN 1997										
11...	.36	.21	21	85	82	120	4.7	.5	36	6.3
01382800 PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)										
JUN 1997										
10...	<.01	<.01	<.01	20	19	23	2	.2	2	.12
10...	*<.01*	*<.01*	*<.01*	*18*	*20*	*21*	*2*	*.2*	--	--
01383505 WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)										
JUN 1997										
10...	<.01	<.01	.02	18	15	11	2.7	.3	3	.09
01387041 WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)										
JUN 1997										
10...	<.01	<.01	<.01	34	31	34	2.3	.2	3	.16
01387042 PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)										
JUN 1997										
10...	<.01	<.01	<.01	33	35	28	2.2	.3	5	.60
01390450 SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)										
JUN 1997										
09...	.02	.04	.04	42	22	8	1.7	.5	27	.65

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

DATE	TIME	SAMPLE TYPE	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)
01367770	WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)							
JUN 1997								
12...	1230	ENVIRONMENTAL	<.002	<.002	.008	E.0025	<.001	<.002
01379000	PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)							
JUN 1997								
11...	0910	ENVIRONMENTAL	<.002	E.0018	.005	E.0012	<.001	<.002
01379500	PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)							
JUN 1997								
10...	*1245*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.001*	*<.002*
10...	1300	ENVIRONMENTAL	<.002	<.002	.038	E.0038	<.001	<.002
01379680	ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)							
JUN 1997								
12...	0910	ENVIRONMENTAL	<.002	<.002	.005	E.0013	<.001	<.002
01380500	ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)							
JUN 1997								
11...	1400	ENVIRONMENTAL	<.002	<.002	.008	E.0022	<.001	<.002
01381295	WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)							
JUN 1997								
11...	1110	ENVIRONMENTAL	<.002	E.0023	.005	E.0013	<.001	<.002
01381500	WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)							
JUN 1997								
10...	1430	ENVIRONMENTAL	<.002	<.002	.005	E.0022	<.001	<.002
01381800	WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)							
JUN 1997								
11...	0940	ENVIRONMENTAL	<.002	<.002	.005	<.002	<.001	<.002
01382800	PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)							
JUN 1997								
10...	0940	ENVIRONMENTAL	<.002	<.002	.004	<.002	<.001	<.002
10...	*0941*	*SPLIT REPLICATE*	*<.002*	*<.002*	*.005*	*<.002*	*<.001*	*<.002*
01383505	WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)							
JUN 1997								
10...	1330	ENVIRONMENTAL	<.002	<.002	.007	E.0017	<.001	<.002
01387041	WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)							
JUN 1997								
10...	1050	ENVIRONMENTAL	<.002	<.002	.004	<.002	<.001	<.002
01387042	PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)							
JUN 1997								
10...	1140	ENVIRONMENTAL	<.002	<.002	.004	E.0018	<.001	<.002
01390450	SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)							
JUN 1997								
09...	1510	ENVIRONMENTAL	<.002	<.002	.004	E.0023	<.001	<.002

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

	DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
01367770	WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)										
	JUN 1997										
	12...	<.003	<.003	E.0016	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01379000	PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)										
	JUN 1997										
	11...	E.0151	<.003	<.004	.005	E.0011	<.002	<.001	<.003	<.002	<.005
01379500	PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)										
	JUN 1997										
	10...	*<.003*	*<.003*	*<.004*	*<.004*	*<.002*	*<.002*	*<.001*	*<.003*	*<.002*	*<.005*
	10...	E.0416	<.003	<.004	<.004	<.002	.006	<.001	<.003	<.002	<.005
01379680	ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)										
	JUN 1997										
	12...	<.003	<.003	<.004	<.004	<.002	E.0027	<.001	<.003	<.002	<.005
01380500	ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)										
	JUN 1997										
	11...	E.0007	<.003	<.004	<.004	E.0024	E.0036	<.001	<.003	<.002	<.005
01381295	WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)										
	JUN 1997										
	11...	<.003	<.003	E.0010	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01381500	WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)										
	JUN 1997										
	10...	<.003	<.003	<.004	<.004	E.0039	.008	<.001	<.003	<.002	<.005
01381800	WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)										
	JUN 1997										
	11...	E.1890	<.003	E.0036	<.004	E.0030	.006	<.001	<.003	<.002	<.005
01382800	PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)										
	JUN 1997										
	10...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
	10...	*<.003*	*<.003*	*<.004*	*<.004*	*<.002*	*<.002*	*<.001*	*<.003*	*<.002*	*<.005*
01383505	WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)										
	JUN 1997										
	10...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01387041	WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)										
	JUN 1997										
	10...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01387042	PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)										
	JUN 1997										
	10...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01390450	SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)										
	JUN 1997										
	09...	<.003	<.003	E.0023	<.004	E.0007	<.002	<.001	<.003	<.002	<.005

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

DATE	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
01367770 WALLKILL RIVER NEAR SUSSEX NJ (LAT 41 11 38N LONG 074 34 32W)										
JUN 1997										
12...	.006	<.004	<.003	<.004	<.004	E.0076	.005	<.010	<.007	<.002
01379000 PASSAIC RIVER NEAR MILLINGTON NJ (LAT 40 40 48N LONG 074 31 45W)										
JUN 1997										
11...	.006	<.004	<.003	<.004	E.0035	<.018	.524	<.010	<.007	<.002
01379500 PASSAIC RIVER NEAR CHATHAM NJ (LAT 40 43 31N LONG 074 23 23W)										
JUN 1997										
10...	*<.002*	*<.004*	*<.003*	*<.004*	*<.004*	*<.018*	*<.005*	*<.010*	*<.007*	*<.002*
10...	.020	<.004	<.003	<.004	<.004	.019	.192	<.010	<.007	<.002
01379680 ROCKAWAY R AT LONGWOOD VALLEY NJ (LAT 40 57 14N LONG 074 34 17W)										
JUN 1997										
12...	E.0025	<.004	<.003	<.004	<.004	<.018	<.005	<.010	<.007	<.002
01380500 ROCKAWAY RIVER ABOVE RESERVOIR AT BOONTON NJ (LAT 40 54 10N LONG 074 24 36W)										
JUN 1997										
11...	.011	<.004	<.003	<.004	<.004	E.0083	E.0031	E.0019	<.007	<.002
01381295 WHIPPANY R DS TINGLEY RD NR BROOKSIDE NJ (LAT 40 47 23N LONG 074 32 38W)										
JUN 1997										
11...	E.0025	<.004	<.003	<.004	<.004	E.0042	.059	<.010	<.007	<.002
01381500 WHIPPANY RIVER AT MORRISTOWN NJ (LAT 40 48 26N LONG 074 27 22W)										
JUN 1997										
10...	E.0027	<.004	<.003	<.004	<.004	E.0160	.025	<.010	<.007	<.002
01381800 WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42N LONG 074 20 51W)										
JUN 1997										
11...	E.0036	<.004	<.003	<.004	<.004	.025	.054	<.010	<.007	E.0016
01382800 PEQUANNOCK RIVER AT RIVERDALE NJ (LAT 40 59 55N LONG 074 17 54W)										
JUN 1997										
10...	E.0025	<.004	<.003	<.004	<.004	E.0058	<.005	<.010	<.007	<.002
10...	*E.0024*	*<.004*	*<.003*	*<.004*	*<.004*	*E.0066*	*<.005*	*<.010*	*<.007*	*<.002*
01383505 WANAQUE RIVER NR AWOSTING NJ (LAT 41 09 49N LONG 074 19 06W)										
JUN 1997										
10...	E.0035	<.004	<.003	<.004	<.004	E.0068	E.0037	<.010	<.007	<.002
01387041 WANAQUE RIVER AT POMPTON LAKES NJ (LAT 40 59 17N LONG 074 17 31W)										
JUN 1997										
10...	<.002	<.004	<.003	<.004	<.004	E.0063	<.005	<.010	<.007	<.002
01387042 PEQUANNOCK RIVER AT POMPTON LAKES NJ (LAT 40 59 14N LONG 074 17 37W)										
JUN 1997										
10...	E.0026	<.004	<.003	<.004	<.004	E.0061	<.005	<.010	<.007	<.002
01390450 SADDLE RIVER AT UPPER SADDLE RIVER NJ (LAT 41 03 32N LONG 074 05 44W)										
JUN 1997										
09...	<.002	<.004	<.003	<.004	<.004	E.0066	.021	<.010	<.007	E.0020

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
01390815	HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)									
JUN 1997										
09...	1330	ENVIRONMENTAL	10	600	7.9	27.0	20.0	758	9.6	106
01391500	SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)									
JUN 1997										
09...	*1020*	*FIELD BLANK*	--	--	--	--	--	--	--	--
09...	*1030*	*FIELD BLANK*	--	--	--	--	--	--	--	--
09...	1050	ENVIRONMENTAL	60	750	7.5	21.0	17.0	769	7.3	75
01393400	ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)									
JUN 1997										
10...	0940	ENVIRONMENTAL	7.8	830	7.6	23.0	18.5	763	7.5	80
01394500	RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)									
JUN 1997										
10...	1050	ENVIRONMENTAL	14	690	7.4	24.0	17.0	763	6.4	66
01396535	SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)									
JUN 1997										
17...	0810	ENVIRONMENTAL	62	280	7.8	15.5	17.0	752	8.9	94
01396588	SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)									
JUN 1997										
17...	0850	ENVIRONMENTAL	16	180	7.5	16.0	14.5	751	9.5	95
01396660	MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)									
JUN 1997										
17...	1020	ENVIRONMENTAL	7.5	220	7.7	17.5	16.5	751	9.4	98
01397295	SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)									
JUN 1997										
17...	1130	ENVIRONMENTAL	170	240	8.1	19.5	18.5	750	10.8	118
01399500	LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)									
JUN 1997										
11...	1320	ENVIRONMENTAL	35	270	7.6	26.0	19.5	750	8.9	99
01399780	LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)									
JUN 1997										
11...	1430	ENVIRONMENTAL	76	250	8.1	30.0	24.0	750	10.8	131
01401600	BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)									
JUN 1997										
09...	1520	ENVIRONMENTAL	8.6	220	7.4	23.0	20.0	765	11.0	120
01408500	TOMS RIVER NEAR TOMS RIVER NJ (LAT 39 59 10N LONG 074 13 29W)									
JUN 1997										
09...	0930	ENVIRONMENTAL	180	82	5.8	18.5	15.0	765	9.0	88
01411110	GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)									
JUN 1997										
16...	1210	ENVIRONMENTAL	165	51	6.2	19.0	19.5	761	8.1	88
16...	*1211*	*SPLIT REPLICATE*	*165*	*52*	*6.2*	--	--	*761*	--	--

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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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
01390815 HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)											
JUN 1997											
09...	200	55	14	44	1.6	150	130	132	19	99	.1
01391500 SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)											
JUN 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	*.04*	*<.01*	*<.2*	*<.1*	--	--	*2.0*	*<.1*	*<.1*	*<.1*
09...	210	60	16	58	4.3	160	130	130	28	120	<.1
01393400 ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)											
JUN 1997											
10...	250	79	12	55	2.5	180	150	154	40	140	<.1
01394500 RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)											
JUN 1997											
10...	210	63	13	43	2.0	140	120	122	33	110	.1
01396535 SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)											
JUN 1997											
17...	100	22	12	13	1.5	98	80	82	12	25	<.1
01396588 SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)											
JUN 1997											
17...	63	15	5.9	11	1.2	45	37	38	16	19	<.1
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)											
JUN 1997											
17...	84	22	7.4	10	1.1	69	56	59	14	19	<.1
01397295 SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)											
JUN 1997											
17...	86	20	8.6	13	1.5	73	60	62	14	24	<.1
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)											
JUN 1997											
11...	72	17	7.0	19	.8	59	48	50	9.9	41	<.1
01399780 LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)											
JUN 1997											
11...	80	20	7.6	14	1.3	73	60	61	14	28	<.1
01401600 BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)											
JUN 1997											
09...	70	17	6.9	14	1.6	49	40	43	23	21	.1
01408500 TOMS RIVER NEAR TOMS RIVER NJ (LAT 39 59 10N LONG 074 13 29W)											
JUN 1997											
09...	11	2.4	1.3	8.0	1.1	3.0	2.0	2.4	9.3	13	<.1
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)											
JUN 1997											
16...	10	2.1	1.2	4.5	1.1	3.0	2.0	3.8	4.1	7.9	<.1
16...	*10*	*2.0*	*1.2*	*4.6*	*1.0*	*2.6*	*2.1*	*3.8*	*4.0*	*8.0*	*<.1*

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DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
01390815 HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)										
JUN 1997										
09...	14	349	327	.03	.92	.05	.4	.2	1.3	1.1
01391500 SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)										
JUN 1997										
09...	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*	*--*
09...	*.03*	*54*	*--*	*<.01*	*.08*	*<.02*	*<.2*	*<.2*	*--*	*--*
09...	13	441	407	.29	5.9	.41	1.1	.9	7.1	6.9
01393400 ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)										
JUN 1997										
10...	13	514	438	.08	2.3	.13	.5	.3	2.8	2.6
01394500 RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)										
JUN 1997										
10...	16	428	359	.04	1.5	.12	.3	.2	1.8	1.7
01396535 SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)										
JUN 1997										
17...	12	160	153	.03	1.5	.05	.3	.1	1.8	1.7
01396588 SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)										
JUN 1997										
17...	17	126	112	<.01	1.1	<.02	.1	<.03	1.2	--
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)										
JUN 1997										
17...	15	130	126	<.01	.88	<.02	.1	<.03	.97	--
01397295 SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)										
JUN 1997										
17...	4.9	138	126	.01	.92	<.02	.3	.1	1.2	1.0
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)										
JUN 1997										
11...	11	155	138	<.01	.52	<.02	.3	.2	.80	.72
01399780 LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)										
JUN 1997										
11...	12	154	137	.02	.83	.02	.3	.2	1.1	1.1
01401600 BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)										
JUN 1997										
09...	12	142	127	.01	1.6	<.02	.4	.2	1.9	1.7
01408500 TOMS RIVER NEAR TOMS RIVER NJ (LAT 39 59 10N LONG 074 13 29W)										
JUN 1997										
09...	4.1	59	44	<.01	.48	.17	.5	.3	1.0	.76
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)										
JUN 1997										
16...	5.7	45	31	<.01	.44	.05	.4	.3	.81	.71
16...	*6.0*	*45*	*31*	*<.01*	*.44*	*.06*	*.4*	*.3*	*.83*	*.72*

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DATE	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
01390815 HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)										
JUN 1997										
09...	.03	.03	.03	51	92	48	2.8	.7	4	.12
01391500 SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)										
JUN 1997										
09...	*--*	*--*	*--*	*--*	*--*	*--*	*.3*	*.7*	*--*	*--*
09...	*<.01*	*<.01*	*<.01*	*6.0*	*<3*	*<1*	*--*	*--*	*--*	*--*
09...	.99	.82	.77	110	52	100	3.4	.3	7	1.1
01393400 ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)										
JUN 1997										
10...	.11	.06	.07	72	86	100	2.9	1.1	3	.07
01394500 RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)										
JUN 1997										
10...	.07	.01	.02	77	71	120	2.2	.4	5	.18
01396535 SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)										
JUN 1997										
17...	.05	.02	.03	23	93	16	2.2	.3	8	1.3
01396588 SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)										
JUN 1997										
17...	.02	<.01	.02	12	34	15	1.7	.2	9	.39
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)										
JUN 1997										
17...	.01	<.01	<.01	17	24	9	1.2	.2	2	.04
01397295 SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)										
JUN 1997										
17...	.04	<.01	<.01	24	66	13	3.2	.5	6	2.6
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)										
JUN 1997										
11...	.04	<.01	.02	27	140	7	4.4	.5	7	.69
01399780 LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)										
JUN 1997										
11...	.07	.04	.05	35	100	20	4.2	.4	7	1.4
01401600 BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)										
JUN 1997										
09...	.09	.07	.08	44	95	10	2.3	.3	4	.08
01408500 TOMS RIVER NEAR TOMS RIVER NJ (LAT 39 59 10N LONG 074 13 29W)										
JUN 1997										
09...	<.01	<.01	<.01	21	610	33	6.9	1.0	5	2.5
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)										
JUN 1997										
16...	<.01	<.01	.01	35	620	10	6.7	.8	6	2.5
16...	*<.01*	*<.01*	*<.01*	*39.0*	*580*	*11*	*6.1*	*.8*	*6*	*2.9*

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DATE	TIME	SAMPLE TYPE	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)
01390815	HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)							
JUN 1997								
09...	1330	ENVIRONMENTAL	<.002	<.002	.008	E.0047	<.001	<.002
01391500	SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)							
JUN 1997								
09...	*1020*	*FIELD BLANK*	*<.002*	*<.002*	*<.001*	*<.002*	*<.001*	*<.002*
09...	1050	ENVIRONMENTAL	<.002	<.002	.006	<.002	<.001	<.002
01393400	ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)							
JUN 1997								
10...	0940	ENVIRONMENTAL	<.002	<.002	.024	E.0033	<.001	<.002
01394500	RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)							
JUN 1997								
10...	1050	ENVIRONMENTAL	<.002	<.002	.011	E.0027	<.001	E.0024
01396535	SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)							
JUN 1997								
17...	0810	ENVIRONMENTAL	<.002	<.002	.041	E.0272	<.001	<.002
01396588	SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)							
JUN 1997								
17...	0850	ENVIRONMENTAL	<.002	E.0019	.034	E.0260	<.001	<.002
01396660	MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)							
JUN 1997								
17...	1020	ENVIRONMENTAL	<.002	<.002	.013	E.0142	<.001	<.002
01397295	SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)							
JUN 1997								
17...	1130	ENVIRONMENTAL	<.002	.004	.061	E.0206	<.001	<.002
01399500	LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)							
JUN 1997								
11...	1320	ENVIRONMENTAL	<.002	<.002	.014	E.0067	<.001	<.002
01399780	LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)							
JUN 1997								
11...	1430	ENVIRONMENTAL	<.002	<.002	.028	E.0122	<.001	<.002
01401600	BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)							
JUN 1997								
09...	1520	ENVIRONMENTAL	.253	<.002	.552	E.0507	<.001	<.002
01408500	TOMS RIVER NEAR TOMS RIVER NJ (LAT 39 59 10N LONG 074 13 29W)							
JUN 1997								
09...	0930	ENVIRONMENTAL	<.002	<.002	<.001	E.0020	<.001	<.002
01411110	GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)							
JUN 1997								
16...	1210	ENVIRONMENTAL	<.002	E.0027	.004	<.002	<.001	<.002
16...	*1211*	*SPLIT REPLICATE*	*<.002*	*<.002*	*E.0036*	*<.002*	*<.001*	*<.002*

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DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
01390815 HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)										
JUN 1997										
09...	<.003	<.003	.005	<.004	E.0008	<.002	<.001	<.003	<.002	E.0030
01391500 SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)										
JUN 1997										
09...	*<.003*	*<.003*	*<.004*	*<.004*	*<.002*	*<.002*	*<.001*	*<.003*	*<.002*	*<.005*
09...	E.0118	<.003	.005	<.004	<.002	.074	<.001	<.003	<.002	<.005
01393400 ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)										
JUN 1997										
10...	<.003	<.003	.007	<.004	<.002	.013	<.001	<.003	<.002	<.005
01394500 RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)										
JUN 1997										
10...	E.0441	<.003	.006	<.004	<.002	.018	<.001	<.003	<.002	<.005
01396535 SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)										
JUN 1997										
17...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01396588 SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)										
JUN 1997										
17...	<.003	<.003	<.004	<.004	E.0013	<.002	<.001	<.003	<.002	<.005
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)										
JUN 1997										
17...	E.0641	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01397295 SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)										
JUN 1997										
17...	<.003	<.003	<.004	.005	<.002	<.002	<.001	<.003	<.002	<.005
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)										
JUN 1997										
11...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01399780 LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)										
JUN 1997										
11...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01401600 BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)										
JUN 1997										
09...	<.003	<.003	<.004	.422	<.002	<.002	<.001	<.003	<.002	.005
01408500 TOMS RIVER NEAR TOMS RIVER NJ (LAT 39 59 10N LONG 074 13 29W)										
JUN 1997										
09...	<.003	<.003	.007	<.004	.006	<.002	<.001	<.003	<.002	.011
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)										
JUN 1997										
16...	E.0063	<.003	<.004	<.004	<.002	.006	<.001	<.003	<.002	<.005
16...	*E.0064*	*<.003*	*<.004*	*<.004*	*<.002*	*.008*	*<.001*	*<.003*	*<.002*	*<.005*

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DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
01390815 HOHOKUS BK DS W CRESCENT AVE AT ALLENDALE NJ (LAT 41 01 32N LONG 074 08 14W)										
JUN 1997										
09...	.012	<.004	<.003	<.004	<.004	E.0074	.045	<.010	<.007	E.0030
01391500 SADDLE RIVER AT LODI NJ (LAT 40 53 25N LONG 074 04 51W)										
JUN 1997										
09...	*<.002*	*<.004*	*<.003*	*<.004*	*<.004*	*<.018*	*<.005*	*<.010*	*<.007*	*<.002*
09...	E.0032	<.004	<.003	<.004	<.004	E.0123	.008	<.010	<.007	E.0022
01393400 ELIZABETH RIVER AT HILLSIDE NJ (LAT 40 41 19N LONG 074 14 16W)										
JUN 1997										
10...	.007	<.004	<.003	<.004	<.004	E.0159	.008	<.010	<.007	<.002
01394500 RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11N LONG 074 18 44W)										
JUN 1997										
10...	E.0032	<.004	<.003	<.004	<.004	.020	.008	<.010	<.007	E.0030
01396535 SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49N LONG 074 53 52W)										
JUN 1997										
17...	E.0038	<.004	<.003	<.004	<.004	E.0084	.007	<.010	<.007	<.002
01396588 SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41N LONG 074 55 06W)										
JUN 1997										
17...	.009	<.004	<.003	<.004	<.004	E.0059	E.0034	<.010	<.007	<.002
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL NJ (LAT 40 38 51N LONG 074 58 09W)										
JUN 1997										
17...	E.0023	<.004	<.003	<.004	<.004	E.0043	E.0025	<.010	<.007	<.002
01397295 SB RARITAN R US RT 523 AT DARTS MILLS NJ (LAT 40 32 16N LONG 074 50 16W)										
JUN 1997										
17...	.017	<.004	<.003	<.004	<.004	E.0147	.007	<.010	<.007	<.002
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE NJ (LAT 40 43 39N LONG 074 43 50W)										
JUN 1997										
11...	.005	<.004	<.003	<.004	<.004	E.0046	E.0025	<.010	E.0021	<.002
01399780 LAMINGTON R AT BURNT MILLS NJ (LAT 40 38 04N LONG 074 41 13W)										
JUN 1997										
11...	.012	<.004	<.003	E.0032	<.004	E.0102	E.0036	<.010	<.007	<.002
01401600 BEDEN BROOK NR ROCKY HILL NJ (LAT 40 24 52N LONG 074 39 02W)										
JUN 1997										
09...	.170	<.004	<.003	<.004	<.004	<.018	.009	<.010	<.007	<.002
01408500 TOMS RIVER NEAR TOMS RIVER NJ (LAT 39 59 10N LONG 074 13 29W)										
JUN 1997										
09...	.005	<.004	<.003	<.004	<.004	<.018	<.005	.041	<.007	<.002
01411110 GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50N LONG 074 46 47W)										
JUN 1997										
16...	.009	<.004	<.003	<.004	<.004	E.0052	<.005	<.010	E.0361	<.002
16...	*.008*	*<.004*	*<.003*	*<.004*	*<.004*	*E.0057*	*E.0034*	*<.010*	*E.0346*	*<.002*

Long Island-New Jersey National Water Quality Assessment Program Surface-Water Pesticide Synoptic Sampling, June 9-18, 1997

STATION	DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
01411500	MAURICE RIVER AT NORMA NJ (LAT 39 29 42N LONG 075 04 38W)										
	JUN 1997										
	18...	0850	ENVIRONMENTAL	122	87	6.5	20.0	20.5	758	7.0	79
01411650	MUDDY RUN NEAR ELMER NJ (LAT 39 36 48N LONG 075 11 21W)										
	JUN 1997										
	18...	1250	ENVIRONMENTAL	2.2	220	6.1	21.5	17.5	755	7.7	81
01411790	PARVIN BRANCH AT S. ORCHARD RD AT VINELAND NJ (LAT 39 27 37N LONG 075 03 18W)										
	JUN 1997										
	18...	0950	ENVIRONMENTAL	2.5	210	6.6	22.5	18.0	758	5.1	54
01412800	COHANSEY RIVER AT SEELEY NJ (LAT 39 28 21N LONG 075 15 21W)										
	JUN 1997										
	18...	1120	ENVIRONMENTAL	22	220	6.7	22.5	20.5	757	7.0	78
01440010	FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)										
	JUN 1997										
	12...	1440	ENVIRONMENTAL	40	220	8.1	28.0	20.5	745	9.1	103
01443290	PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)										
	JUN 1997										
	12...	1100	ENVIRONMENTAL	19	660	7.9	24.0	19.0	741	8.3	93
01456600	MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)										
	JUN 1997										
	17...	0920	ENVIRONMENTAL	118	410	8.0	16.0	16.5	751	9.1	95
01464515	DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)										
	JUN 1997										
	09...	1130	ENVIRONMENTAL	25	180	6.8	21.0	18.0	764	8.2	86
01467329	SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)										
	JUN 1997										
	16...	0830	ENVIRONMENTAL	23	160	7.0	15.0	18.5	762	7.1	76
01475000	MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)										
	JUN 1997										
	16...	0910	ENVIRONMENTAL	8.4	150	7.1	18.0	19.0	760	8.5	92

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	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
01411500	MAURICE RIVER AT NORMA NJ (LAT 39 29 42N LONG 075 04 38W)											
	JUN 1997											
	18...	20	4.2	2.3	6.1	2.1	9.3	7.6	9.0	6.8	9.6	<.1
01411650	MUDDY RUN NEAR ELMER NJ (LAT 39 36 48N LONG 075 11 21W)											
	JUN 1997											
	18...	67	14	7.7	8.1	3.2	11	9.0	9.3	25	21	<.1
01411790	PARVIN BRANCH AT S. ORCHARD RD AT VINELAND NJ (LAT 39 27 37N LONG 075 03 18W)											
	JUN 1997											
	18...	56	14	5.2	11	4.6	23	19	21	12	20	<.1
01412800	COHANSEY RIVER AT SEELEY NJ (LAT 39 28 21N LONG 075 15 21W)											
	JUN 1997											
	18...	60	12	7.3	11	4.7	25	21	20	21	23	<.1
01440010	FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)											
	JUN 1997											
	12...	84	24	5.6	9.5	.5	83	68	72	14	15	<.1
01443290	PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)											
	JUN 1997											
	12...	230	56	22	37	1.9	240	200	199	28	68	.1
01456600	MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)											
	JUN 1997											
	17...	160	34	18	20	1.5	140	120	120	16	41	<.1
01464515	DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)											
	JUN 1997											
	09...	51	12	5.1	8.4	2.8	31	25	20	17	20	.2
01467329	SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)											
	JUN 1997											
	16...	38	11	2.8	12	2.5	27	23	24	12	19	<.1
01475000	MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)											
	JUN 1997											
	16...	44	9.9	4.6	9.0	2.4	28	23	25	16	15	<.1

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DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
01411500 MAURICE RIVER AT NORMA NJ (LAT 39 29 42N LONG 075 04 38W)										
JUN 1997										
18...	5.3	60	46	<.01	.95	.05	.4	.4	1.3	1.3
01411650 MUDDY RUN NEAR ELMER NJ (LAT 39 36 48N LONG 075 11 21W)										
JUN 1997										
18...	8.3	125	93	<.01	.08	<.02	.2	.2	.27	.30
01411790 PARVIN BRANCH AT S. ORCHARD RD AT VINELAND NJ (LAT 39 27 37N LONG 075 03 18W)										
JUN 1997										
18...	8.2	129	96	.03	2.3	.18	.4	.3	2.6	2.6
01412800 COHANSEY RIVER AT SEELEY NJ (LAT 39 28 21N LONG 075 15 21W)										
JUN 1997										
18...	6.0	122	109	.03	2.3	.13	.6	.3	2.9	2.6
01440010 FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)										
JUN 1997										
12...	2.4	123	113	<.01	.13	<.02	.2	.2	.29	.29
01443290 PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)										
JUN 1997										
12...	7.4	367	345	.04	1.7	.03	.4	.3	2.1	1.9
01456600 MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)										
JUN 1997										
17...	8.8	230	217	.01	1.8	<.02	.3	.1	2.1	1.9
01464515 DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)										
JUN 1997										
09...	7.5	109	94	.03	1.0	.71	1.6	1.2	2.6	2.1
01467329 SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)										
JUN 1997										
16...	6.7	95	84	.06	1.2	.15	.5	.3	1.7	1.6
01475000 MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)										
JUN 1997										
16...	5.8	90	82	.02	1.1	.04	.3	.2	1.4	1.3

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	DATE	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
01411500	MAURICE RIVER AT NORMA NJ (LAT 39 29 42N LONG 075 04 38W)										
	JUN 1997										
	18...	.07	.04	.04	32	460	22	5.7	.6	6	1.9
01411650	MUDDY RUN NEAR ELMER NJ (LAT 39 36 48N LONG 075 11 21W)										
	JUN 1997										
	18...	<.01	.02	<.01	15	30	46	1.6	.2	2	.01
01411790	PARVIN BRANCH AT S. ORCHARD RD AT VINELAND NJ (LAT 39 27 37N LONG 075 03 18W)										
	JUN 1997										
	18...	.01	.02	<.01	31	96	82	3.4	.5	7	.05
01412800	COHANSEY RIVER AT SEELEY NJ (LAT 39 28 21N LONG 075 15 21W)										
	JUN 1997										
	18...	.13	<.01	<.01	22	54	48	3.1	.2	6	.37
01440010	FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)										
	JUN 1997										
	12...	<.01	<.01	<.01	11	63	8	1.9	.2	3	.27
01443290	PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)										
	JUN 1997										
	12...	.02	.01	.03	34	69	29	6.0	.5	6	.32
01456600	MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)										
	JUN 1997										
	17...	.03	<.01	<.01	27	38	8	2.3	.5	6	2.0
01464515	DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)										
	JUN 1997										
	09...	.22	.03	.04	32	300	79	3.4	2.3	8	.56
01467329	SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)										
	JUN 1997										
	16...	.04	<.01	.02	74	380	42	3.3	.7	15	.92
01475000	MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)										
	JUN 1997										
	16...	<.01	<.01	<.01	34	340	28	2.9	.3	5	.12

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DATE	TIME	SAMPLE TYPE	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)
01411500	MAURICE RIVER AT NORMA NJ (LAT 39 29 42N LONG 075 04 38W)							
JUN 1997								
18...	0850	ENVIRONMENTAL	<.002	.005	.009	E.0034	<.001	<.002
01411650	MUDDY RUN NEAR ELMER NJ (LAT 39 36 48N LONG 075 11 21W)							
JUN 1997								
18...	1250	ENVIRONMENTAL	<.002	.005	.018	E.0232	<.001	<.002
01411790	PARVIN BRANCH AT S. ORCHARD RD AT VINELAND NJ (LAT 39 27 37N LONG 075 03 18W)							
JUN 1997								
18...	0950	ENVIRONMENTAL	<.002	<.002	.005	E.0011	<.001	<.002
01412800	COHANSEY RIVER AT SEELEY NJ (LAT 39 28 21N LONG 075 15 21W)							
JUN 1997								
18...	1120	ENVIRONMENTAL	<.002	.020	.032	E.0154	<.001	<.002
01440010	FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)							
JUN 1997								
12...	1440	ENVIRONMENTAL	<.002	<.002	E.0026	E.0011	<.001	<.002
01443290	PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)							
JUN 1997								
12...	1100	ENVIRONMENTAL	<.002	<.002	.011	E.0054	<.001	<.002
01456600	MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)							
JUN 1997								
17...	0920	ENVIRONMENTAL	<.002	E.0026	.051	E.0354	<.001	<.002
01464515	DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)							
JUN 1997								
09...	1130	ENVIRONMENTAL	.079	.089	.898	E.0473	<.001	<.002
01467329	SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)							
JUN 1997								
16...	0830	ENVIRONMENTAL	<.002	.005	.009	E.0022	<.001	<.002
01475000	MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)							
JUN 1997								
16...	0910	ENVIRONMENTAL	<.002	.006	.018	E.0036	E.0101	<.002

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	DATE	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)
01411500	MAURICE RIVER AT NORMA NJ (LAT 39 29 42N LONG 075 04 38W)										
	JUN 1997										
	18...	E.0026	E.0067	<.004	<.004	E.0012	<.002	<.001	<.003	<.002	<.005
01411650	MUDDY RUN NEAR ELMER NJ (LAT 39 36 48N LONG 075 11 21W)										
	JUN 1997										
	18...	<.003	E.0072	<.004	.006	E.0006	<.002	<.001	<.003	<.002	<.005
01411790	PARVIN BRANCH AT S. ORCHARD RD AT VINELAND NJ (LAT 39 27 37N LONG 075 03 18W)										
	JUN 1997										
	18...	E.0973	<.003	.004	<.004	.287	.007	<.001	<.003	.040	<.005
01412800	COHANSEY RIVER AT SEELEY NJ (LAT 39 28 21N LONG 075 15 21W)										
	JUN 1997										
	18...	E.0472	E.0115	<.004	.007	E.0036	E.0040	<.001	<.003	<.002	<.005
01440010	FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)										
	JUN 1997										
	12...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01443290	PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)										
	JUN 1997										
	12...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01456600	MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)										
	JUN 1997										
	17...	<.003	<.003	<.004	<.004	<.002	<.002	<.001	<.003	<.002	<.005
01464515	DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)										
	JUN 1997										
	09...	E.0906	E.1320	<.030	.622	.133	.005	<.001	<.003	.048	.008
01467329	SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)										
	JUN 1997										
	16...	E.0058	<.003	<.004	<.004	<.002	.009	<.001	<.003	<.002	<.005
01475000	MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)										
	JUN 1997										
	16...	E.0052	E.0060	.005	<.004	.058	.035	<.001	<.003	<.002	<.005

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DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
01411500 MAURICE RIVER AT NORMA NJ (LAT 39 29 42N LONG 075 04 38W)										
JUN 1997										
18...	.018	<.004	<.003	<.004	<.004	E.0099	E.0034	E.0034	E.0176	<.002
01411650 MUDDY RUN NEAR ELMER NJ (LAT 39 36 48N LONG 075 11 21W)										
JUN 1997										
18...	.110	<.004	<.003	<.004	<.004	E.0068	<.005	<.010	<.007	<.002
01411790 PARVIN BRANCH AT S. ORCHARD RD AT VINELAND NJ (LAT 39 27 37N LONG 075 03 18W)										
JUN 1997										
18...	.075	<.004	.009	<.004	<.004	.059	E.0045	<.010	E.0191	<.002
01412800 COHANSEY RIVER AT SEELEY NJ (LAT 39 28 21N LONG 075 15 21W)										
JUN 1997										
18...	.115	<.004	<.003	<.004	<.004	E.0107	.051	<.010	<.007	<.002
01440010 FLAT BROOK AT FLATBROOKVILLE NJ (LAT 41 05 56N LONG 074 57 58W)										
JUN 1997										
12...	E.0018	<.004	<.003	<.004	<.004	<.018	<.005	<.010	<.007	<.002
01443290 PAULINS KILL US RT 206 AT LAFAYETTE NJ (LAT 41 05 56N LONG 074 41 28W)										
JUN 1997										
12...	.005	<.004	<.003	<.004	<.004	.022	<.005	<.010	<.007	<.002
01456600 MUSCONETCONG RIVER AT HAMPTON N. J. (LAT 40 42 42N LONG 074 58 06W)										
JUN 1997										
17...	.008	<.004	<.003	<.004	<.004	.021	.018	E.0036	<.007	<.002
01464515 DOCTORS CREEK AT ALLENTOWN NJ (LAT 40 10 37N LONG 074 35 57W)										
JUN 1997										
09...	1.26	.049	<.003	<.004	<.004	<.018	.043	<.010	<.007	<.002
01467329 SB BIG TIMBER C AT BLACKWOOD TERRACE NJ (LAT 39 48 05N LONG 075 04 27W)										
JUN 1997										
16...	.027	.008	<.003	<.004	<.004	.026	.007	<.010	<.007	<.002
01475000 MANTUA CREEK AT PITMAN NJ (LAT 39 44 14N LONG 075 06 53W)										
JUN 1997										
16...	.032	<.004	<.003	<.004	<.004	.028	.010	<.010	E.0606	<.002

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^{0}	kilometer
	Area	
acre	4.047×10^{3}	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi^2)	2.590×10^{0}	square kilometer
	Volume	
gallon (gal)	3.785×10^{0}	liter
	3.785×10^{0}	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^{3}	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^{3}	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second
	2.832×10^{1}	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^{1}	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
	Mass	
ton (short)	9.072×10^{-1}	megagram or metric ton

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

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