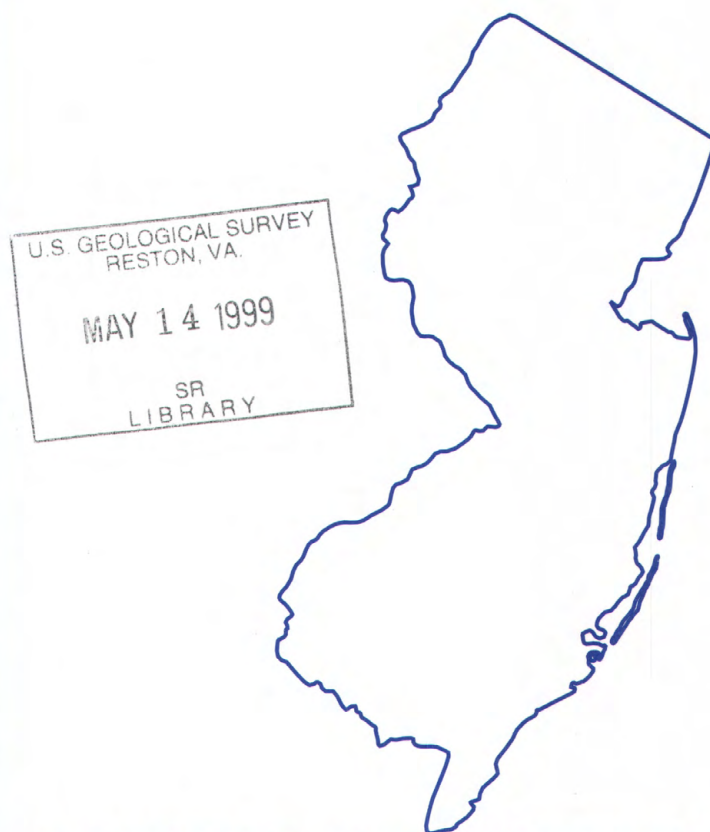


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Water Resources Data New Jersey Water Year 1996

Volume 1. Surface-Water Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-96-1
Prepared in cooperation with the New Jersey Department
of Environmental Protection and with other agencies

CALENDAR FOR WATER YEAR 1996

1995

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	11	12	13	14	15	16	17	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
														31						

1996

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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APRIL							MAY							JUNE						
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21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
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JULY							AUGUST							SEPTEMBER						
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7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					



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 1996". 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://wwwnj.er.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 in various machine-readable formats on 5-1/4 inch and 3-1/2 inch floppy disk. When ordering, refer to U.S. Geological Survey Water-Data Report NJ-96-1 (for Volume 1) and NJ-96-2 (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, Chief
Hydrologic Data Assessment Program



Water Resources Data New Jersey Water Year 1996

Volume 1. Surface-Water Data

by T.J. Reed, G.L. Centinaro, M.J. DeLuca, J.T. Hutchinson, and J. Scudder



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-96-1
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

Gordon P. Eaton, *Director*

For information on the water program in New Jersey write to

District Chief, Water Resources Division
U.S. Geological Survey
Mountain View Office Park
810 Bear Tavern Road, Suite 206
West Trenton, New Jersey 08628

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 stream-flow, 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 Geological Survey policy and established guidelines. The following individuals contributed significantly to the completion of the report.

Jacob Gibbs

Robert D. Schopp

M.D. Morgan word processed the text of the report with assistance from K.L. Laubach and I.C. Heerwagen. G.L. Simpson and D.K. Sun drafted the illustrations.

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

M.A. Ayers
K.M. Beaulieu
G.A. Brown
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V. Corcino
J.F. Dudek
B. Gray
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D.S. Kauffman
R.C. McTigue
A.K. O'Brien
R.G. Reiser

G.C. Steckroat
K. VanNest

Some water-quality samples were collected by the following N.J. Department of Environmental Protection personnel:

A.A. Altieri
R.F. Fenton

R. Maruska
J.R. Specht

J.R. Spiritosanto

Some water quality samples 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, Acting Associate District Chief; Eric Evenson, District Chief, New Jersey; and William J. Carswell, Jr., Regional Hydrologist, Northeastern Region.

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13. ABSTRACT (Maximum 200 words) Water-resources data for the 1996 water year for New Jersey are presented in two volumes, and consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. Volume 1 contains discharge records for 90 gaging stations; tide summaries for 9 stations; stage-only at 15 gaging stations; stage and contents for 34 lakes and reservoirs; and water quality for 84 surface-water sites. Also included are data for 54 crest-stage partial-record stations, 12 tidal crest-stage gages, and 83 low-flow partial-record stations. Locations of these sites are shown on figures 9 and 10. Additional water data were collected at various sites not involved in the systematic data-collection program. Miscellaneous data were collected at 51 measuring sites. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal, State, and local agencies in New Jersey. Data collected for the LINJ National Water Quality Assessment Program is presented for 7 stream sites.				
14. SUBJECT TERMS *New Jersey, *Hydrologic data, *Surface water, *Streamflow, *Water quality, flow rate, gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temper- atures, Sampling sites, and Water analyses				15. NUMBER OF PAGES 586
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SURFACE WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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

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Musconetcong River at Beattystown (cms)	01456200	425
Musconetcong River near Bloomsbury (dcms)	01457000	427
Musconetcong River at Riegelsville (cms)	01457400	431
Delaware River at Riegelsville (cms)	01457500	433
Delaware and Raritan Canal at Port Mercer (d)	01460440	435
Delaware River at Lumberville, PA (cms)	01461000	437
Delaware River at Trenton (dcmts)	01463500	439
Assunpink Creek near Clarksville (dcms)	01463620	455
Assunpink Creek at Trenton (dcms)	01464000	459
Crosswicks Creek at Extonville (dcms)	01464500	463
Doctors Creek at Allentown (cms)	01464515	467
Delaware River at Burlington (e)	01464598	469
South Branch Rancocas Creek at Vincentown (cms)	01465850	470
North Branch Rancocas Creek:		
Greenwood Branch:		
McDonalds Branch in Lebanon State Forest (dcms)	01466500	472
North Branch Rancocas Creek at Pemberton (dcms)	01467000	476
Pennsauken Creek:		
North Branch Pennsauken Creek near Moorestown (cms)	01467069	481
South Branch Pennsauken Creek at Cherry Hill (dcms)	01467081	483
Cooper River at Haddonfield (dcms)	01467150	487
Big Timber Creek:		
South Branch Big Timber Creek at Blackwood Terrace (cms)	01467329	491
Schuylkill River at Philadelphia, PA (d)	01474500	493
Raccoon Creek near Swedesboro (dcms)	01477120	495
Oldmans Creek at Porches Mill (cms)	01477510	499
Salem River at Woodstown (cms)	01482500	501
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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
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
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
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
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
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

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

Station name	Station number	Drainage area (mi ²)	Period of record
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
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	2.16	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
Paulins Kill at Columbia, NJ	01444000	179	1908-09
Pequest River at Huntsville, NJ	01445000*	31.0	1940-62
Pequest River at Townsburly, 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., S.C., pH, D.O.	1963-74
				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., S.C.	1964-66, 1975-81
				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 Lebanon 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., D.O. pH	1969-74 1970-72 1970-74
Cooper River at Haddonfield, NJ	01467150	17.0	Temp., Sed.	1968-69
Raccoon Creek near Swedesboro, NJ	01477120	26.9	Temp. Sed.	1966-73 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 Pelletstown, 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	0.46	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	0.61	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	0.86	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	0.21	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 McCreia 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	0.53	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 (mi ²)	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	0.41	1967-73,1990-92
Bidwell Creek trib. No. 2 near Cape May Court House, NJ	01411412	0.19	1967-72
Goshen Creek at Goshen, NJ	01411418	0.33	1967-72,1990-92
Dennis Creek trib No. 2 at Dennisville, NJ	01411428	4.00	1990-92
Sluice Creek at Clermont, NJ	01411430	0.67	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 Tuttle's 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 Hurdstown, 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	12.3	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	0.52	1968-74
S. Br. Newton Creek at Haddon Heights, NJ	01467317	0.63	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, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of New Jersey each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - New Jersey."

This report series includes records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 90 gaging stations; tide summaries at 9 gaging stations; stage-only at 15 gaging stations; stage and contents at 34 lakes and reservoirs; and water quality at 100 surface-water stations. Also included are data for 54 crest-stage partial-record stations and stage-only at 12 tidal crest-stage gages. Locations of these sites are shown on figures 13 and 14. Additional water data were collected at various sites not involved in the systematic data-collection program. Discharge measurements were made at 83 low-flow partial-record stations. Miscellaneous data were collected at 51 discharge measuring sites and 14 water-quality sites. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

This series of annual reports for New Jersey began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. For the 1975 through 1989 water years, 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 the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, CO, 80225-0286.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NJ-96-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (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 Survey are:

Hackensack Meadowlands Development Commission
New Jersey Department of Environmental Protection,
Robert C. Shinn Jr., Commissioner.
New Jersey Water Supply Authority, Thomas G. Baxter,
Executive Director.
North Jersey District Water Supply Commission, William R.
Goble, Chief Engineer.
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 Morris, Herman Nadel, 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.

Assistance in the form of funds was given by the Corps of Engineers, U.S. Army, in collecting records for 12 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 from funds appropriated directly to the Geological Survey. Funding was also supplied by the following Federal Energy Regulatory Commission licensees: Jersey Central Power and Light Company, Passaic Valley Water Commission, and Independent Hydro

Developers Inc. Assistance was provided by the National Weather Service and the National Ocean Service.

The following organizations aided in collecting records:

Municipalities of Atlantic City, Jersey City, Newark, New Brunswick and Spotswood; American Cyanamid Company; Elizabethtown Water Company; Ewing-Lawrence Sewage Authority; United Water New Jersey; New Jersey-American Water Company; and Jersey Central Power and Light Company.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Precipitation and Reservoir Contents

Water year 1996 in New Jersey was characterized by a cold, wet fall and winter and a cool, wet spring and summer. In contrast to the 1995 water year, during which many drought warnings were posted, the 1996 water year was one of the wettest in recorded history. The water year began with precipitation above normal at all three index stations. In early January the "blizzard of '96" left more than 2 feet of snow throughout much of the State. In mid-January a combination of warm temperatures, rain, windy conditions, and a heavy snow pack resulted in severe flooding throughout most of the northern two-thirds of the State. Widespread flooding was reported in the Delaware and Raritan River Basins, and more moderate flooding was reported in other basins throughout the State. Precipitation generally was below normal in February but well above normal in March and April throughout much of the State. May brought drier conditions to all but shore communities near Atlantic City, where above-normal precipitation was recorded. June was a wet month, especially in the Mercer County area, where precipitation was reported to exceed 12.5 inches (347 percent of normal) due to a localized thunderstorm on June 12 that dropped more than 7 inches of rain in less than 3 hours. Throughout the summer and into the fall, precipitation remained above normal. As a result, water year 1996 was the fifth wettest year in New Jersey since 1895 (David Robinson, State Climatologist, Rutgers University, oral commun., 1997), when records began.

Water-year precipitation totals for New Jersey were all above normal, ranging from 63.7 inches, 146 percent of the 30-year reference-period (1961-90) mean, at Trenton to 50.64 inches, 126 percent of the 30-year mean, at Atlantic City. Precipitation in the Newark area was 58.07 inches, 132 percent of the 30-year mean. Figure 1 shows monthly precipitation at three National Weather Service sites compared with the 30-year means.

Combined usable contents of the 13 major water-supply reservoirs in New Jersey were 40.1 billion gallons at the end of September 1995, which is 75.9 percent of the 30-year mean (normal) contents for the end of September and 49.9 percent of capacity. Contents increased to a maximum of 80.8 billion gallons by the end of April, which is 113 percent of normal contents for the end of April, and slightly

more than 100 percent of capacity. By September 30, 1996, the contents were 67.0 billion gallons, which is 127 percent of normal contents for the end of September, and 84.4 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

Streamflow during the 1996 water year was above normal throughout the State, averaging about 140 percent of normal in the north and 120 percent of normal in the south. Streamflow at the index station for northern New Jersey (South Branch Raritan River near High Bridge) averaged 173 ft³/s for the water year; this flow is 141 percent of the 1919-96 average. Streamflow at the index station for southern New Jersey (Great Egg Harbor River at Folsom) averaged 101 ft³/s, which is 118 percent of the 1926-96 average. The observed annual mean discharge of the Delaware River at Trenton was 15,730 ft³/s, which is 135 percent of the 1913-96 average. The Delaware River is highly regulated by reservoirs and diversions. The natural flow at Trenton (adjusted for upstream storage and diversions) for the year was 157 percent of the long-term (1961-90) average. 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.

Flooding occurred throughout the State on January 19-21 as warm winds and heavy rains combined to melt the snow left by the "blizzard of '96" (January 7-8). The temperature began to rise late in the day on January 18 and reached the mid- to upper 50's by the 20th. Heavy rains on the 19th and 20th combined with the melting snow to cause the peak streamflow of the year at many gaging stations in the State. Peak discharges for selected streamflow-gaging stations in the State are listed in table 1. Other, more localized flooding occurred during the year throughout the State, but about one-half the annual peaks were recorded as a result of the January rainfall and snowmelt.

Water Quality

Below-normal streamflow in December (fig. 3) caused decreased dilution, which in turn increased concentrations of dissolved solids in streams throughout the State. Above-normal streamflow in November, May, and July (fig. 3) caused increased dilution, which in turn decreased concentrations of dissolved solids in streams throughout the State. Dissolved-solids concentrations in streams during January and February probably were elevated as a result of the dissolution of deicing compounds, applied in response to snowfall, into direct runoff. Dilution of dissolved solids generally indicates an improvement in water quality because concentrations of undesirable substances, such as trace elements, organic compounds, nutrients, bacteria, and nuisance aquatic organisms, usually are decreased.

Monthly mean specific-conductance values for the Delaware River at Trenton, a large drainage area encompass-

Table 1. Instantaneous peak discharge for water year 1996 and instantaneous peak discharge for period of record at selected sites in New Jersey

Station number	Station name	Drainage area (square miles)	Instantaneous peak discharge, water year 1996			Instantaneous peak discharge, period of record	
			Date	Cubic feet per second	Approximate recurrence interval (years)	Date	Cubic feet per second
01379000	Passaic R. near Millington	55.4	01/28	985	4	08/29/71	2,170
01380500	Rockaway R. above Reservoir at Boonton	116	01/28	2,660	4	04/05/84	5,590
01387500	Ramapo R. near Mahwah	120	11/12	4,330	4	04/05/84	15,500
01389500	Passaic R. at Little Falls	762	01/29	9,440	4	10/10/03	31,700
01396500	S. Branch Raritan R. near High Bridge	65.3	01/19	3,440	10	01/25/79	6,910
01400000	N. Branch Raritan R. near Raritan	190	01/19	23,700	75	08/28/71	28,600
01402000	Millstone R. at Blackwells Mills	258	01/20	12,600	15	08/28/71	22,200
01403060	Raritan R. below Calco Dam at Bound Brook	785	01/20	32,700	15	08/28/71	46,100
01408000	Manasquan R. at Squankum	44.0	01/20	1,420	5	09/21/38	2,940
01408500	Toms R. near Toms River	123	01/21	838	3	09/23/38	2,000
01411000	Great Egg Harbor R. at Folsom	57.1	01/21	429	4	09/03/40	1,440
01411500	Maurice R. at Norma	112	01/22	453	2	09/02/40	7,360
01438500	Delaware R. at Montague	3,480	01/20	149,000	30	08/19/55	250,000
01440000	Flat Brook near Flatbrookville	64.0	01/28	2,710	6	08/19/55	9,560
01445500	Pequest R. at Pequest	106	01/28	1,510	7	01/25/79	2,130
01463500	Delaware R. at Trenton	6,780	01/20	179,000	25	08/20/55	329,000
01464000	Assunpink Cr. at Trenton	90.6	06/13	3,230	20	07/21/75	5,450
01467000	N. Branch Rancocas Cr. at Pemberton	118	01/20	747	2	08/21/39	1,730

ing northwestern New Jersey and parts of Pennsylvania and New York, in 1996 are compared with mean monthly values for 1968-95 in figure 5. Specific-conductance values were below the long-term mean monthly values for 6 months of the year, but were within the range of the extreme historical monthly mean values. The monthly mean specific conductance was highest in September (212 $\mu\text{S}/\text{cm}$) and lowest in May (135 $\mu\text{S}/\text{cm}$).

The October monthly mean temperature of the water flowing past the continuous-monitoring station on the Delaware River at Trenton in water year 1996 was above the historical mean monthly value. The June and September monthly mean values in water year 1996 were approximately equal to the historical mean monthly values. The monthly mean values for the remainder of the 1996 water year were below the historical mean monthly values. The monthly mean of daily mean water-temperature values was highest in August (24.5 °C) and lowest in January (1.0 °C). All monthly mean water-temperature values were within the range of extreme monthly mean values (1968-95) (fig. 6).

The extreme monthly median concentrations of dissolved oxygen in the Delaware River at Trenton during the 1996 water year were within the range of the historical (1968-95) extreme monthly median values (fig. 7). The monthly median of the daily maximum concentrations was highest in February (14.1 mg/L) and the monthly median of the daily minimum concentrations was lowest in June (7.7

mg/L). The difference between the monthly median of daily maximum values and the monthly median of daily minimum values was greater in October and in May through September than in other months as a result of aquatic photosynthesis and respiration. During these months, supersaturated dissolved-oxygen concentrations are produced during daylight hours by the release of oxygen from aquatic plants and algae through photosynthesis, and below-saturation concentrations are produced nocturnally as oxygen is consumed from water by respiration of aquatic organisms.

Volatile Organic Compounds in New Jersey Streams

Sampling Summary

Few data on the presence of volatile organic compounds (VOC's) in the water of New Jersey streams were available prior to the 1996 water year, when 76 samples were collected at eight sites (fig. 8) for VOC analysis. The eight sampling sites are distributed throughout the State and cover all but the northwestern and southeastern parts. Except at station 01463500, the Delaware River at Trenton, samples were collected as part of the Long Island-New Jersey National Water-Quality Assessment program and were analyzed for VOC's. Methyl tert-butyl ether (MTBE), chloroform, and 1,1,1-trichloroethane (TCA) were the most frequently detected VOC's (fig. 9). Summary statistics were

calculated on detected concentrations only (fig. 10); the median concentrations of the three most frequently detected VOC's were MTBE, 0.36 $\mu\text{g/L}$; chloroform, 0.46 $\mu\text{g/L}$; and TCA, 0.12 $\mu\text{g/L}$.

Hackensack River Survey

A 14-site synoptic survey on the Hackensack River and its tributaries was conducted in the spring of 1994 as part of a cooperative effort by the USGS and the Hackensack Meadowlands Development Commission. Samples were analyzed for 29 VOC's. The detection frequency and median of detected concentrations of seven of the most commonly found VOC's in this study were as follows: MTBE, detected at all sites with a median concentration of 7.75 $\mu\text{g/L}$; tetrachloroethylene, detected at all sites with a median concentration of 1.3 $\mu\text{g/L}$; chloroform, detected at 93 percent of the sites with a median concentration of 1.1 $\mu\text{g/L}$; trichloroethylene, detected at 86 percent of the sites with a median concentration of 0.5 $\mu\text{g/L}$; cis-1, 2-dichloroethylene, detected at 86 percent of the sites with a median concentration of 0.65 $\mu\text{g/L}$; methylene chloride, detected at 86 percent of the sites with a median concentration of 1.35 $\mu\text{g/L}$; and total xylene, detected at 86 percent of the sites with a median concentration of 0.85 $\mu\text{g/L}$.

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. The Hydrologic Benchmark Network site published in this report is:

McDonalds Branch in Lebanon State Forest, NJ (01466500).

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 NO_x 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. NAWQA 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).

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

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

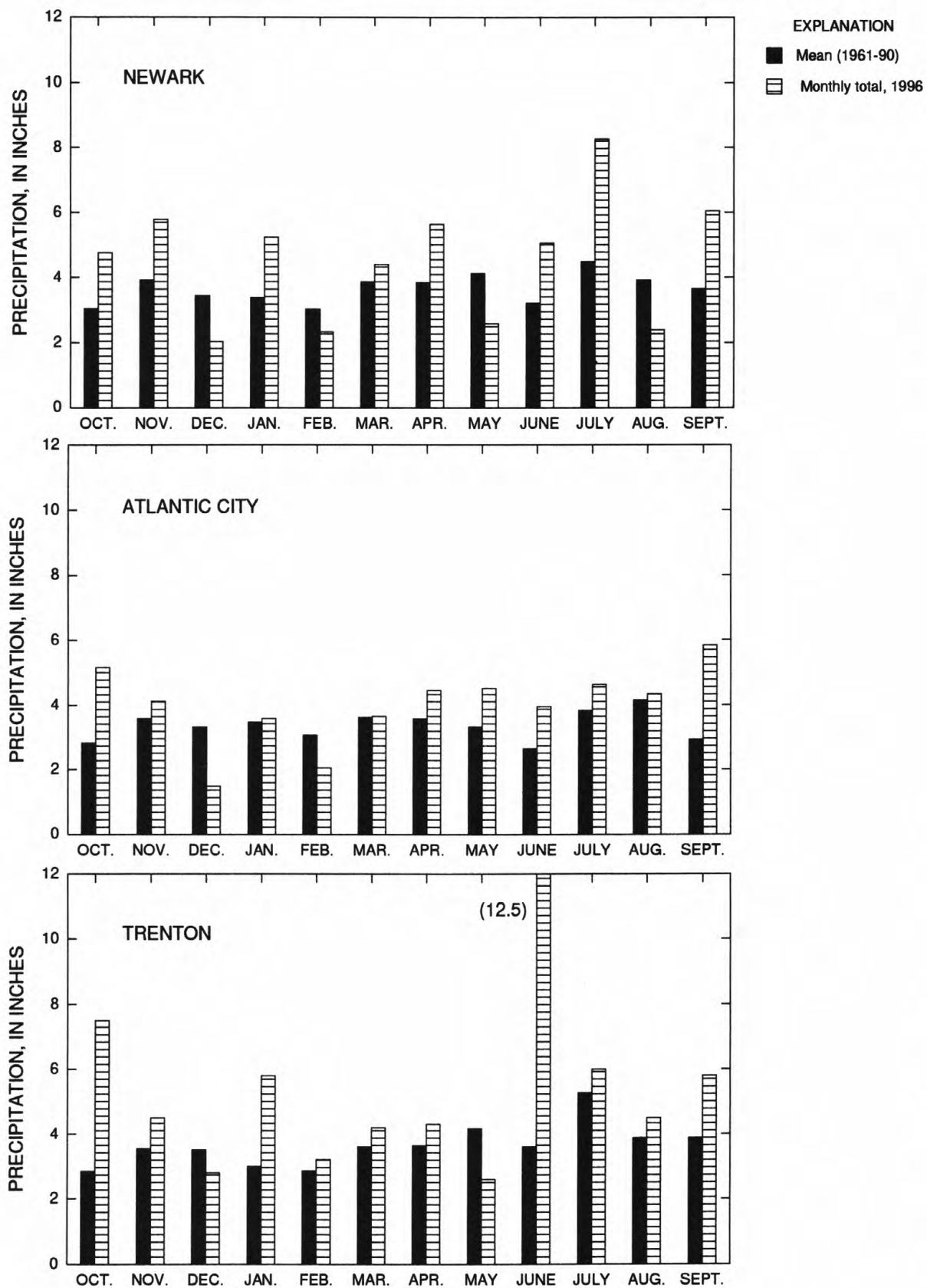
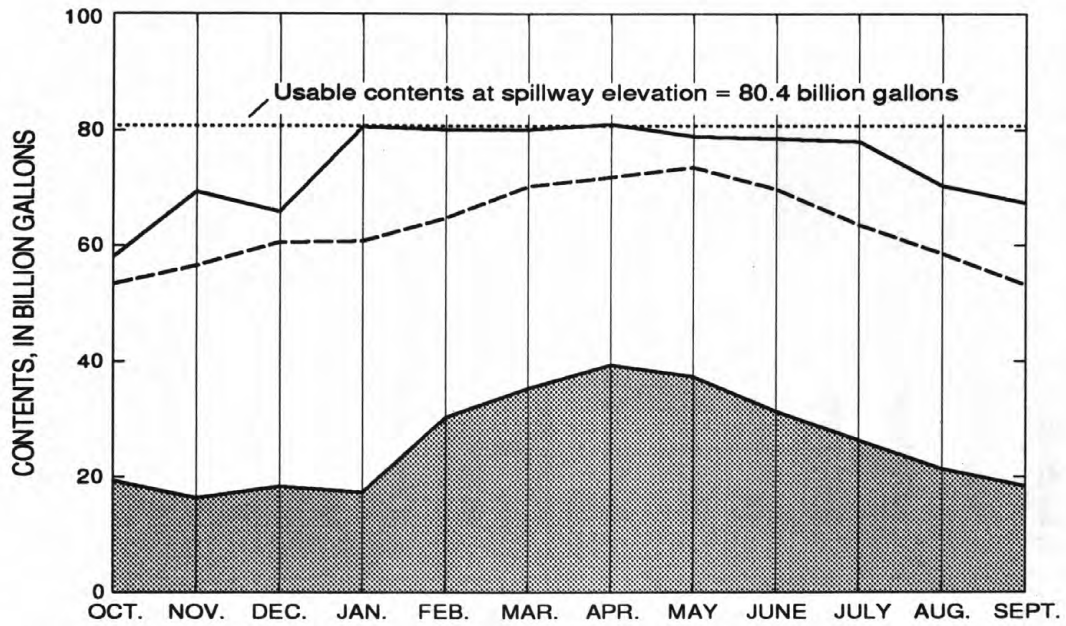





Figure 1. Monthly precipitation at three National Weather Service locations.

WATER RESOURCES DATA - NEW JERSEY, 1996



EXPLANATION

-  Shaded area indicates lowest monthly usable contents for reference period
-  Mean usable contents, 1961-90
-  Month-end usable contents, 1996 water year

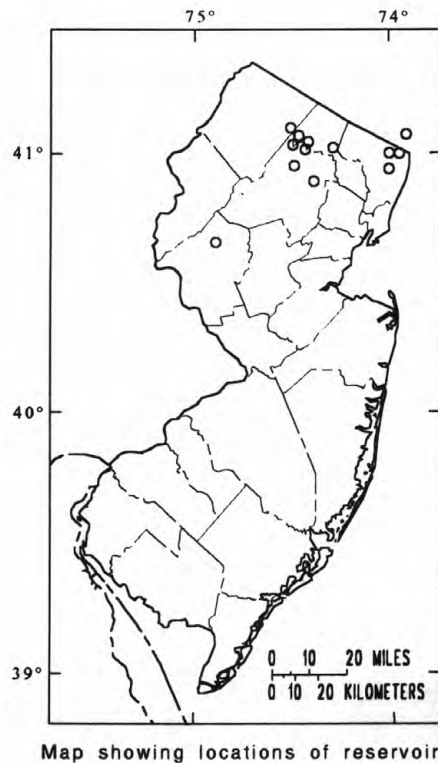
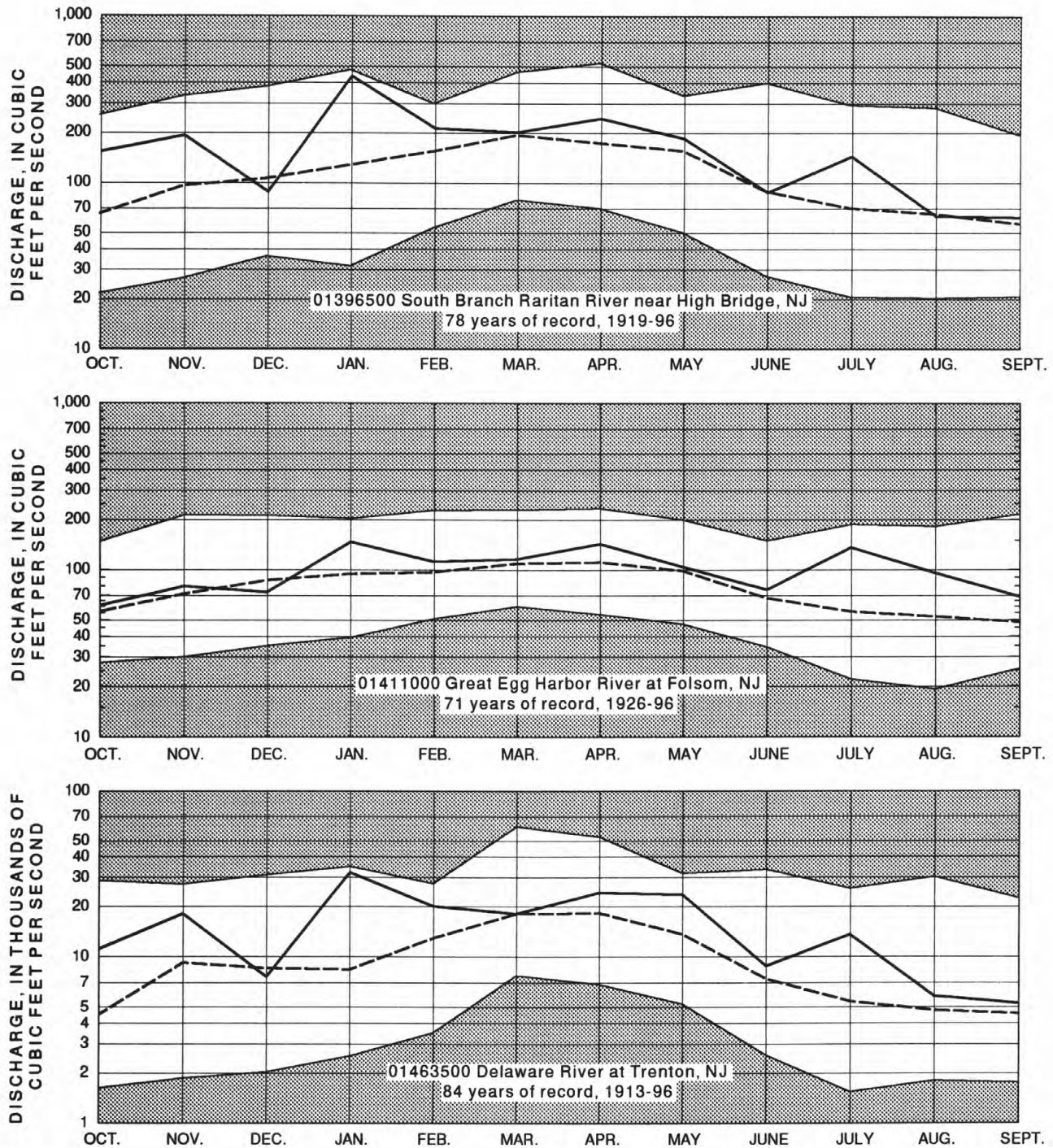


Figure 2. Combined usable contents of 13 major water-supply reservoirs.



EXPLANATION

UNSHADED AREA--Indicates range between highest and lowest mean recorded for the month, prior to 1996 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 1996 water year

Figure 3. Monthly mean discharge at index gaging stations.

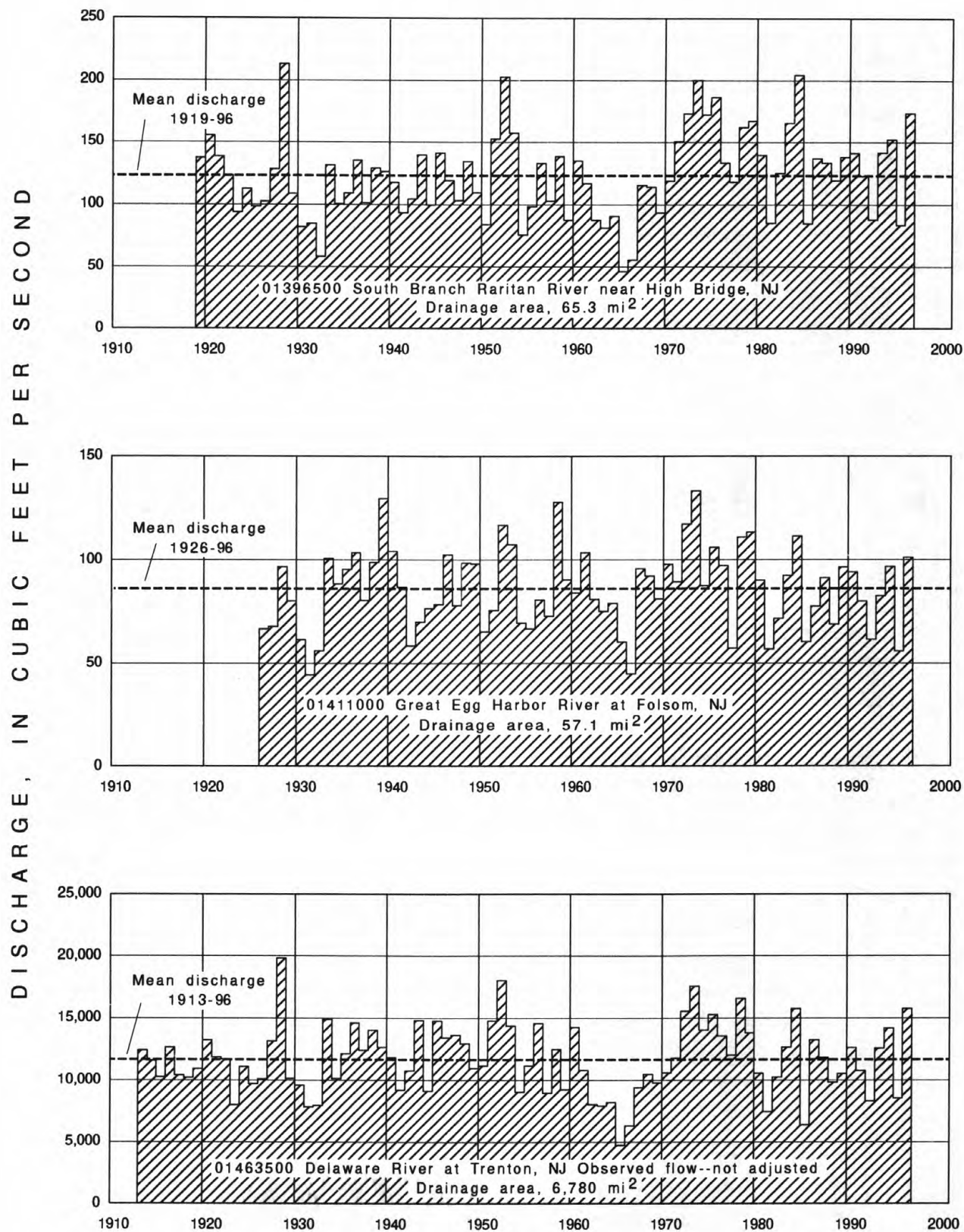


Figure 4. Annual mean discharge at index gaging stations.

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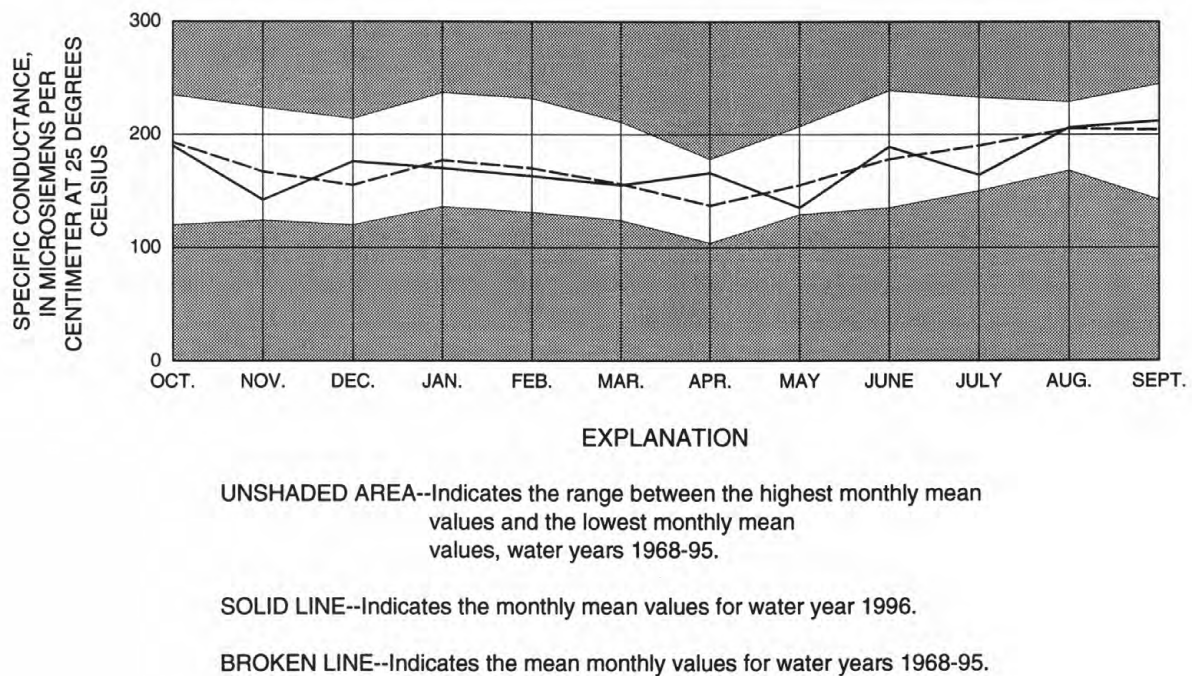


Figure 5. Monthly mean specific conductance at Delaware River at Trenton, New Jersey.

WATER RESOURCES DATA-NEW JERSEY, 1996

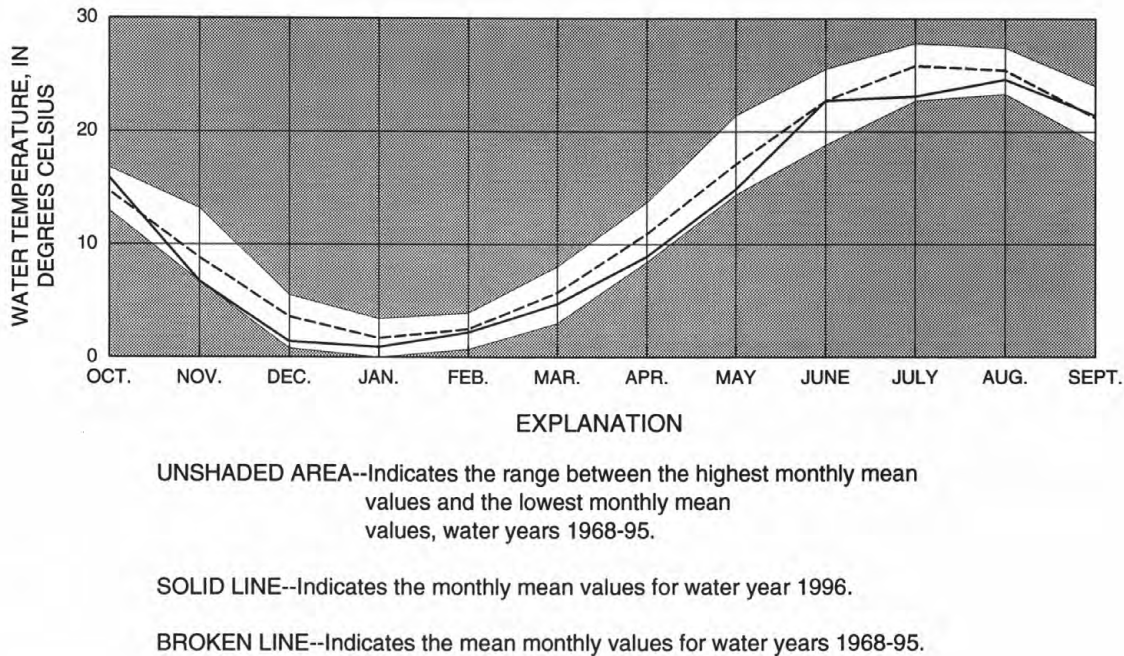


Figure 6. Monthly mean water temperature at Delaware River at Trenton, New Jersey.

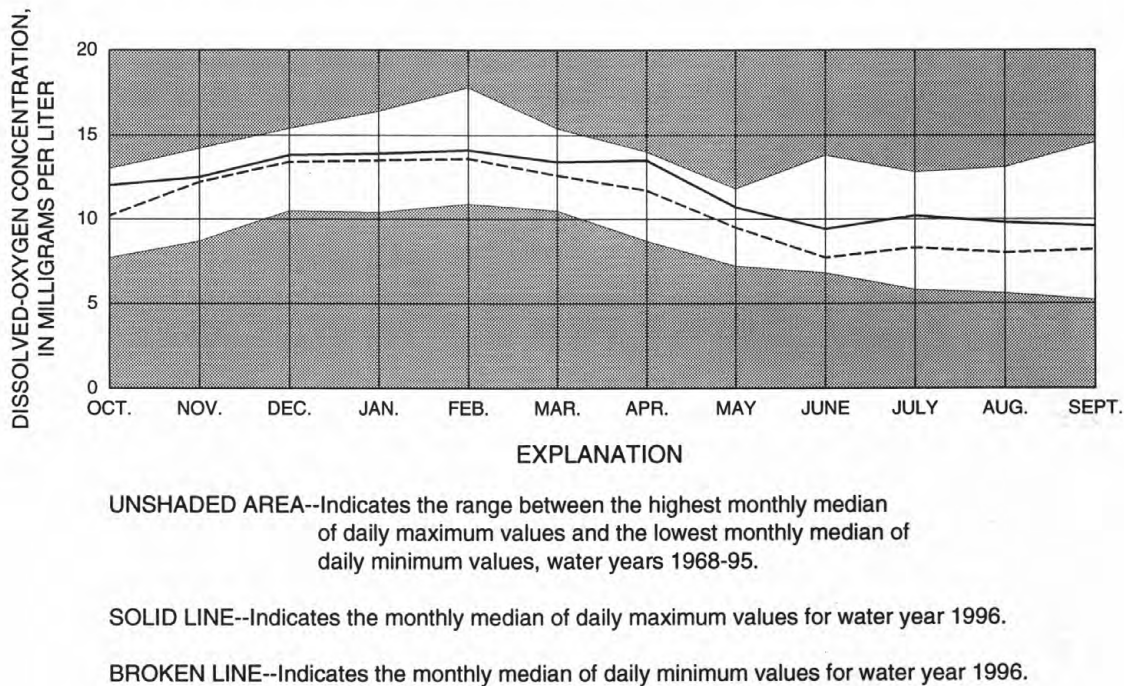


Figure 7. Monthly medians of daily maximum and minimum dissolved-oxygen concentrations at Delaware River at Trenton, New Jersey.

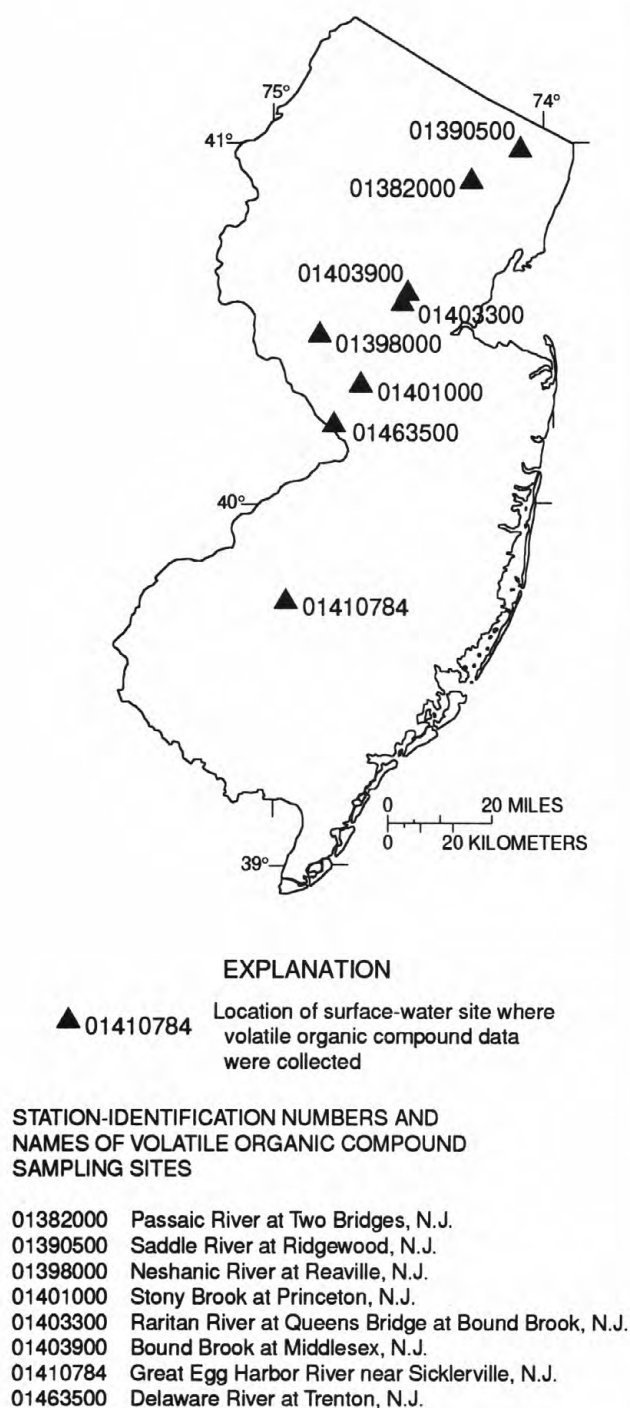


Figure 8. Map showing locations and station-identification numbers of volatile organic compound sampling sites.

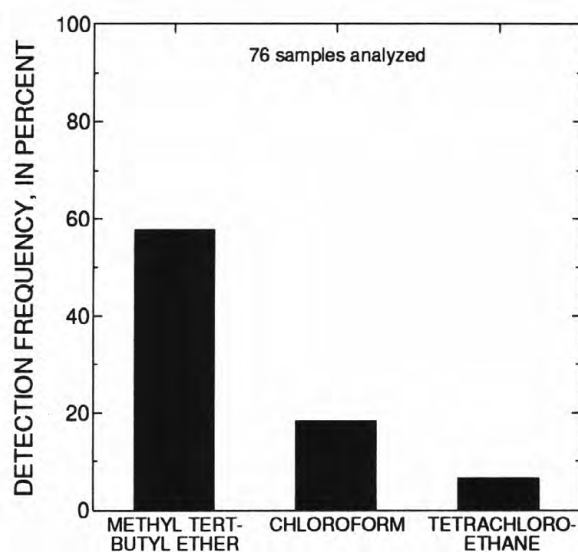


Figure 9. Detection frequency of three volatile organic compounds in eight streams in New Jersey.

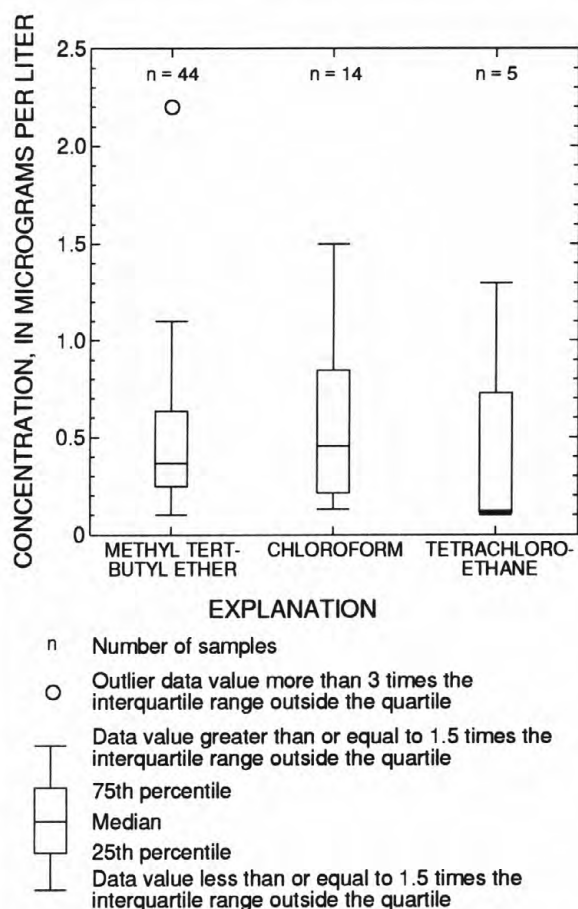


Figure 10. Statistical summary of detected concentrations of three volatile organic compounds in eight streams in New Jersey.

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 1996 water year that began October 1, 1995, and ended September 30, 1996. 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 indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned 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. (See figure below.)

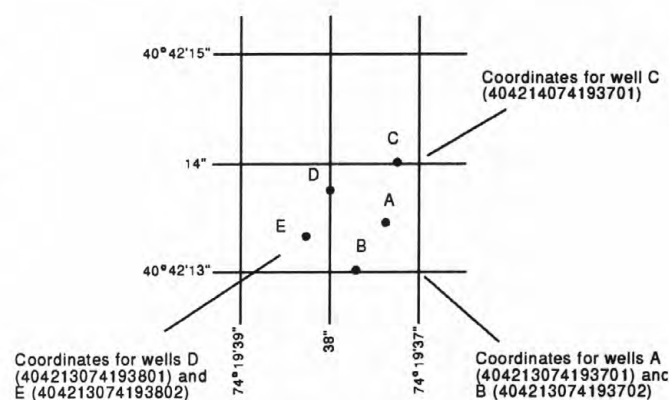


Figure 11.--System for numbering wells and miscellaneous sites (latitude and longitude)

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 par-

tial-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 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 con-

trol, 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 or 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 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

Information 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 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 Geological Survey Laboratory in Arvada, Colorado. Sediment samples are analyzed in the Geological Survey Laboratories in Iowa City, Iowa. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, 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 1996 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.

Sch. 2001	Compound Name/(Common Name)	MRL* (µg/L)
49260	Acetochlor	0.002
46342	Alachlor (Lasso)	0.002
39632	Atrazine	0.001
04040	Atrazine,Desethyl-	0.002
82686	Azinphos,Methyl- (guthion)	0.001
82673	Benfluralin (Benefin) (Balan, Bonalan)	0.002
04028	Butylate (Genate Plus, Suntan+)	0.002
82680	Carbaryl (Sevin)	0.003
82674	Carbofuran (Furandan)	0.003
38933	Chlorpyrifos	0.004
04041	Cyanazine	0.004
82682	DCPA (Dacthal)	0.002
34653	DDE,p,p-	0.006
39572	Diazinon	0.002
39381	Dieldrin	0.001
82660	Diethylalaline	0.003
82677	Disulfoton	0.017
82668	EPTC (Eptam)	0.002
82663	Ethalfuralin (Sonalan)	0.004
82672	Ethoprop (Mocap, ethoprophos)	0.003

Sch. 2001	Compound Name/(Common Name)	MRL* (µg/L)
04095	Fonofos	0.008
34253	HCH,alpha-	0.002
39341	HCH,gamma- (Lindane)	0.004
82666	Linuron (Lorex, Linex)	0.002
39532	Malathion	0.005
39415	Metolachlor (Dual)	0.002
82630	Metribuzin (Lexon, Sencor)	0.004
82671	Molinate (Ordram)	0.004
82684	Napropamide (Devrinol)	0.003
39542	Parathion, Ethyl-	0.004
82667	Parathion, Methyl- (Pennacp-M)	0.006
82669	Pebulate (Tillam)	0.004
82683	Pendimethalin (Prowl)	0.004
82687	Permethrin,cis-	0.005
82664	Phorate (Thimet)	0.002
04037	Prometon	0.018
82676	Pronamide (Kerb) (Propyzamid)	0.003
04024	Propachlor (Ramrod)	0.007
82679	Propanil (Stampede)	0.004
82685	Propargite (Omite) (alkyl sulfite)	0.013
04035	Simazine (Aquazine,Princep)	0.005
82670	Tebuthiuron (Spike)	0.010
82665	Terbacil (Sinbar)	0.007
82675	Terbufos (Counter)	0.013
82681	Thiobencarb (Bolero)	0.002
82678	Triallate (Avadex BW, Far-Go)	0.001
82661	Trifluralin (Treflin)	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 1996 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.

Sch. 2050	Compound Name/(Common Name)	MRL* (µg/L)
49315	Acifluorfen (Blazer)	0.035
49312	Aldicarb (Temik)	0.016
49313	Aldicarb Sulfone	0.016
49314	Aldicarb Sulfoxide	0.021
38711	Bentazo (Basagran)	0.014
04029	Bromacil (Bromax)	0.035
49311	Bromoxynil (Torch)	0.035
49310	Carbaryl (Sevin)	0.008

Sch. 2050	Compound Name/(Common Name)	MRL* (µg/L)
49309	Carbofuran	0.028
49308	3-hydrxy-carbofuran	0.014
49307	Chloramben (Amiben,methyl)	0.011
38482	4-Chloro-2-methylphenoxy acetic acid (MCPA) (Metaxon)	0.050
49306	Chlorothalonil (Bravo)	0.030
49305	Chlorpyralid (Stringer)	0.050
40304	Dacthal (DCPA, chlorthal-dimethyl)	0.017
38442	Dicamba (Banval)	0.035
49303	Dichlobenil	0.020
39732	2,4-Dichlorophenoxy acetic acid (2,4 D)	0.035
38746	2,4-Dichlorophenoxy butyric acid (2,4 DB)	0.035
49302	Dichlorprop (2,4-DP)	0.032
49299	Dinitrocresol (DNOC)	0.035
49301	Dinoseb (DNPB)	0.035
49300	Diuron (DCMU)	0.020
49298	Esfenvalerate (Asana)	0.019
49297	Fenuron (Beet-Klean)	0.013
38811	Fluometuron	0.035
38478	Linuron (Linurex)	0.018
38501	Methiocarb (Mesurol)	0.026
49296	Methomyl (Lannate)	0.017
38487	4-2-Methyl-4-chlorophenoxy butyric acid (MCPB, Tropolox)	0.050
49295	1-Naphthol (Alpha Napthol)	0.007
49294	Neburon (Neberex)	0.015
49293	Norflurazon (Telok)	0.024
49292	Oryzalin (Surflan)	0.019
38866	Oxyamyl (Vydate)	0.018
49291	Picloram (Amdon)	0.035
49236	Propham (IPC)	0.035
38538	Propoxur (Baygon)	0.035
39762	Silvex (2,4,5-TP)	0.021
39742	2,4,5-Trichlorophenoxy acetic acid (2,4,5 T)	0.035
49235	Triclopyr (Crossbow)	0.050

Analyses of volatile organic compounds in surface-water samples (custom method schedule 9090)

REMARKS.--Selected surface water samples from LINJ NAWQA study sites were analyzed for volatile organic compounds (VOCs) in 1996. The National Water Quality Laboratory (NWQL) created a provisional method for determination of low level VOCs in water, Custom Method Schedule 9090. This provisional method is based upon USEPA Method 524.2 Revision 4.0 (Eichelberger and Budde, 1989) and USGS Open File Report 94-708 (Rose, Schroeder, 1994), with minor improvements to instrumental operating conditions, increasing the compound list analyzed by the method, some modifications to quantitation ions, and inclusion of strategies for data reporting near the method reporting levels (MRL's). An open-file report is in draft form and will be published in the future describing all aspects of the method.

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. Values for analytes in the 9090 schedule are preceded by an "E" in the following situations:

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.

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.

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

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 determined by full scan quadrupole mass spectrometry. Compound identification is confirmed by matching retention times and spectra identification by three unique ions matched from certified standards. Unknown compounds are tentatively identified by comparing the unknown's mass spectra with reference mass spectra 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	MRL (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

PCode	Compound Name	Common Name	MRL (µg/L)	PCode	Compound Name	Common Name	MRL (µg/L)
34516	1,1,2,2-Tetrachloroethane	1,1,2,2-tetrachloroethane	0.10	73570	Ethyl methacrylate	Ethyl Methacrylate	1.00
77652	1,1,2-Trichloro-1,2,2-trifluoroethane	Freon-113	0.05	50004	Ethyl tert-butyl ether	Ethyl-t-butyl ether (ETBE)	0.10
34511	1,1,2-Trichloroethane	1,1,2-trichloroethane	0.10	34371	Ethylbenzene	Ethylbenzene	0.05
34496	1,1-Dichloroethane	1,1-dichloroethane	0.05	39702	Hexachlorobutadiene	Hexachlorobutadiene	0.20
34501	1,1-Dichloroethene	1,1-dichloroethene	0.10	77424	Iodomethane	Methyl iodide	0.05
77168	1,1-Dichloropropene	1,1-dichloropropene	0.05	49991	Methyl acrylate	Methyl Acrylate	2.00
49999	1,2,3,4-Tetramethylbenzene	Preh-nitene	0.05	81593	Methyl acrylonitrile	Methyl Acrylonitrile	2.00
50000	1,2,3,5-Tetramethylbenzene	Isodurence	0.05	81597	Methyl methacrylate	Methyl Methacrylate	1.00
77613	1,2,3-Trichlorobenzene	1,2,3-trichlorobenzene	0.20	78032	Methyl tert-butyl ether	Methyl-t-butyl ether (MTBE)	0.10
77443	1,2,3-Trichloropropane	1,2,3-trichloropropane	0.20	34010	Methylbenzene	Toluene	0.05
77221	1,2,3-Trimethylbenzene	1,2,3-trimethylbenzene	0.05	77342	n-Butylbenzene	n-butylbenzene	0.05
34551	1,2,4-Trichlorobenzene	1,2,4-trichlorobenzene	0.20	77224	n-Propylbenzene	n-propylbenzene	0.05
77222	1,2,4-Trimethylbenzene	1,2,4-trimethylbenzene	0.05	34696	Naphthalene	Naphthalene	0.20
82625	1,2-Dibromo-3-chloropropane	1,2-dibromo-3-chloropropane (DBCP)	0.50	50005	tert-Amyl methyl ether	tert-amyl methyl ether (TAME)	0.10
77651	1,2-Dibromoethane	1,2-dibromoethane	0.10	34475	Tetrachloroethene	Tetrachloroethene	0.05
34536	1,2-Dichlorobenzene	1,2-dichlorobenzene	0.05	32102	Tetrachloromethane	Carbon tetrachloride	0.05
32103	1,2-Dichloroethane	1,2-dichloroethane	0.05	81607	Tetrahydrofuran	Tetrahydrofuran	5.00
34541	1,2-Dichloropropane	1,2-dichloropropane	0.05	34546	trans-1,2-Dichloroethene	trans-1,2-dichloroethene	0.05
77135	1,2-Dimethylbenzene	o-xylene	0.05	34699	trans-1,3-Dichloropropene	trans-1,3-dichloropropene	0.10
85795	1,3 & 1,4-Dimethylbenzene	m & p-xylene	0.05	73547	trans-1,4-Dichloro-2-butene	trans-1,4-dichloro-2-butene	5.00
77226	1,3,5-Trimethylbenzene	1,3,5-trimethylbenzene	0.05	32104	Tribromomethane	Bromoform	0.20
34566	1,3-Dichlorobenzene	1,3-dichlorobenzene	0.05	39180	Trichloroethene	Trichloroethene	0.05
77173	1,3-Dichloropropane	1,3-dichloropropane	0.05	34488	Trichlorofluoromethane	Trichlorofluoromethane	0.10
34571	1,4-Dichlorobenzene	1,4-dichlorobenzene	0.05	32106	Trichloromethane	Chloroform	0.05
77275	1-Chloro-2-methylbenzene	2-chlorotoluene	0.05	77057	Vinyl Acetate	Vinyl Acetate	5.00
77277	1-Chloro-4-methylbenzene	4-chlorotoluene	0.05	*****			
77356	1-Isopropyl-4-methylbenzene	p-Isopropyltoluene	0.05	Methylene blue active substances			
77170	2,2-Dichloropropane	2,2-dichloropropane	0.05	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:			
81595	2-Butanone	Methyl-ethyl ketone	5.00	$MBASCOR = M - 0.0088N - 0.00019C$			
77220	2-Ethyltoluene	2-ethyl toluene	0.05	where:			
77103	2-Hexanone	2-hexanone	5.00	MBASCOR = corrected MBAS concentration, in mg/L;			
34210	2-Propenal	Acrolein	2.00	M = reported MBAS concentration, in mg/L;			
34215	2-Propenenitrile	Acrylonitrile	2.00	N = dissolved nitrate plus nitrite, as nitrogen, concentration, in mg/L; and			
78109	3-Chloro-1-propene	3-chloro-1-propene	0.10	C = dissolved chloride concentration, in mg/L.			
78133	4-Methyl-2-pentanone	Methyl isobutyl ketone	5.00	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.			
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	Ethylbenzene	Styrene	0.05				

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 Geological Survey by a cooperating organization are identified here.

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

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

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

Remark codes

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

PRINTED

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

Water 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:

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.

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:

Sequential samples - 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.

Dissolved Trace-Element Concentrations

Note.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) 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 $\mu\text{g/L}$ 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 WATSTORE data base. Subsequent sections contain information on recent publications and on WATSTORE.

- A Watershed-Based Method for Relating Water Quality to Flow Characteristics
- Barnegat Bay Non-Point Source
- Distribution and Sources of Arsenic in Soils near the Imperial Oil Site, Monmouth County, New Jersey
- Effects of Withdrawals from Ramapo and Pompton Rivers on Streamflow Water Quality
- Efficacy of Composted Biosolids Application in the New Jersey Pinelands for Disturbed Site Recovery
- EPA Technical Assistance Program
- Fate and Transport Research at Gasoline Spill Sites
- 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 Confined Aquifers of the Coastal Plain
- Hydrologic Controls on Well-Contributing Areas in New Jersey
- Hydrology of Surficial Aquifer Systems
- Hydrology of Wetlands and Ground-Water/Surface-Water Interactions
- 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
- Long Island-New Jersey National Water Quality Assessment
- Magnitude and Frequency of Floods at Roadway Sites in New Jersey
- Movement of Chromium in the Ground-Water of Pennsauken, New Jersey--Phase Two: Data Interpretation and Modeling
- New Jersey Tidal Telemetry Network
- New Jersey Water Use Program
- Pesticide Vulnerability of Public Ground-Water Supplies
- Potentiometric Surface of the Potomac-Raritan-Magothy aquifer system in the vicinity of the National Park and 17G Drudge-Spoil Disposal Sites, Gloucester and Camden Counties, N.J., and Philadelphia, Pa.
- Radium and Trace Metal Leaching in the Kirkwood-Cohansey Aquifer System
- Recharge Areas and Ground-Water-Flow Paths in a Valley-Fill and Carbonate-Rock Aquifer System, Chester, Mine Hill, Randolph, and Roxbury Townships, Morris County, New Jersey
- Small Watershed Flood Data Collection
- Quality of Water Data Collection Network
- Regionalization of Low Flows for New Jersey Streams
- 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
- Somerset County Flood-Monitoring Network
- Strategic Environmental Research Development Program, Biodegradation, Picatinny Arsenal
- Surface Water Data Collection Network
- Trends in the Water Quality of Streams in New Jersey
- Vulnerability Assessment of the Kirkwood-Cohansey Aquifer System to Radium, Mercury, and Trace Metals
- Water-Supply Availability in Salem and Gloucester Counties, New Jersey
- WATER-RELATED REPORTS FOR NEW JERSEY COMPLETED BY THE GEOLOGICAL SURVEY IN RECENT YEARS**
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ACCESS TO WATSTORE DATA

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

- Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sedi-

ment concentrations, sediment discharges, and ground-water levels.

- **Peak Flow File** - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- **Water Quality File** - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- **Ground-Water Site Inventory Data Base** - Contains inventory data for over 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

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

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 20192

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch and 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's 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.

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.

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 μm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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

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

tion 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.

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

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

Microsiemens per centimeter (mS/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.

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 NO_x 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 (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter

(mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

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

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

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

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

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

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay	0.00024 - 0.004	Sedimentation
Silt .....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation/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 (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

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

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

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

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

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

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

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/(m³/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 O₂/(m²/time)] for periphyton and macrophytes and [mg O₂/(m³/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 environmen-

tal 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 multi-plate 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 planimeted. all areas shown are those for the stage when the planimeted 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 μ m membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the 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 μ m membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

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

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

KingdomAnimal
PhylumArthropoda
ClassInsecta
OrderEphemeroptera
FamilyEphemeridae
GenusHexagenia
SpeciesHexagenia 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.

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

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

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

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

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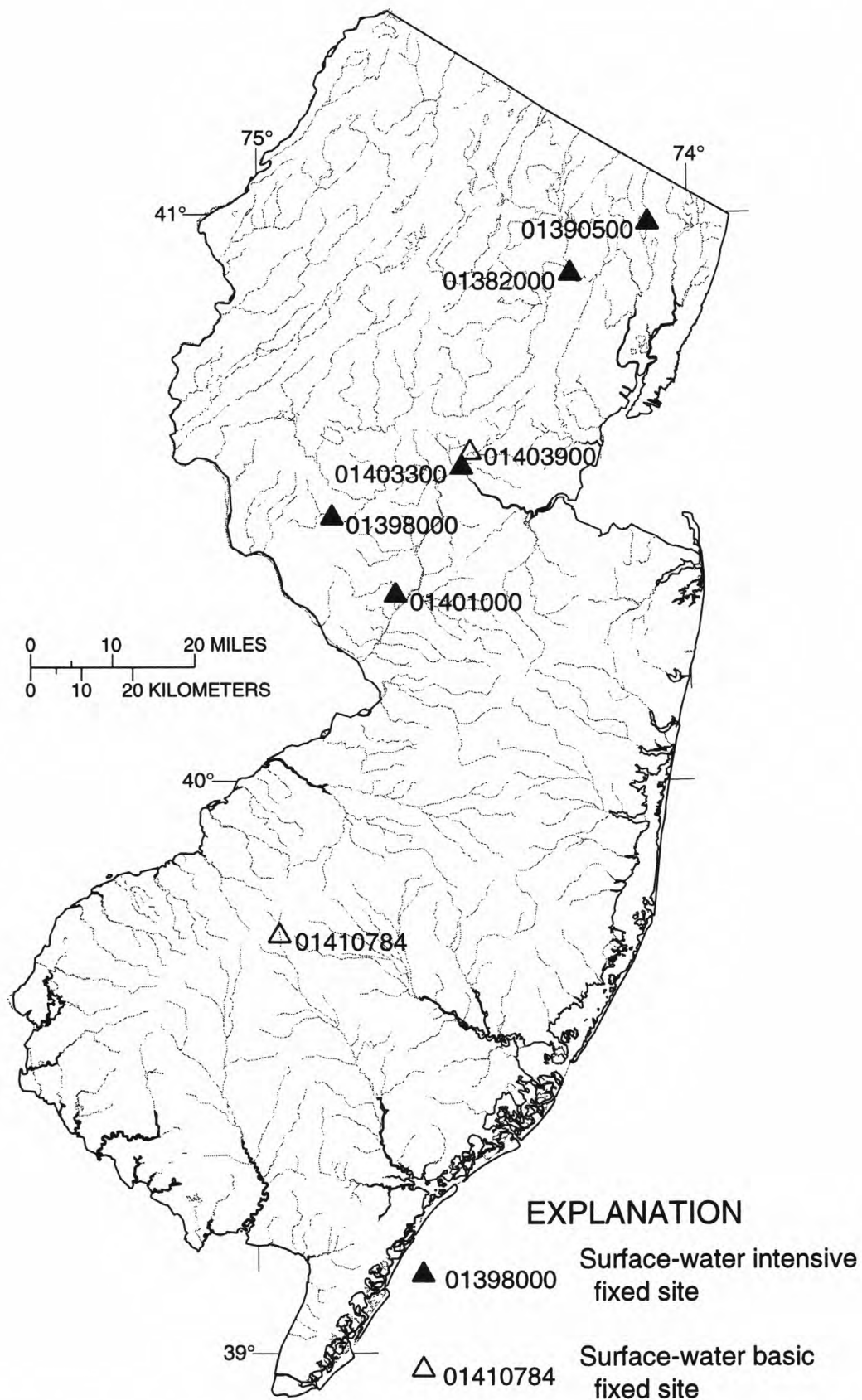
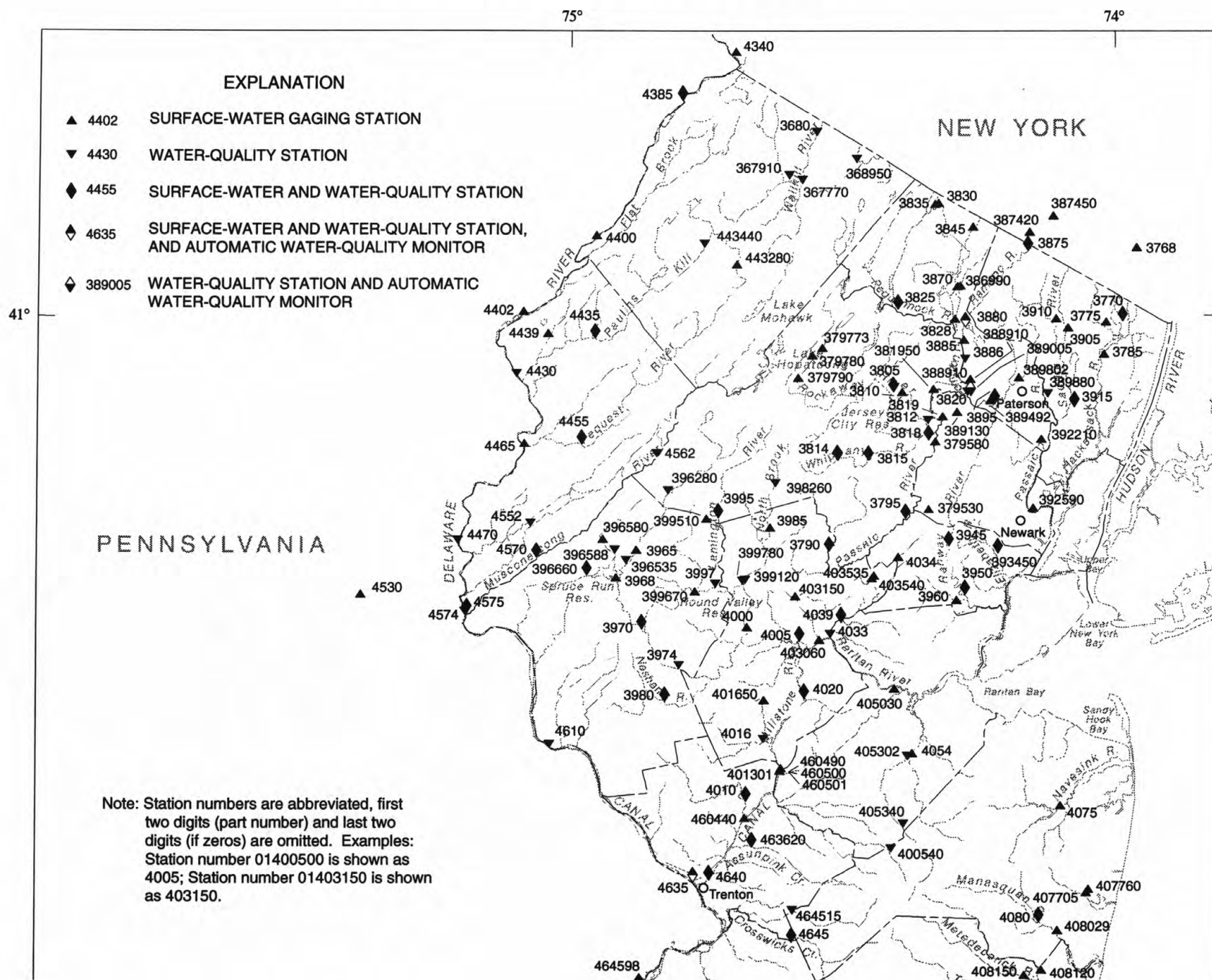


Figure 12. Map showing location of Long Island-New Jersey National Water Quality Assessment Program surface-water fixed site network.

WATER RESOURCES DATA-NEW JERSEY, 1996

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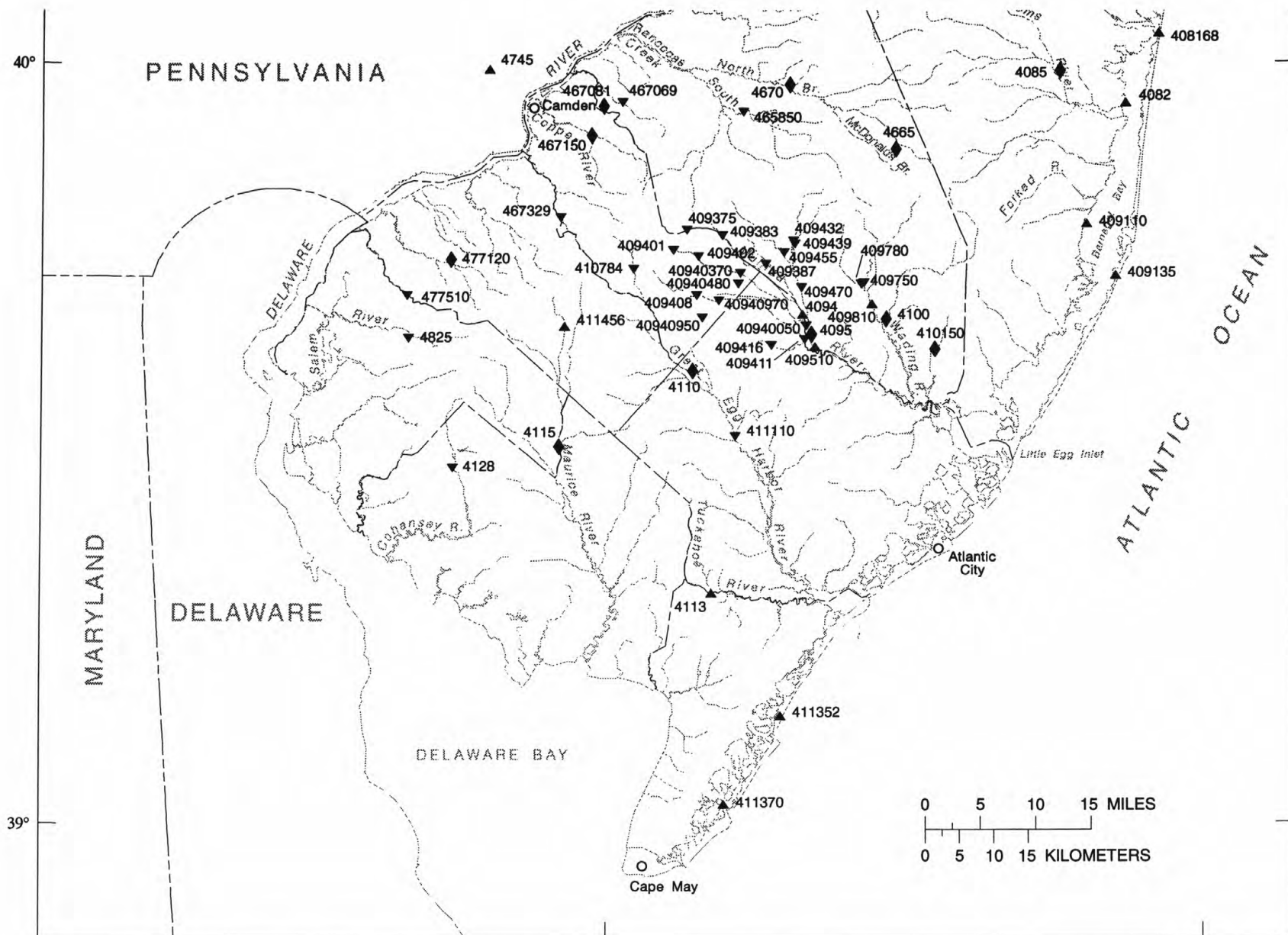
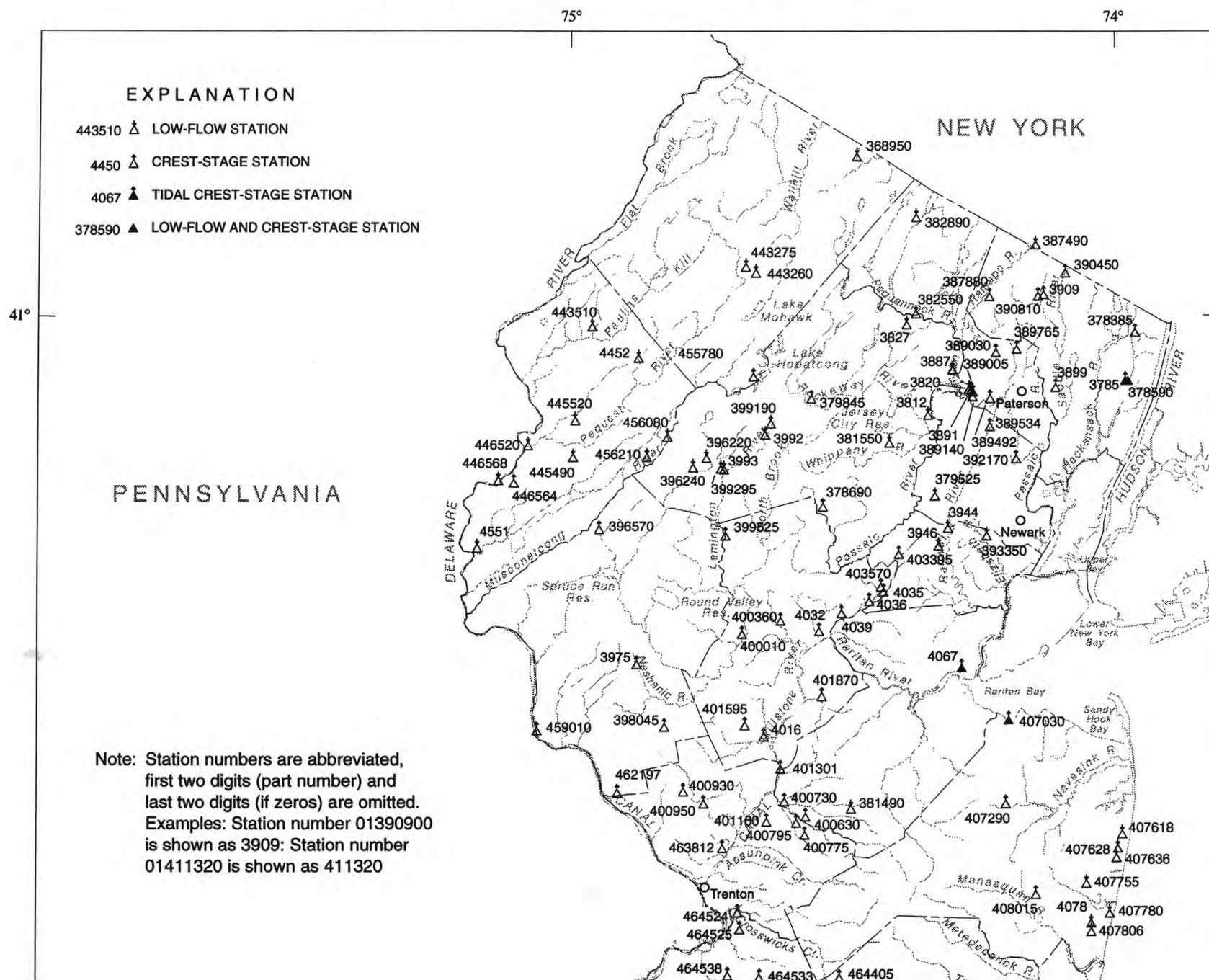


Figure 13. Map showing location of gaging stations and surface-water quality stations.

WATER RESOURCES DATA-NEW JERSEY, 1996

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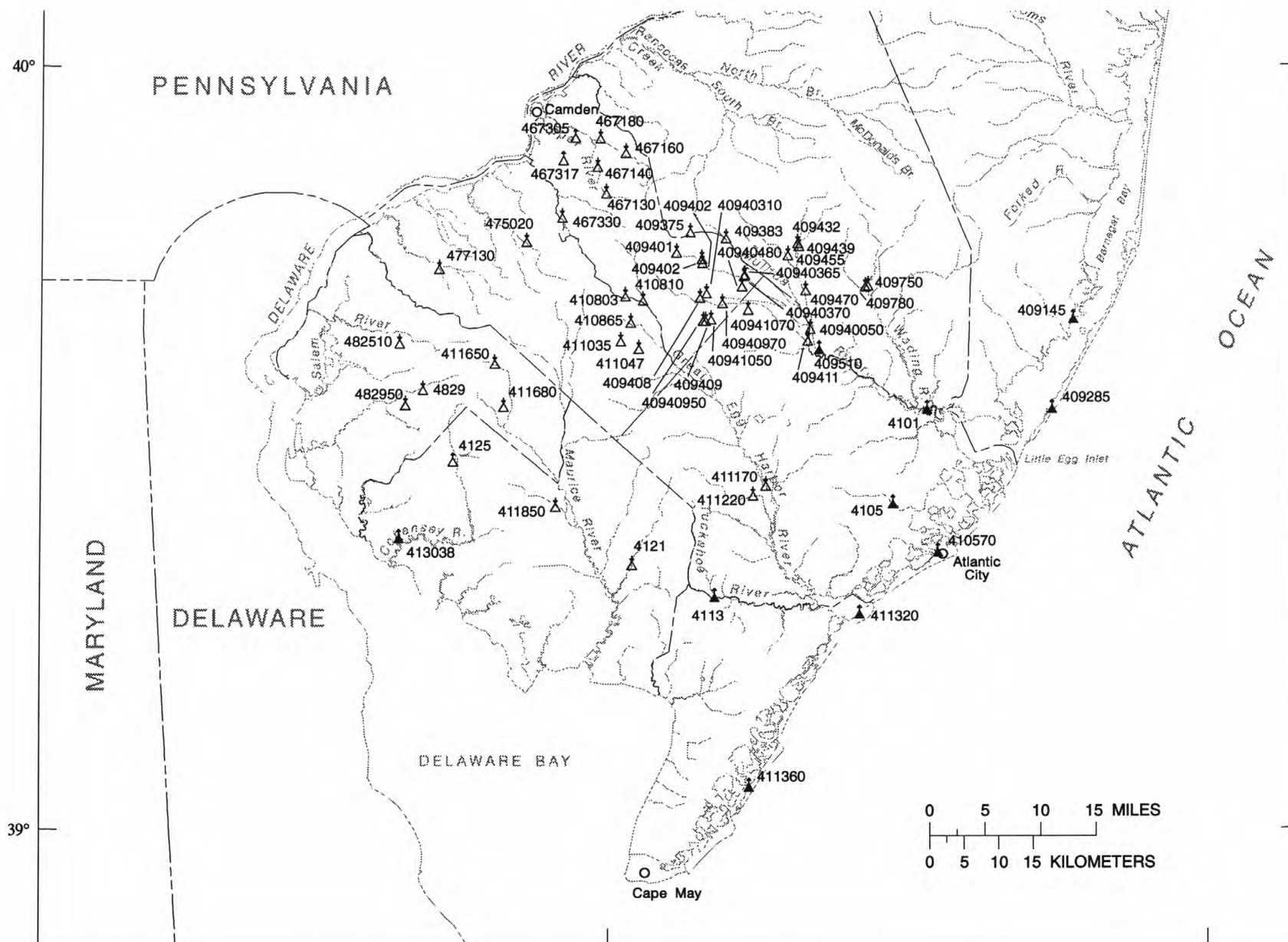


Figure 14. Map showing location of low-flow and crest-stage partial-record stations.

HUDSON RIVER BASIN

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 of 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 mi².

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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, FECAL, EC BROTH (MPN) (31615)	ENTEROCOCCUS, ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	
OCT 1995													
17...	1200	123	420	7.7	10.5	758	8.9	80	E1.1	1400	340	150	
JAN 1996													
30...	1130	380	320	7.9	0.5	749	11.8	83	E1.4	<20	10	100	
APR													
01...	1200	173	468	8.0	8.0	750	11.4	98	E1.6	<20	<10	150	
JUN													
06...	1200	123	483	7.9	18.0	757	7.8	83	E1.6	330	190	190	
AUG													
13...	1200	75	562	7.9	18.0	754	8.1	87	<1.0	5400	1300	210	
DATE		CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB AS CaCO3 (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT 1995													
17...	36	15	23	2.1	103	35	44	<0.1	11	254	231	8	
JAN 1996													
30...	25	9.8	22	1.1	78	12	40	<0.1	6.6	162	166	4	
APR													
01...	37	15	31	1.4	129	17	57	<0.1	3.1	224	242	6	
JUN													
06...	45	19	27	1.3	159	14	49	0.1	7.9	240	261	13	
AUG													
13...	46	22	31	2.4	181	16	55	0.1	8.4	280	298	26	
DATE		NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITROGEN, DIS-SOLVED (MG/L AS N) (00600)	NITROGEN, DIS-SOLVED (MG/L AS N) (00602)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
OCT 1995													
17...	0.007	0.73	<0.03	0.07	0.50	0.45	1.2	1.2	0.06	0.04	7.3	0.4	
JAN 1996													
30...	0.003	0.62	<0.03	<0.03	0.30	0.17	0.92	0.79	0.01	<0.01	2.9	0.2	
APR													
01...	0.006	0.61	<0.03	<0.03	0.20	0.22	0.81	0.83	0.03	0.02	3.2	0.4	
JUN													
06...	0.009	0.53	<0.03	<0.03	0.50	0.47	1.0	1.0	0.06	<0.01	4.8	0.8	
AUG													
13...	0.007	1.90	0.06	0.06	0.60	0.28	2.5	2.2	0.07	0.03	3.8	1.2	

HUDSON RIVER BASIN

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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 mi².

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 1995 TO SEPTEMBER 1996

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 BROTH (MPN) (31615)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)		
OCT 1995													
18...	1200	30	367	7.7	9.0	757	9.4	82	<1.0	2400	120		
JAN 1996													
29...	1130	E1150	196	7.6	0.5	757	12.2	85	2.1	1300	48		
APR													
01...	1130	60	268	8.2	7.5	748	11.8	100	2.6	80	72		
JUN													
05...	1200	130	257	7.5	17.0	753	8.0	84	2.5	>24000	75		
AUG													
13...	1200	29	321	7.7	17.5	750	7.6	81	E1.3	>24000	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)	ALKA-LINITY 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 1995													
18...	37	5.7	19	2.7	48	56	38	<0.1	9.6	212	202	4	
JAN 1996													
29...	15	2.6	17	1.5	22	13	29	<0.1	6.4	104	105	10	
APR													
01...	23	3.5	20	1.3	42	19	38	<0.1	1.8	138	135	2	
JUN													
05...	24	3.6	17	2.1	54	15	29	<0.1	5.8	172	131	48	
AUG													
13...	33	4.8	19	2.0	80	17	35	<0.1	6.4	170	169	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-SOLVED (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 1995													
18...	0.009	1.10	0.17	0.20	0.60	0.49	1.7	1.6	0.07	0.04	5.1	0.6	
JAN 1996													
29...	0.004	1.60	<0.03	<0.03	0.30	0.14	1.9	1.7	0.02	0.02	3.1	0.3	
APR													
01...	0.007	0.61	0.09	0.05	0.40	0.26	1.0	0.87	0.05	0.02	3.0	1.0	
JUN													
05...	0.021	0.52	0.14	0.13	0.90	0.57	1.4	1.1	0.15	0.03	6.0	1.6	
AUG													
13...	0.042	0.87	0.21	0.23	0.60	0.43	1.5	1.3	0.10	0.05	3.7	0.7	

HUDSON RIVER BASIN

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 mi².

PERIOD OF RECORD.--Water years 1963-78, 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 1995 TO SEPTEMBER 1996

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 1995	17...	1230	250	411	7.4	11.0	760	7.4	67	E1.2	1800	260	140
JAN 1996	30...	1130	E590	235	7.7	0.0	752	15.5	107	<1.0	130	60	72
APR	02...	1115	420	344	7.7	7.5	747	10.6	90	E1.4	1100	170	98
MAY	29...	1145	155	417	7.9	14.5	747	7.1	71	E1.1	210	20	160
AUG	12...	1200	E70	498	7.6	21.0	755	6.7	76	<1.0	40	--	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)	ALKA- LINITY 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 1995	17...	36	12	21	2.4	82	47	41	<0.1	11	222	231	9
JAN 1996	30...	19	6.0	17	1.9	51	13	32	<0.1	6.5	128	131	5
APR	02...	27	7.5	24	1.4	69	19	44	<0.1	2.9	186	170	10
MAY	29...	41	13	23	1.4	122	17	42	<0.1	5.8	264	220	15
AUG	12...	43	16	28	2.1	143	18	53	<0.1	7.9	248	260	24
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- SOLVED (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 1995	17...	0.009	2.50	0.05	0.06	0.60	0.45	3.1	3.0	0.06	0.03	8.2	0.5
JAN 1996	30...	0.005	1.10	<0.03	<0.03	0.30	0.44	1.4	1.5	0.09	0.08	4.0	0.3
APR	02...	0.009	0.74	<0.03	<0.03	0.40	0.29	1.1	1.0	0.05	0.01	4.3	0.6
MAY	29...	0.018	0.80	0.06	0.07	0.50	0.46	1.3	1.3	0.06	0.04	4.0	0.7
AUG	12...	0.019	1.50	0.15	0.05	0.60	0.36	2.1	1.9	0.05	0.02	4.3	1.4

HUDSON RIVER BASIN

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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 of confluence with Wawayanda Creek, 0.7 mi northwest of Maple Grange, and 1.7 mi northeast of Vernon.

DRAINAGE AREA.--17.3 mi².

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 1995 TO SEPTEMBER 1996

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 SATUR- ATION (00301)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY BROTH (MG/L) (00310)	COLI- FORM, FECAL, EC (MPN) (31615)	ENTERO- COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
OCT 1995													
17...	1130	28	555	7.3	9.0	760	5.8	50	E1.4	490	160	210	
JAN 1996													
30...	1130	900	283	7.7	1.0	749	11.2	80	<1.0	220	40	87	
APR													
02...	1200	80	455	7.9	8.0	746	10.2	88	E1.4	490	70	180	
JUN													
04...	1130	39	585	7.6	15.0	750	5.7	58	2.3	9200	1100	220	
AUG													
12...	1200	11	711	7.7	18.5	755	6.1	66	<1.0	230	--	270	
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)	ALKA- LINITY 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 1995													
17...	51	21	29	2.2	146	50	54	<0.1	9.7	332	308	3	
JAN 1996													
30...	21	8.4	19	1.2	65	11	32	<0.1	6.2	146	142	8	
APR													
02...	39	20	20	1.9	160	14	36	<0.1	3.7	244	237	6	
JUN													
04...	50	22	32	1.4	194	13	64	0.1	7.3	290	308	9	
AUG													
12...	62	27	42	1.4	236	14	79	0.2	10	410	380	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- SOLVED (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 1995													
17...	0.012	0.70	0.11	0.05	0.80	0.76	1.5	1.5	0.05	0.03	12	0.4	
JAN 1996													
30...	0.005	0.91	<0.03	<0.03	0.30	0.20	1.2	1.1	0.03	0.02	3.2	0.3	
APR													
02...	0.012	1.40	<0.03	<0.03	0.50	0.34	1.9	1.7	0.03	0.01	4.7	0.6	
JUN													
04...	0.017	0.48	0.10	0.10	0.70	0.53	1.2	1.0	0.07	0.02	4.7	0.9	
AUG													
12...	0.008	0.56	0.05	0.08	0.50	0.40	1.1	0.96	0.02	0.02	5.0	0.5	

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.

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

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).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s, Feb. 3, 1973, gage height, 9.38 ft, from floodmarks, from rating curve extended above 840 ft³/s; maximum gage height, 10.52 ft, May 30, 1984; minimum daily discharge, about 2.2 ft³/s, Jan. 13, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft³/s, July 13, gage height, 9.51 ft; minimum daily, about 2.2 ft³/s, Jan. 13.

MEAN	30.9	31.4	36.6	43.8	50.2	70.4	73.6	52.3	34.9	34.5	28.3	33.3
MAX	84.2	88.6	121	125	152	151	204	162	162	127	83.3	100
(WY)	1990	1976	1973	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

HACKENSACK RIVER BASIN

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01376800 HACKENSACK RIVER AT WEST NYACK, NY--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1959 - 1996	
ANNUAL TOTAL	10014.9		16547.0			
ANNUAL MEAN	27.4		45.2		43.6	
HIGHEST ANNUAL MEAN					74.1	1984
LOWEST ANNUAL MEAN					13.4	1981
HIGHEST DAILY MEAN	248	Mar 9	518	Jul 13	1320	Feb 3 1973
LOWEST DAILY MEAN	4.4	Oct 9	2.2	Jan 13	2.2	Jan 13 1996
ANNUAL SEVEN-DAY MINIMUM	5.8	Oct 7	5.8	Oct 7	3.1	Sep 25 1966
10 PERCENT EXCEEDS	42		96		86	
50 PERCENT EXCEEDS	25		20		24	
90 PERCENT EXCEEDS	9.1		8.7		12	

e Estimated.

HACKENSACK RIVER BASIN

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 Riverdale, 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 mi².

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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	12	6.9	82	146	100	87	188	27	59	51	82
2	8.7	35	6.8	69	125	100	416	158	36	38	54	96
3	8.7	16	6.3	44	125	97	266	123	144	42	78	129
4	8.2	13	7.5	39	115	88	148	115	523	44	69	129
5	28	11	6.9	38	101	83	119	104	266	44	53	127
6	70	11	14	38	89	139	101	107	168	43	47	126
7	7.8	19	16	39	81	277	100	100	116	40	42	126
8	5.0	28	15	55	79	258	147	89	88	64	38	124
9	4.5	14	16	75	91	152	140	80	72	152	36	122
10	4.4	12	16	64	103	120	197	86	60	141	36	122
11	4.4	11	18	40	110	105	166	92	53	95	36	122
12	4.5	115	43	40	107	103	130	178	49	69	34	123
13	4.7	14	66	40	92	113	128	145	49	491	41	114
14	8.0	21	66	40	84	125	113	110	50	1140	67	86
15	50	35	61	40	78	140	98	88	51	320	80	53
16	8.8	12	61	40	76	171	940	97	48	304	80	34
17	7.2	10	58	40	82	152	896	152	44	222	80	60
18	8.1	9.6	58	40	73	129	271	134	44	125	79	73
19	8.1	11	57	171	65	124	178	112	47	94	92	39
20	7.8	9.5	58	81	75	232	146	96	54	80	131	36
21	89	8.6	52	43	251	232	131	81	69	57	131	35
22	26	7.8	53	40	401	156	118	72	76	48	119	43
23	10	7.2	59	40	234	121	106	61	75	48	118	41
24	8.6	7.1	81	69	255	100	113	54	62	47	119	35
25	8.4	7.8	110	235	236	87	95	48	56	44	98	36
26	7.9	9.6	107	262	159	81	85	41	45	48	90	33
27	7.6	8.3	103	498	132	75	91	36	37	47	82	33
28	143	7.2	98	1110	124	67	78	35	83	43	82	34
29	17	8.4	77	429	117	82	94	33	126	39	82	51
30	13	7.8	74	205	---	87	142	35	111	38	82	36
31	11	---	82	180	---	83	---	30	---	49	82	---
TOTAL	607.5	498.9	1553.4	4226	3806	3979	5840	2880	2729	4115	2309	2300
MEAN	19.6	16.6	50.1	136	131	128	195	92.9	91.0	133	74.5	76.7
MAX	143	115	110	1110	401	277	940	188	523	1140	131	129
MIN	4.4	7.1	6.3	38	65	67	78	30	27	38	34	33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1996, BY WATER YEAR (WY)

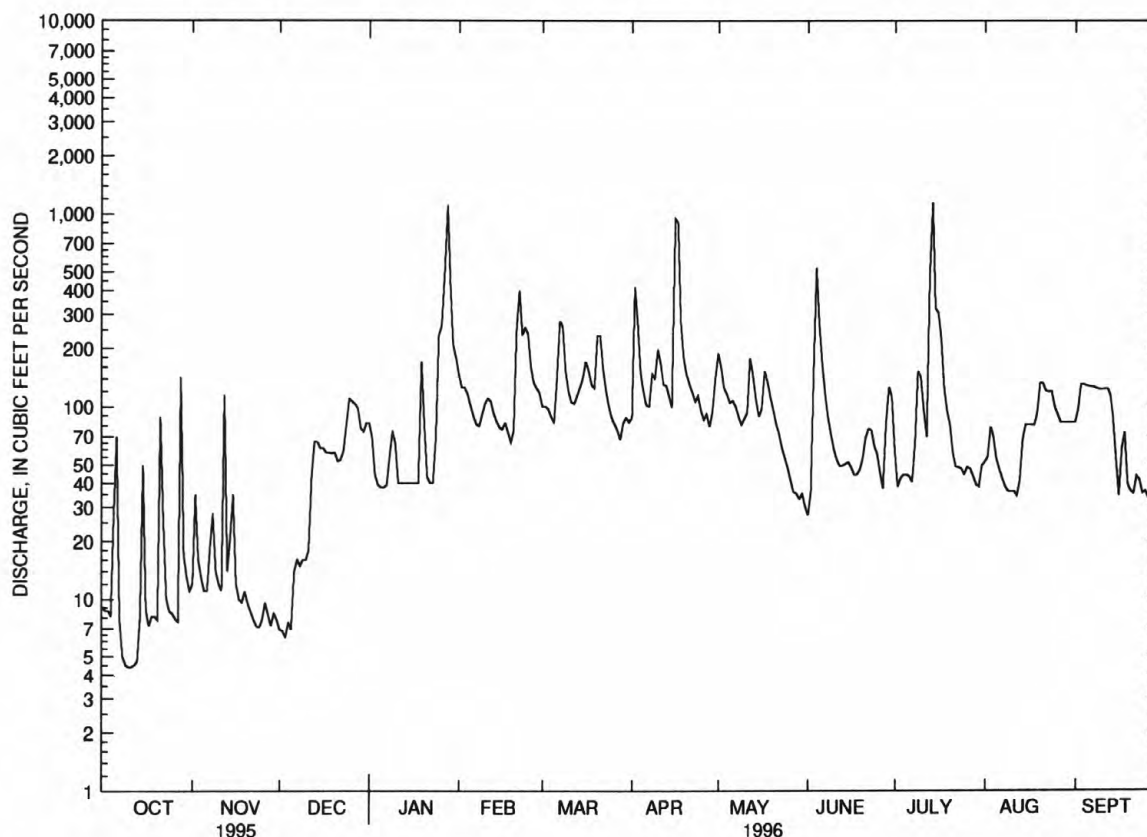
MEAN	59.9	70.7	77.9	89.4	92.5	137	140	102	74.3	78.4	70.9	63.6
MAX	312	240	202	251	221	379	438	310	319	339	197	177
(WY)	1956	1956	1973	1949	1951	1953	1983	1989	1972	1945	1955	1975
MIN	12.1	16.6	12.6	22.6	23.0	11.2	14.5	20.4	13.4	11.6	11.3	7.87
(WY)	1942	1996	1981	1982	1967	1981	1981	1981	1957	1954	1944	1953

HACKENSACK RIVER BASIN

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01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1942 - 1996	
ANNUAL TOTAL	18771.1		34843.8		88.0	
ANNUAL MEAN	51.4		95.2		156	
HIGHEST ANNUAL MEAN					30.9	
LOWEST ANNUAL MEAN					2190	
HIGHEST DAILY MEAN	213	Mar 22	1140	Jul 14	2190	May 31 1984
LOWEST DAILY MEAN	4.4	Oct 10	4.4	Oct 10	4.4	Oct 10 1995
ANNUAL SEVEN-DAY MINIMUM	5.0	Oct 7	5.0	Oct 7	5.0	Oct 7 1995
INSTANTANEOUS PEAK FLOW			1570	Apr 16	2530	May 17 1989
INSTANTANEOUS PEAK STAGE			5.64	Apr 16	8.08	May 17 1989
INSTANTANEOUS LOW FLOW			4.2	Oct 10	.00	Jan 16 1970
10 PERCENT EXCEEDS	107		161		171	
50 PERCENT EXCEEDS	35		74		60	
90 PERCENT EXCEEDS	9.5		9.6		21	



01377000 HACKENSACK RIVER AT RIVERVALE, NJ, DAILY MEAN DISCHARGE

HACKENSACK RIVER BASIN

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 1995 TO SEPTEMBER 1996

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 1995 18...	1040	8.1	461	7.3	10.0	768	7.0	62	E1.6	790
JAN 1996 29...	1043	383	547	7.7	2.0	773	13.2	94	E1.6	350
MAR 20...	1138	209	534	7.8	6.0	744	12.1	100	3.6	540
MAY 20...	1022	96	498	7.8	17.0	750	8.0	85	E1.7	--
JUL 16...	1108	269	424	7.9	24.0	763	7.6	90	2.2	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)	ALKA- LINITY 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 1995 18...	200	160	47	9.3	26	2.0	94	41	56	<0.1
JAN 1996 29...	280	100	31	5.4	62	1.9	54	19	120	<0.1
MAR 20...	90	97	30	5.3	60	1.7	59	17	110	<0.1
MAY 20...	--	110	34	6.1	52	1.8	73	16	94	<0.1
JUL 16...	350	110	33	5.8	43	1.7	73	12	74	<0.1

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- PENDE (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 1995 18...	12	264	255	8	0.013	1.10	0.11	0.08	0.50
JAN 1996 29...	4.4	278	280	15	0.007	0.81	0.14	0.15	0.50
MAR 20...	4.3	280	267	--	0.008	0.73	<0.03	<0.03	0.60
MAY 20...	1.7	286	251	8	0.015	0.42	0.15	<0.03	0.50
JUL 16...	4.1	246	218	--	0.015	0.18	0.05	<0.03	0.70

HACKENSACK RIVER BASIN

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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- PENDEDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT 1995									
18...	0.37	1.6	1.5	0.09	0.02	4.2	0.4	--	--
JAN 1996									
29...	0.39	1.3	1.2	<0.01	<0.01	4.4	0.5	--	--
MAR									
20...	0.32	1.3	1.0	0.05	0.01	4.1	1.4	18	10
MAY									
20...	0.37	0.92	0.79	<0.01	<0.01	4.3	0.4	--	--
JUL									
16...	0.43	0.88	0.61	0.07	<0.01	4.8	1.7	19	14

HACKENSACK RIVER BASIN

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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 15	0745	520	3.58	Nov. 12	0700	1,090	4.70
Oct. 21	1945	1,120	4.75	Jan. 19	2300	*1,250	*4.96
Oct. 28	0600	675	3.93	Jan. 27	2045	991	4.53
Oct. 28	1500	1,090	4.69	Apr. 16	1330	1,090	4.70
Oct. 30	1600	448	3.40				

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	24	59	31	30	61	52	43	49	31	50	49	31
2	24	56	32	31	58	66	126	49	31	43	91	31
3	20	50	29	33	58	79	71	94	109	52	52	30
4	24	38	31	31	53	78	79	93	120	83	68	31
5	78	32	29	30	49	88	93	90	110	83	29	30
6	133	30	42	29	47	114	90	93	97	46	31	28
7	36	44	45	27	46	111	95	57	67	50	28	37
8	34	85	42	32	48	98	105	37	34	93	27	35
9	31	40	43	32	59	91	101	37	33	140	30	32
10	31	32	43	30	65	89	103	38	33	96	39	31
11	33	49	49	30	62	85	47	50	33	80	38	31
12	33	584	72	31	57	50	41	60	34	92	39	32
13	31	108	79	31	46	70	45	39	35	223	43	40
14	43	80	70	29	46	80	39	38	32	145	40	49
15	142	179	48	27	46	79	38	38	32	105	39	37
16	42	71	48	23	55	87	592	62	31	112	38	32
17	29	51	47	27	75	50	177	99	31	97	38	98
18	18	44	47	35	75	52	97	55	31	94	38	97
19	17	48	46	403	80	62	80	48	45	88	38	89
20	17	42	44	392	99	112	72	45	92	92	37	73
21	360	39	32	92	150	92	67	42	80	84	30	41
22	116	38	31	63	85	79	75	41	31	44	27	58
23	45	36	31	54	69	70	101	39	30	33	31	58
24	42	35	31	143	125	42	100	37	30	31	50	62
25	47	34	31	179	87	47	95	34	30	30	41	51
26	67	34	31	73	63	34	95	33	33	35	32	43
27	147	34	30	401	56	33	93	34	40	30	29	43
28	438	32	30	282	58	33	79	33	46	29	36	44
29	110	34	30	99	53	39	47	33	41	28	35	68
30	223	31	30	80	---	36	51	33	59	28	33	64
31	136	---	30	72	---	34	---	31	---	41	31	---
TOTAL	2571	2069	1254	2871	1931	2132	2937	1561	1481	2277	1207	1426
MEAN	82.9	69.0	40.5	92.6	66.6	68.8	97.9	50.4	49.4	73.5	38.9	47.5
MAX	438	584	79	403	150	114	592	99	120	223	91	98
MIN	17	30	29	23	46	33	38	31	30	28	27	28

HACKENSACK RIVER BASIN

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01377500 PASCACK BROOK AT WESTWOOD, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1996, BY WATER YEAR (WY)

MEAN	38.7	49.2	51.7	54.2	58.6	79.6	79.4	62.5	49.7	45.9	42.6	39.9
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	10.1	9.83	15.8	10.8	15.7	34.8	28.9	21.2	18.2	14.2	9.99	9.45
(WY)	1942	1950	1940	1954	1954	1965	1991	1992	1939	1944	1935	1939

SUMMARY STATISTICS

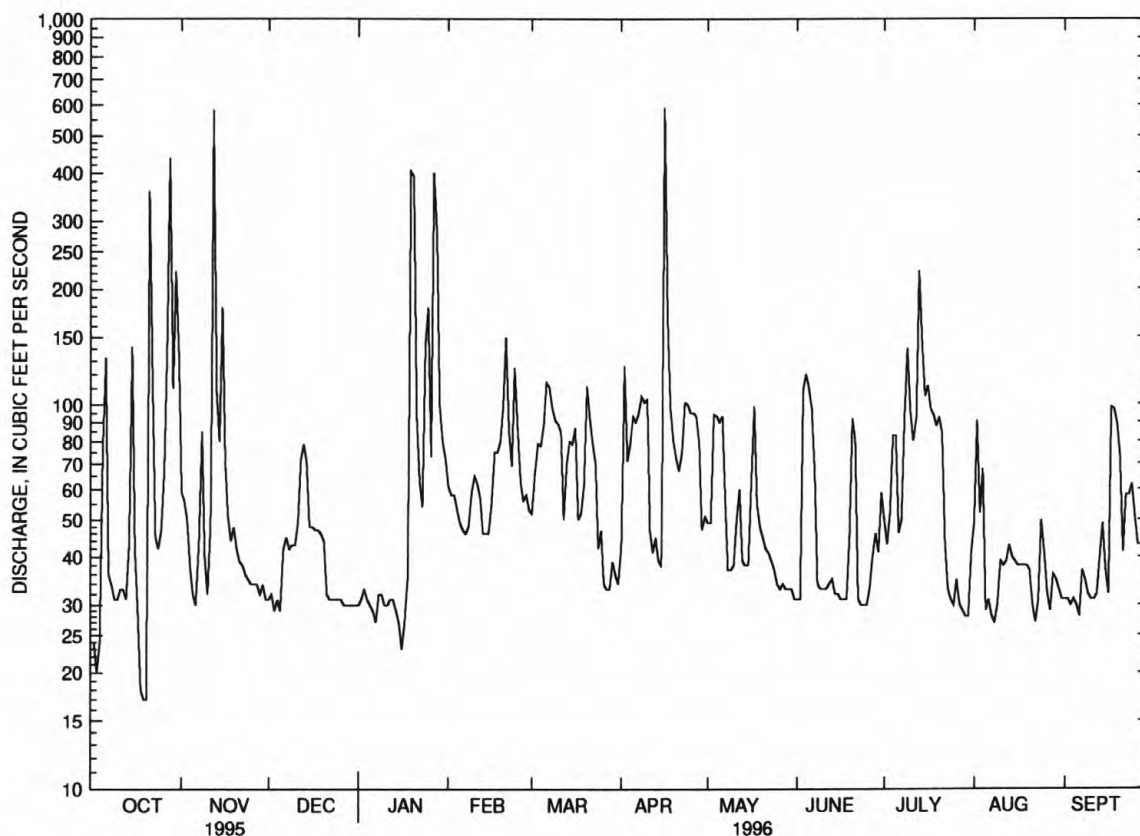
FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1935 - 1996

ANNUAL TOTAL	15093.0			23717								
ANNUAL MEAN	41.4			64.8								
HIGHEST ANNUAL MEAN									54.3			
LOWEST ANNUAL MEAN									88.6			1952
HIGHEST DAILY MEAN	584	Nov 12		592	Apr 16			1770	27.6			1965
LOWEST DAILY MEAN	9.0	Aug 20		17	Oct 19			.45				Apr 26 1991
ANNUAL SEVEN-DAY MINIMUM	14	Aug 14		28	Jan 11			6.3				Oct 19 1949
INSTANTANEOUS PEAK FLOW				1250	Jan 19			2440				Sep 12 1971
INSTANTANEOUS PEAK STAGE				4.96	Jan 19			7.57				Sep 12 1971
INSTANTANEOUS LOW FLOW				16	Oct 20			.05a				Apr 23 1991
10 PERCENT EXCEEDS	59			102				96				
50 PERCENT EXCEEDS	31			45				39				
90 PERCENT EXCEEDS	20			30				18				

a Also occurred Sept. 28, 1993.



01377500 PASCACK BROOK AT WESTWOOD, NJ, DAILY MEAN DISCHARGE

HACKENSACK RIVER BASIN

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 mi².

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 of 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 ft³/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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	21	14	14	159	21	27	149	17	14	17	1.6
2	.00	18	15	14	37	71	687	108	16	14	17	1.3
3	.00	15	13	14	135	46	258	300	23	16	16	1.4
4	.00	13	15	14	27	33	520	598	52	14	15	1.4
5	.00	14	15	14	51	76	205	157	278	14	15	1.3
6	.00	14	15	14	51	504	19	19	157	13	16	1.5
7	.00	15	15	14	57	442	52	19	97	14	17	1.4
8	.00	14	15	15	130	317	300	18	28	16	13	1.4
9	.00	15	14	14	108	129	305	18	19	15	2.8	1.2
10	.00	15	15	14	181	19	227	18	18	15	3.5	1.2
11	.00	15	13	14	116	18	131	19	16	15	3.5	1.3
12	.00	504	16	15	79	16	40	20	15	402	3.3	1.3
13	.00	48	16	15	55	69	17	20	17	821	3.7	1.8
14	.00	225	15	14	45	161	17	19	19	634	3.1	1.8
15	.00	106	15	14	33	155	16	19	19	792	2.9	1.3
16	.00	23	15	14	52	189	1690	21	19	106	2.9	1.4
17	.00	13	15	14	48	103	1320	20	18	20	2.8	5.0
18	.00	16	15	14	51	75	365	29	18	21	3.1	2.3
19	.00	13	15	23	191	465	188	36	18	22	3.1	1.2
20	.00	13	15	94	435	180	167	21	18	23	3.1	1.2
21	2.9	12	15	105	478	87	127	16	17	22	3.1	1.3
22	2.4	13	15	208	251	139	98	17	16	20	3.1	2.3
23	2.0	14	15	52	29	112	443	17	16	21	4.5	1.3
24	2.3	13	15	460	418	44	86	18	16	20	3.7	1.4
25	2.2	13	15	213	243	21	19	17	15	19	2.0	1.4
26	4.1	13	15	534	141	19	19	17	15	19	1.8	1.4
27	15	13	15	856	97	19	18	15	14	19	1.8	1.4
28	518	14	14	1280	85	18	20	14	14	19	1.8	1.6
29	18	15	14	463	83	17	26	14	14	19	1.8	2.5
30	29	16	14	185	---	21	72	15	15	19	1.6	1.4
31	195	---	14	162	---	22	---	18	---	18	1.7	---
TOTAL	790.90	1266	457	4890	3866	3608	7479	1806	1034	3216	190.7	48.3
MEAN	25.5	42.2	14.7	158	133	116	249	58.3	34.5	104	6.15	1.61
MAX	518	504	16	1280	478	504	1690	598	278	821	17	5.0
MIN	.00	12	13	14	27	16	16	14	14	13	1.6	1.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

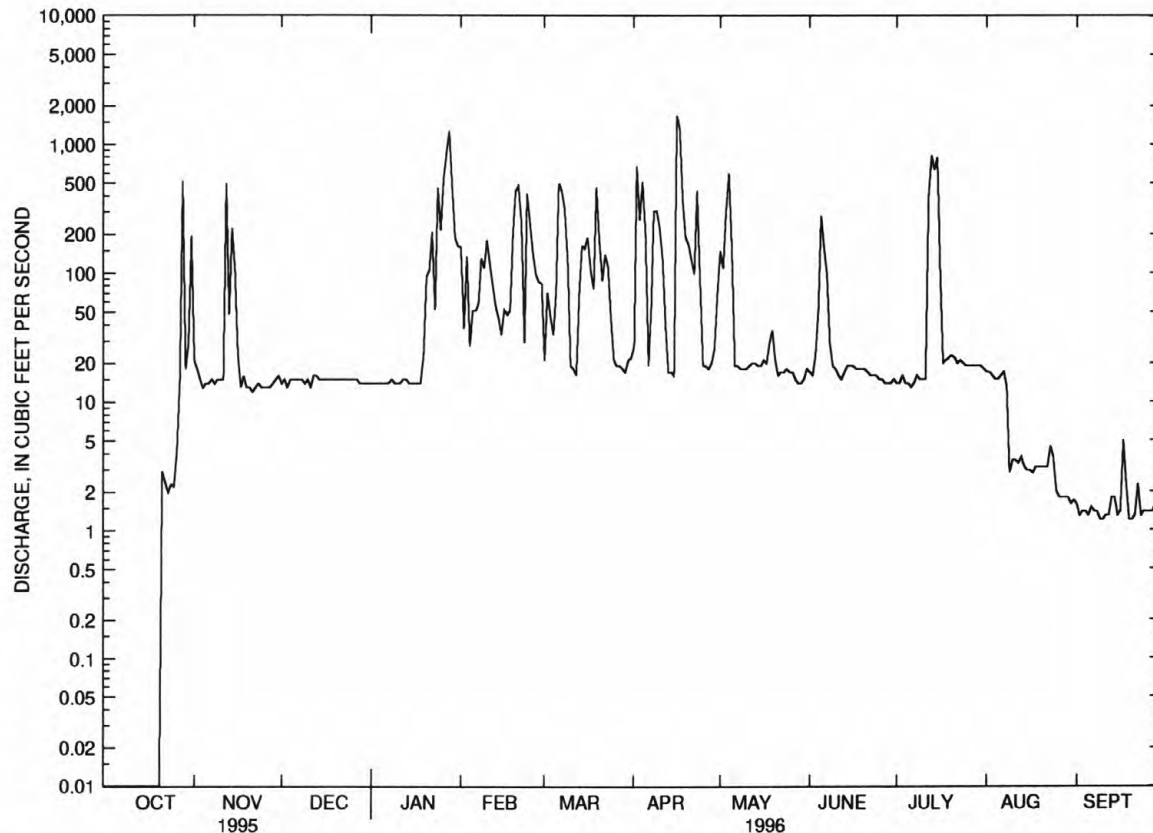
	MEAN	35.3	64.7	84.9	103	126	211	199	123	60.7	46.3	39.3	42.0
MAX	480	356	329	359	396	651	774	528	612	543	373	385	
(WY)	1956	1928	1973	1937	1939	1936	1983	1989	1972	1945	1927	1927	
MIN	.000	.000	.000	.000	.000	.000	.000	.39	.000	.000	.000	.000	
(WY)	1922	1924	1932	1971	1977	1981	1981	1985	1977	1954	1924	1923	

HACKENSACK RIVER BASIN

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01378500 HACKENSACK RIVER AT NEW MILFORD, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1922 - 1996	
ANNUAL TOTAL	3707.93		28651.90		94.4	
ANNUAL MEAN	10.2		78.3		263	
HIGHEST ANNUAL MEAN					.40	
LOWEST ANNUAL MEAN					1928	
HIGHEST DAILY MEAN	518	Oct 28	1690	Apr 16	4230	May 31 1984
LOWEST DAILY MEAN	.00	Sep 15	.00	Oct 1	.00	Oct 1 1921
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 15	.00	Oct 1	.00	Oct 1 1921
INSTANTANEOUS PEAK FLOW			2780	Apr 16	4630	May 17 1989
INSTANTANEOUS PEAK STAGE			5.75	Apr 16	8.23	May 17 1989
INSTANTANEOUS LOW FLOW			.00	Many days	.00	Many days
10 PERCENT EXCEEDS	16		206		277	
50 PERCENT EXCEEDS	2.3		16		16	
90 PERCENT EXCEEDS	.11		1.4		.00	



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

HACKENSACK RIVER BASIN

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 mi². 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 mi². 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 mi². 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 mi². 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 1995 TO SEPTEMBER 1996

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.....	73.71	2,326	--	41.85	400	--
Oct. 31.....	79.05	3,837	+75.4	48.84	1,874	+73.6
Nov. 30.....	83.09	5,060	+63.1	52.79	3,083	+62.4
Dec. 31.....	83.28	5,119	+2.9	51.46	2,653	-21.5
CAL YR 1995			-3			+3.2
Jan. 31.....	85.29	5,767	+32.3	55.38	3,991	+66.8
Feb. 29.....	85.23	5,747	-1.1	55.28	3,954	-2.0
Mar. 31.....	85.19	5,733	-7	55.25	3,944	-5
Apr. 30.....	85.31	5,773	+2.1	55.42	4,004	+3.1
May 31.....	84.82	5,628	-7.2	55.08	3,883	-6.0
June 30.....	84.97	5,659	+1.6	54.81	3,785	-5.1
July 31.....	85.00	5,678	+9	55.12	3,896	+5.5
Aug. 31.....	83.94	5,327	-17.5	52.44	2,968	-46.3
Sept. 30.....	83.89	5,313	-7	50.66	2,404	-29.1
WTR YR 1996			+12.6			+8.5
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.....	88.64	531	--	20.02	2,707	--
Oct. 31.....	90.42	623	+4.6	22.92	3,442	+36.7
Nov. 30.....	91.05	655	+1.7	20.42	2,803	-33.0
Dec. 31.....	88.00	501	-7.7	18.35	2,318	-24.2
CAL YR 1995			-6			-6
Jan. 31.....	91.19	663	+8.1	23.30	3,545	+61.2
Feb. 29.....	91.12	659	-2	23.34	3,527	-1.0
Mar. 31.....	89.51	576	-4.1	23.23	3,526	0
Apr. 30.....	89.63	582	+3	23.32	3,550	+1.2
May 31.....	91.00	653	+3.5	21.67	3,110	-22.0
June 30.....	93.70	799	+7.5	19.59	2,603	-26.1
July 31.....	91.79	695	-5.2	21.17	2,987	+19.2
Aug. 31.....	89.91	597	-4.9	19.31	2,537	-22.5
Sept. 30.....	91.20	663	+3.4	20.55	2,833	+15.3
WTR YR 1996			+6			+5

† 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 of 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 of 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).
- 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).
- 01391210 United Water New Jersey, diverts water from Saddle River (Passaic River basin) just north of bridge on State Route 4 at Arcola. Water is diverted into Oradell Reservoir on the Hackensack River, for municipal supply. Records provided by United Water New Jersey (formerly Hackensack Water Company).

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

MONTH	01376699 UNITED WATER NEW YORK.	01376810 WEST NYACK, NY	01378490 UNITED WATER NEW JERSEY
October.....	7.31	2.07	139
November.....	7.31	2.08	142
December.....	7.49	2.26	145
CAL YR 1995.....	9.77	2.69	157
January.....	7.31	2.11	148
February.....	8.40	2.16	131
March.....	7.32	2.14	143
April.....	7.34	2.21	144
May.....	12.69	2.41	155
June.....	14.51	2.49	177
July.....	14.74	2.36	151
August.....	15.40	2.77	160
September.....	12.33	2.84	153
WTR YR 1996.....	10.18	2.14	150

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)	01388981 POMPTON RIVER (PASSAIC RIVER BASIN)	01391210 SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October.....	0.67	1.80	30.44	10.35	1.70
November.....	0	0	1.20	.01	.10
December.....	0	0	11.17	3.52	.30
CAL YR 1995.....	.37	1.06	30.82	6.04	1.15
January.....	0	0	30.62	0	.44
February.....	0	0	0	0	.63
March.....	0	0	0	0	.38
April.....	0	0	0	0	.44
May.....	0	0	0	0	.42
June.....	0	0	4.46	2.50	.42
July.....	0	0	15.86	3.12	.44
August.....	0	0	5.45	9.53	.42
September.....	0	2.01	8.51	12.93	.40
WTR YR 1996.....	.06	.32	9.08	3.51	.51

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 mi².

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).

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 except for estimated daily discharges, which are fair. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 20	1715	717	7.19	Jan. 28	0545	*985	*7.71
Jan. 25	1530	560	6.85				

REVISIONS.--Some peak discharges and the annual maximum (*) for the water years 1936, 1949, 1971, 1975, 1979, and 1984 have been revised as shown in the following table. They supersede figures published in the state reports for 1936, 1949, 1971, 1975, 1979, and 1984.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 12, 1936	3 to 9 pm	*1,800	*9.18	Sept. 27, 1975	0015	*1,580	*8.81
Dec. 31, 1948	5 to 7 pm	*1,520	*8.71	Jan. 25, 1979	0745	*1,530	*8.73
Aug. 29, 1971	1245	*2,170	*9.73	Apr. 5, 1984	2045	*1,620	*8.87

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	14	203	53	36	e290	136	144	239	33	74	71	15
2	11	245	53	40	218	111	305	200	31	56	67	15
3	8.2	282	50	42	154	104	291	160	35	47	53	14
4	7.6	229	49	44	e140	88	242	148	60	41	51	13
5	26	184	46	42	e120	93	207	127	69	34	45	13
6	152	149	48	37	e99	151	166	122	67	29	39	15
7	137	129	49	35	91	246	139	125	49	26	38	24
8	89	146	45	e33	87	255	161	118	41	28	35	30
9	83	139	36	31	95	231	163	108	36	80	32	45
10	65	118	e35	32	120	221	186	99	33	59	33	30
11	48	114	35	33	154	172	184	99	40	37	29	25
12	44	352	30	34	168	158	155	188	72	30	26	22
13	35	408	27	34	130	163	135	187	84	202	32	23
14	42	368	27	34	98	170	119	150	81	426	32	35
15	123	439	33	35	83	164	103	123	71	374	28	28
16	131	420	36	36	68	157	296	107	58	338	27	25
17	89	342	44	37	e50	139	438	119	49	274	26	61
18	73	272	47	39	e59	124	365	108	66	197	24	112
19	66	218	45	172	e57	121	282	97	59	146	22	102
20	45	173	33	589	64	262	215	85	71	133	21	82
21	82	135	42	648	160	273	168	72	62	101	21	69
22	137	107	43	565	299	228	135	64	52	78	22	62
23	115	91	42	425	334	186	115	57	49	69	21	88
24	94	84	43	366	358	150	106	53	45	65	25	68
25	80	81	42	525	360	123	91	46	38	55	22	58
26	65	72	42	476	303	104	82	44	32	64	19	56
27	45	64	39	566	260	90	79	43	27	64	18	51
28	235	53	38	951	222	80	71	44	25	52	18	41
29	355	53	37	833	179	109	74	42	22	44	17	52
30	305	54	35	596	---	153	144	39	41	40	16	49
31	256	---	34	410	---	149	---	35	---	53	15	---

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	3057.8	5724	1258	7776	4820	4911	5361	3248	1498	3316	945	1323
MEAN	98.6	191	40.6	251	166	158	179	105	49.9	107	30.5	44.1
MAX	355	439	53	951	360	273	438	239	84	426	71	112
MIN	7.6	53	27	31	50	80	71	35	22	26	15	13
CFSM	1.78	3.44	.73	4.53	3.00	2.86	3.23	1.89	.90	1.93	.55	.80
IN.	2.05	3.84	.84	5.22	3.24	3.30	3.60	2.18	1.01	2.23	.63	.89

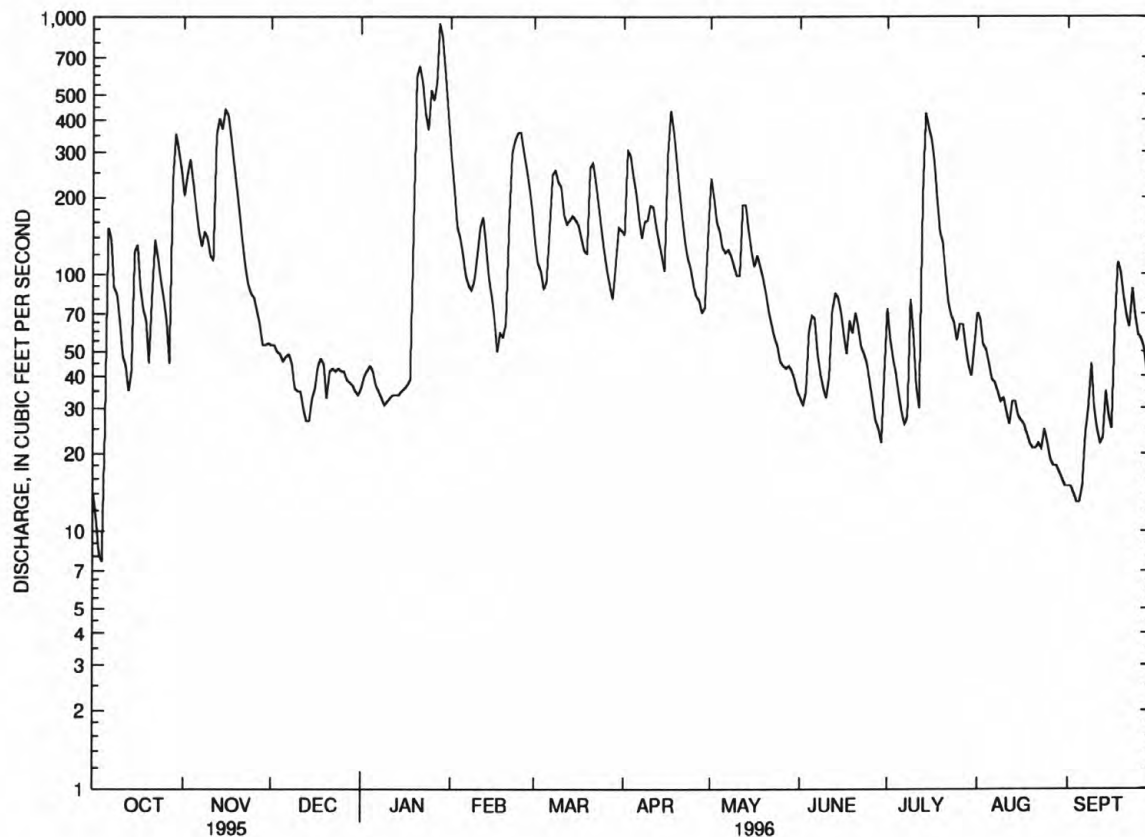
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1996, BY WATER YEAR (WY)

MEAN	45.6	87.0	104	113	129	188	145	92.5	57.5	45.7	50.0	51.2
MAX	187	340	335	463	380	439	420	365	292	307	397	380
(WY)	1990	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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1904 - 1996
ANNUAL TOTAL	23762.6	43237.8	
ANNUAL MEAN	65.1	118	91.2
HIGHEST ANNUAL MEAN			163
LOWEST ANNUAL MEAN			32.3
HIGHEST DAILY MEAN	439	Nov 15	1800
LOWEST DAILY MEAN	1.5	Sep 7	.30
ANNUAL SEVEN-DAY MINIMUM	2.1	Sep 3	.47
INSTANTANEOUS PEAK FLOW		985	2000a
INSTANTANEOUS PEAK STAGE		7.71	9.73
INSTANTANEOUS LOW FLOW		7.6	.20
ANNUAL RUNOFF (CFSM)	1.18	2.13	1.65
ANNUAL RUNOFF (INCHES)	15.96	29.03	22.37
10 PERCENT EXCEEDS	140	276	225
50 PERCENT EXCEEDS	42	71	48
90 PERCENT EXCEEDS	8.5	27	9.0

a From rating curve extended above 1,400 ft³/s on basis of velocity-area study.

e Estimated.



PASSAIC RIVER BASIN

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1962 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 1995 TO SEPTEMBER 1996

		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 1995	23...	0945	118	283	6.8	11.0	764	5.8	52	<1.0	700
JAN 1996	18...	1157	38	493	6.7	0.0	764	5.2	36	E2.1	33
MAR	25...	1044	123	284	7.3	7.0	756	9.1	76	2.3	17
MAY	21...	1028	72	270	7.0	23.5	759	3.0	35	E1.1	220
JUL	16...	1033	339	166	7.0	23.0	756	3.0	36	2.9	1100
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)	ALKA- LINITY 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 1995	23...	210	82	21	7.2	18	2.8	27	51	27	<0.1
JAN 1996	18...	10	110	27	10	47	2.2	46	29	94	0.1
MAR	25...	10	68	17	6.1	26	1.5	32	17	50	<0.1
MAY	21...	40	76	19	6.9	21	1.5	54	11	38	0.1
JUL	16...	260	44	11	3.9	13	1.5	33	8.6	20	<0.1
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUB- PENDE (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 1995	23...	15	184	162	3	0.006	0.88	0.04	0.03	0.60	
JAN 1996	18...	18	264	257	10	0.01	0.50	0.17	0.17	0.50	
MAR	25...	4.3	166	142	3	0.003	0.21	<0.03	0.03	0.40	
MAY	21...	9.6	182	140	--	0.014	0.15	0.13	0.11	0.80	
JUL	16...	11	126	89	8	0.007	0.077	<0.03	<0.03	0.70	
DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (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 PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, DIS- SOLVED PENDE (MG/L) (80154)	SEDI- MENT, DIS- SOLVED PENDE (T/DAY) (80155)		
OCT 1995	23...	0.39	1.5	1.3	0.06	0.02	9.6	0.3	--	--	
JAN 1996	18...	0.50	1.0	1.0	0.10	0.04	5.3	0.4	--	--	
MAR	25...	0.26	0.61	0.47	0.04	0.02	5.8	0.7	--	--	
MAY	21...	0.64	0.95	0.79	0.18	0.10	10	0.2	11	2.1	
JUL	16...	0.64	0.78	0.72	0.15	0.10	13	0.6	--	--	

PASSAIC RIVER BASIN

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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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	0530	823	5.40	Jan. 19	1445	*1,400	*6.38
Nov. 15	0130	1,070	5.81	Jan. 27	2030	1,180	6.00

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	34	371	127	59	703	230	297	408	57	137	230	27
2	29	479	131	e64	502	184	537	400	52	110	150	26
3	26	485	124	e73	e273	166	577	339	124	85	104	27
4	24	435	118	e84	e255	142	504	294	132	76	83	26
5	89	336	96	e80	e240	148	412	240	137	62	75	26
6	355	240	84	e68	e194	339	329	238	113	52	65	32
7	261	222	83	53	e165	485	268	239	91	45	62	44
8	153	313	78	58	142	492	325	244	72	66	59	112
9	109	255	75	79	180	445	319	219	60	172	53	157
10	94	195	71	72	242	370	384	188	59	143	53	82
11	77	197	e65	65	280	311	377	190	107	86	52	51
12	63	837	e57	64	300	287	318	374	164	60	46	44
13	56	915	52	70	e218	313	258	400	171	454	67	59
14	62	911	48	72	e180	340	215	334	134	698	63	81
15	217	976	57	71	155	323	182	248	109	772	52	64
16	209	902	71	70	114	299	601	233	90	701	45	47
17	141	802	85	73	108	252	750	247	77	571	43	247
18	104	683	87	83	175	216	717	210	80	450	40	384
19	91	570	73	625	134	210	594	175	129	363	38	269
20	80	440	53	959	134	477	476	154	196	300	36	159
21	210	330	83	1090	379	519	372	131	132	206	37	117
22	314	259	84	988	514	464	268	111	102	138	39	119
23	226	226	79	849	539	380	213	99	85	122	44	161
24	154	208	76	823	574	287	200	90	72	115	64	137
25	122	191	74	864	569	222	164	81	67	99	46	108
26	102	172	72	857	516	182	141	71	58	102	37	93
27	82	154	70	957	444	153	133	70	49	135	34	87
28	550	136	67	1150	372	135	121	70	44	100	32	76
29	622	127	64	1140	296	222	128	70	41	79	31	118
30	569	130	59	1030	---	347	293	67	97	71	30	109
31	466	---	58	873	---	304	---	61	---	135	29	---
TOTAL	5691	12497	2421	13463	8897	9244	10473	6295	2901	6705	1839	3089
MEAN	184	417	78.1	434	307	298	349	203	96.7	216	59.3	103
MAX	622	976	131	1150	703	519	750	408	196	772	230	384
MIN	24	127	48	53	108	135	121	61	41	45	29	26
CFSM	1.84	4.17	.78	4.34	3.07	2.98	3.49	2.03	.97	2.16	.59	1.03
IN.	2.12	4.65	.90	5.01	3.31	3.44	3.90	2.34	1.08	2.49	.68	1.15

PASSAIC RIVER BASIN

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1996, BY WATER YEAR (WY)

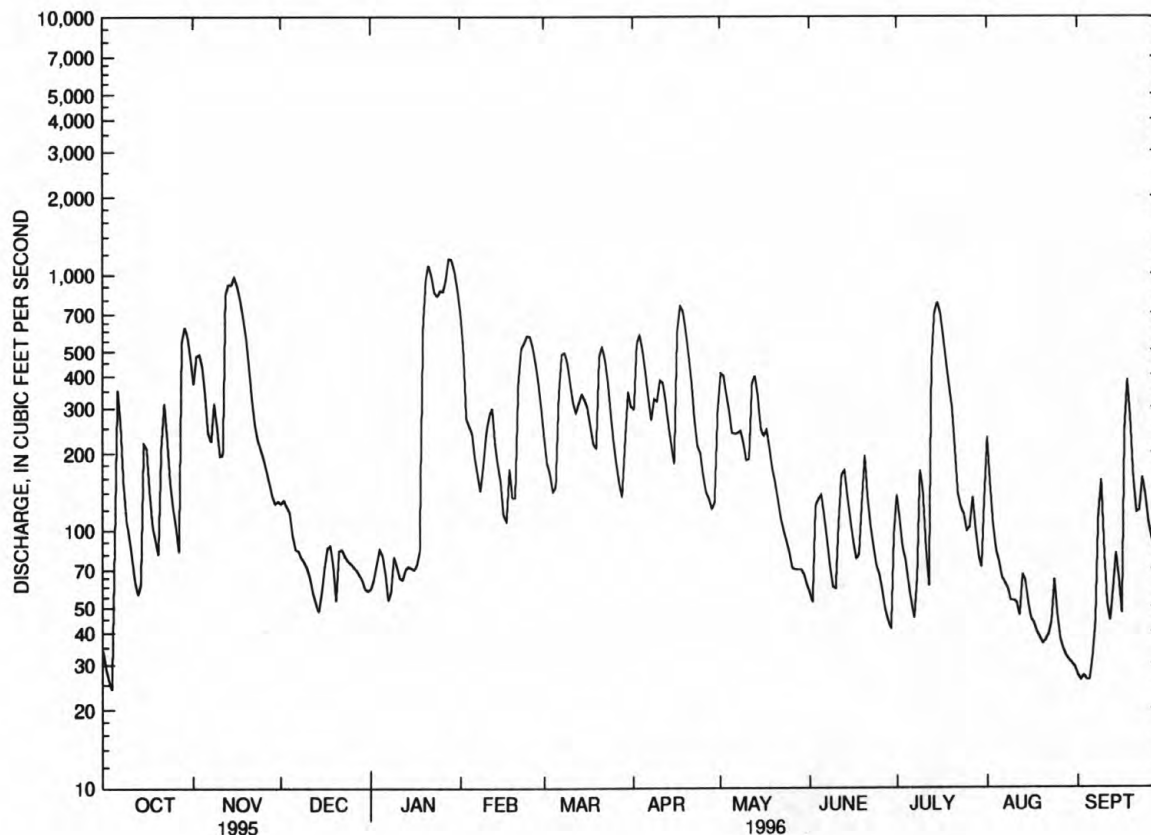
MEAN	88.6	159	200	227	238	343	265	173	115	84.8	95.3	94.0
MAX	576	590	655	735	493	719	711	637	533	539	664	713
(WY)	1904	1973	1984	1979	1908	1994	1983	1989	1972	1975	1942	1971
MIN	8.05	13.6	32.3	21.5	63.2	94.5	54.3	7.52	13.6	7.74	7.35	4.70
(WY)	1965	1950	1940	1981	1980	1911	1985	1903	1965	1966	1957	1906

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1903 - 1996

ANNUAL TOTAL	47323	83515	
ANNUAL MEAN	130	228	172
HIGHEST ANNUAL MEAN			305
LOWEST ANNUAL MEAN			67.7
HIGHEST DAILY MEAN	976	Nov 15	1150
LOWEST DAILY MEAN	11	Sep 4	24
ANNUAL SEVEN-DAY MINIMUM	12	Sep 2	27
INSTANTANEOUS PEAK FLOW			1400
INSTANTANEOUS PEAK STAGE			6.38
INSTANTANEOUS LOW FLOW			23
ANNUAL RUNOFF (CFSM)	1.30	2.28	1.72
ANNUAL RUNOFF (INCHES)	17.60	31.07	23.40
10 PERCENT EXCEEDS	295	542	458
50 PERCENT EXCEEDS	77	135	83
90 PERCENT EXCEEDS	27	52	17

a From floodmark.

e Estimated.



01379500 PASSAIC RIVER NEAR CHATHAM, NJ, DAILY MEAN DISCHARGE

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1966 to September 1968.

SUSPENDED-SEDIMENT DISCHARGE: July 1963 to September 1968.

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 1995 TO SEPTEMBER 1996

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 1995 23...	1030	231	325	7.2	12.0	765	7.5	69	E1.4	--
JAN 1996 17...	1120	70	799	7.2	0.0	760	10.1	69	E1.9	540
MAR 27...	1145	154	374	8.1	9.5	768	11.6	101	2.0	50
MAY 21...	1100	132	376	7.5	22.5	745	5.8	69	E1.0	330
JUL 16...	1145	707	173	7.2	22.0	758	4.6	53	E1.2	3300

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)	ALKA- LINEITY 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 1995 23...	--	80	20	7.2	27	2.8	39	46	35	<0.1
JAN 1996 17...	200	150	38	13	82	2.9	56	35	170	0.1
MAR 27...	<10	84	21	7.7	32	1.7	42	22	62	<0.1
MAY 21...	160	91	23	8.2	34	1.9	61	20	58	0.1
JUL 16...	600	47	12	4.2	15	1.8	31	11	21	<0.1

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- PENDE (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 SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 1995 23...	15	196	179	--	0.008	0.49	0.03	0.03	0.70
JAN 1996 17...	17	412	405	<1	0.022	3.10	0.13	0.12	0.60
MAR 27...	7.2	206	184	9	0.013	1.10	0.05	0.05	0.50
MAY 21...	12	226	199	27	0.037	1.10	0.09	0.11	0.70
JUL 16...	10	124	95	20	0.012	0.39	<0.03	<0.03	0.60

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- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 1995 23...	0.42	1.2	0.91	0.20	0.11	8.4	1.3	31	20
JAN 1996 17...	0.48	3.7	3.6	0.43	0.36	3.9	0.5	--	--
MAR 27...	0.35	1.6	1.4	0.16	0.13	4.7	0.8	--	--
MAY 21...	0.62	1.8	1.7	0.29	0.17	7.4	0.9	--	--
JUL 16...	0.53	0.99	0.92	0.14	0.07	9.6	0.9	--	--

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.

PERIOD OF RECORD.--December 1992 to current year.

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 PERIOD OF RECORD.--Maximum gage height recorded, 9.87 ft, Jan. 29, 1996; minimum recorded, 1.29 ft, many days in September 1995.

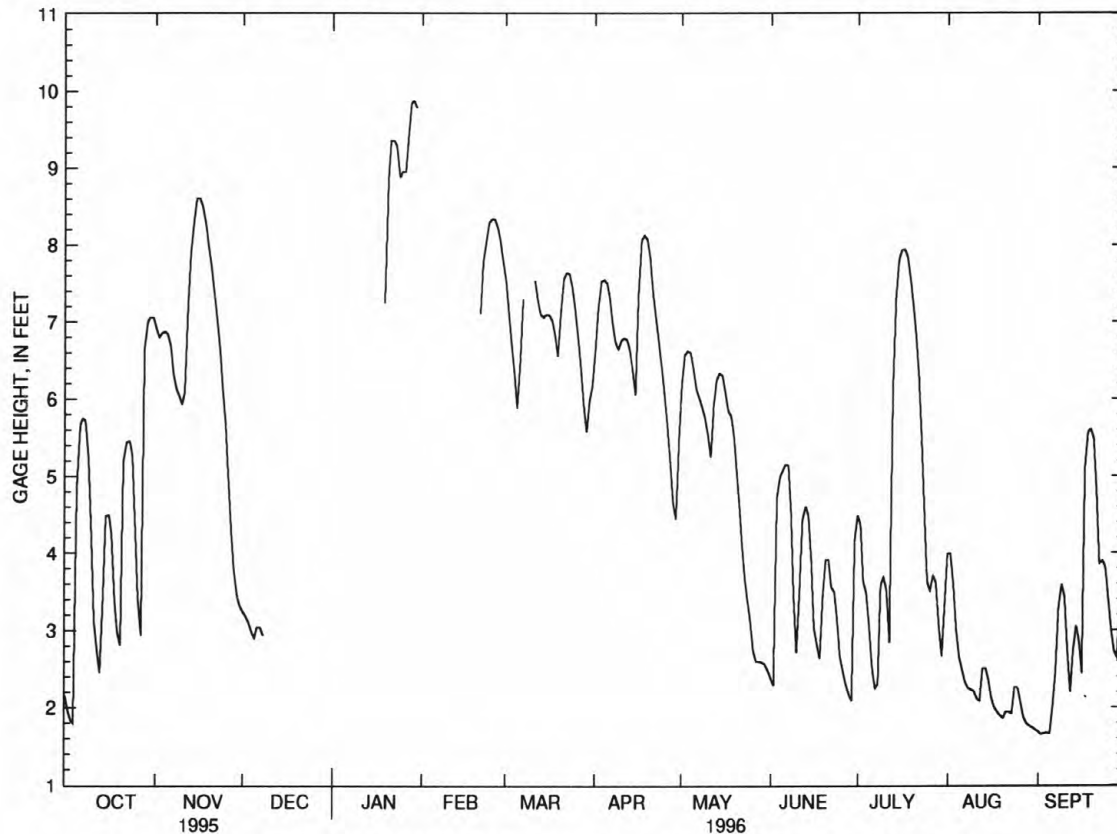
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.16	1.95	6.93	6.70	3.24	3.17	---	---	---	---	7.54	7.18
2	1.95	1.84	6.80	6.68	3.19	3.11	---	---	---	---	7.18	6.72
3	1.84	1.80	6.86	6.79	3.11	3.00	---	---	---	---	6.72	6.31
4	1.80	1.74	6.87	6.85	3.00	2.90	---	---	---	---	6.31	5.88
5	4.86	1.72	6.85	6.68	2.90	2.82	---	---	---	---	5.88	5.55
6	5.67	4.86	6.68	6.34	3.04	2.83	---	---	---	---	6.52	5.66
7	5.75	5.67	6.34	6.09	3.04	2.93	---	---	---	---	7.30	6.52
8	5.72	5.23	6.12	6.05	2.93	2.78	---	---	---	---	---	---
9	5.23	4.18	6.05	5.93	---	---	---	---	---	---	---	---
10	4.18	3.12	5.93	5.55	---	---	---	---	---	---	---	---
11	3.12	2.72	6.08	5.10	---	---	---	---	---	---	7.54	7.29
12	2.72	2.45	7.23	6.08	---	---	---	---	---	---	7.29	7.10
13	2.45	2.32	7.91	7.23	---	---	---	---	---	---	7.10	7.01
14	3.46	2.25	8.33	7.91	---	---	---	---	---	---	7.06	7.02
15	4.48	3.46	8.61	8.33	---	---	---	---	---	---	7.10	7.05
16	4.50	4.25	8.61	8.51	---	---	---	---	---	---	7.09	7.02
17	4.25	3.37	8.51	8.28	---	---	---	---	---	---	7.02	6.83
18	3.37	2.98	8.28	8.01	---	---	---	---	---	---	6.83	6.55
19	2.98	2.81	8.01	7.72	---	---	7.24	3.04	---	---	6.56	6.26
20	2.81	2.69	7.72	7.42	---	---	8.86	7.24	---	---	7.12	6.56
21	5.20	2.72	7.42	7.05	---	---	9.36	8.86	7.11	5.73	7.57	7.12
22	5.45	5.20	7.05	6.63	---	---	9.36	9.29	7.79	7.11	7.64	7.57
23	5.46	5.26	6.63	6.16	---	---	9.29	8.87	8.07	7.79	7.62	7.44
24	5.26	4.26	6.16	5.67	---	---	8.87	8.75	8.30	8.07	7.44	7.16
25	4.26	3.41	5.67	5.04	---	---	8.95	8.87	8.34	8.29	7.16	6.81
26	3.41	2.92	5.04	4.31	---	---	8.95	8.76	8.33	8.21	6.81	6.42
27	2.93	2.73	4.31	3.81	---	---	9.37	8.73	8.21	8.03	6.42	5.92
28	6.65	2.93	3.81	3.46	---	---	9.85	9.37	8.03	7.80	5.92	5.36
29	7.00	6.65	3.46	3.32	---	---	9.87	9.78	7.80	7.54	5.57	5.30
30	7.06	7.00	3.32	3.24	---	---	9.78	9.39	---	---	5.97	5.57
31	7.06	6.93	---	---	---	---	---	---	---	---	6.16	5.97
MONTH	7.06	1.72	8.61	3.24	---	---	---	---	---	---	---	---

01379580 PASSAIC RIVER NEAR HANOVER NECK, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.64	6.14	6.21	5.52	2.38	2.28	4.49	4.17	3.99	3.31	1.69	1.65
2	7.19	6.64	6.57	6.21	2.28	2.18	4.37	3.62	3.99	3.61	1.65	1.61
3	7.53	7.19	6.62	6.57	4.73	2.12	3.62	3.10	3.61	3.01	1.66	1.62
4	7.55	7.51	6.60	6.39	4.99	4.73	3.49	3.07	3.01	2.65	1.67	1.65
5	7.51	7.31	6.39	6.12	5.07	4.97	3.07	2.54	2.65	2.49	1.66	1.64
6	7.31	6.97	6.12	6.01	5.15	5.07	2.54	2.25	2.49	2.33	2.01	1.61
7	6.97	6.73	6.01	5.89	5.14	4.53	2.25	2.08	2.33	2.25	2.46	2.01
8	6.73	6.64	5.89	5.75	4.53	3.44	2.30	2.01	2.25	2.21	3.28	2.08
9	6.65	6.61	5.75	5.53	3.44	2.71	3.58	2.30	2.23	2.15	3.59	3.28
10	6.76	6.65	5.53	5.23	2.71	2.52	3.68	3.52	2.21	2.11	3.43	2.73
11	6.79	6.76	5.24	4.98	3.46	2.47	3.52	2.84	2.11	2.08	2.73	2.19
12	6.77	6.63	5.92	5.24	4.44	3.46	2.84	2.37	2.08	2.01	2.19	1.98
13	6.63	6.37	6.25	5.92	4.61	4.44	6.14	2.42	2.51	2.01	2.75	1.94
14	6.37	6.05	6.33	6.25	4.48	3.85	7.33	6.14	2.51	2.36	3.06	2.75
15	6.05	5.70	6.30	6.08	3.92	3.03	7.82	7.33	2.36	2.12	2.85	2.43
16	7.37	5.70	6.08	5.84	3.03	2.82	7.93	7.82	2.12	2.00	2.43	2.10
17	8.07	7.37	5.84	5.78	2.82	2.63	7.94	7.83	2.00	1.94	5.11	2.10
18	8.12	8.07	5.78	5.52	2.63	2.53	7.83	7.55	1.94	1.89	5.57	5.11
19	8.07	7.84	5.52	5.05	3.42	2.59	7.55	7.20	1.89	1.86	5.60	5.48
20	7.84	7.40	5.05	4.61	3.91	3.42	7.21	6.81	1.86	1.82	5.48	4.78
21	7.40	7.08	4.61	4.09	3.91	3.55	6.81	6.27	1.94	1.79	4.78	3.67
22	7.08	6.76	4.09	3.67	3.55	3.13	6.27	5.48	1.94	1.90	3.86	3.31
23	6.76	6.42	3.67	3.37	3.50	3.14	5.48	4.54	1.92	1.86	3.89	3.81
24	6.42	6.06	3.37	3.11	3.14	2.66	4.54	3.62	2.26	1.87	3.81	3.40
25	6.06	5.64	3.11	2.73	2.66	2.47	3.62	3.05	2.25	2.06	3.40	3.00
26	5.64	5.17	2.73	2.58	2.47	2.30	3.51	2.95	2.06	1.87	3.00	2.72
27	5.17	4.65	2.60	2.54	2.30	2.14	3.70	3.51	1.87	1.79	2.72	2.59
28	4.65	4.14	2.60	2.57	2.17	2.08	3.62	3.07	1.79	1.75	2.65	2.47
29	4.44	3.93	2.59	2.55	2.08	2.00	3.07	2.66	1.76	1.73	3.37	2.65
30	5.52	4.44	2.56	2.48	4.17	1.99	2.66	2.46	1.74	1.71	3.29	3.04
31	---	---	2.48	2.38	---	---	3.31	2.42	1.71	1.68	---	---
MONTH	8.12	3.93	6.62	2.38	5.15	1.99	7.94	2.01	3.99	1.68	5.60	1.61



01379580 PASSAIC RIVER NEAR HANOVER NECK, MAXIMUM DAILY GAGE HEIGHT

PASSAIC RIVER BASIN

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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 19	1630	178	2.95	Jan. 27	1800	*227	*3.15
Jan. 24	1815	103	2.57				

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	1.2	9.1	11	6.2	62	30	21	43	4.9	5.4	7.1	2.2
2	1.2	11	10	6.6	53	28	34	38	4.7	4.4	6.3	2.1
3	.99	11	e9.5	7.4	46	26	31	34	6.2	4.2	6.4	2.0
4	1.2	9.9	e9.3	7.6	e36	22	30	31	7.5	4.3	6.6	2.0
5	5.0	9.2	9.4	7.2	e32	21	27	28	12	4.0	5.6	2.0
6	15	8.7	8.9	7.0	e26	27	25	34	11	7.6	5.0	2.0
7	7.8	9.6	8.2	6.6	28	31	25	31	10	7.6	4.7	2.7
8	5.3	11	7.5	e7.4	27	32	26	27	8.9	6.4	4.6	3.4
9	e3.7	9.6	7.5	e8.2	24	31	25	23	7.9	6.3	4.6	3.5
10	e3.8	9.0	7.6	8.8	23	27	25	21	7.4	5.6	4.5	2.7
11	e3.5	12	7.0	8.8	22	25	24	22	7.2	4.8	4.2	2.3
12	e3.0	48	6.3	9.5	21	24	22	32	8.1	4.5	4.0	2.2
13	e2.8	40	5.6	9.7	20	23	23	31	7.1	27	4.4	3.0
14	e3.8	45	5.7	9.4	19	23	28	28	6.2	34	4.1	3.7
15	e7.7	55	6.1	9.0	16	24	27	32	6.0	39	3.8	3.0
16	e5.8	51	6.4	8.5	16	25	50	28	5.0	41	3.6	2.8
17	e4.1	44	6.4	8.5	16	23	56	25	4.6	37	3.5	6.0
18	e3.4	37	6.4	8.6	16	22	52	23	4.9	30	3.3	13
19	3.4	32	6.6	76	15	23	46	20	5.1	25	4.0	9.2
20	3.2	31	e6.8	92	15	48	40	18	5.4	23	3.6	6.3
21	13	26	e7.2	85	30	48	34	19	4.9	19	3.3	5.0
22	14	23	7.4	78	37	42	33	20	4.3	15	3.1	5.6
23	9.9	19	8.8	65	41	36	29	17	4.1	13	3.3	6.0
24	7.8	18	9.1	77	54	31	24	13	3.8	11	3.6	5.2
25	6.6	16	8.5	87	56	26	20	9.9	3.7	9.4	3.2	4.7
26	6.1	19	8.0	77	52	23	19	8.2	3.6	10	2.9	4.1
27	5.9	19	7.6	142	47	21	18	8.3	3.5	10	2.8	4.0
28	12	15	7.0	172	43	19	15	8.1	3.4	9.8	2.7	4.0
29	11	13	6.5	134	36	20	20	7.0	3.3	9.6	2.6	5.1
30	10	12	6.2	102	---	21	33	6.0	4.9	8.5	2.5	4.7
31	9.3	---	6.1	80	---	20	---	5.1	---	7.7	2.4	---
TOTAL	191.49	673.1	234.6	1412.0	929	842	882	690.6	179.6	444.1	126.3	124.5
MEAN	6.18	22.4	7.57	45.5	32.0	27.2	29.4	22.3	5.99	14.3	4.07	4.15
MAX	15	55	11	172	62	48	56	43	12	41	7.1	13
MIN	.99	8.7	5.6	6.2	15	19	15	5.1	3.3	4.0	2.4	2.0
CFM	.81	2.93	.99	5.95	4.19	3.55	3.84	2.91	.78	1.87	.53	.54
IN.	.93	3.27	1.14	6.87	4.52	4.09	4.29	3.36	.87	2.16	.61	.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1996, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	7.07	11.4	17.0	15.9	16.0	23.8	26.6	18.0	10.3	8.31	6.18	6.02		
MAX	26.1	22.4	40.8	45.5	32.0	49.5	64.1	50.6	21.8	32.6	20.9	24.7		
(WY)	1990	1996	1984	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		

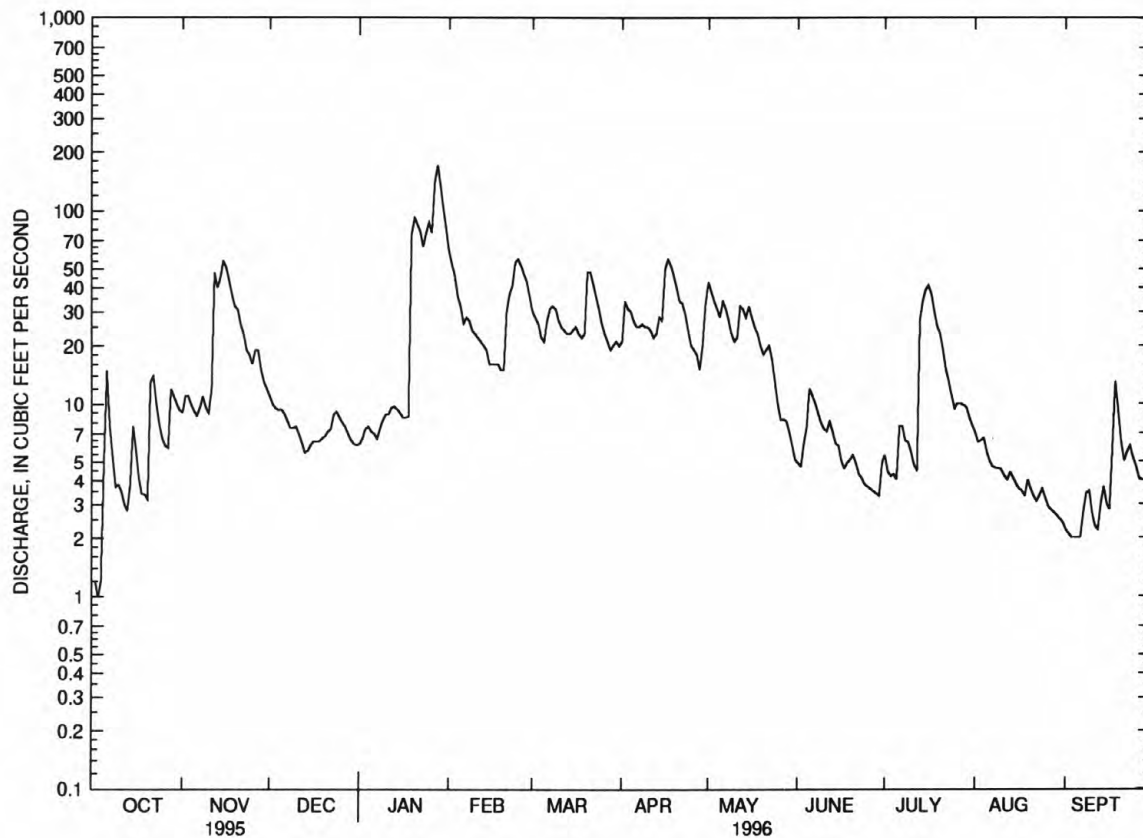
PASSAIC RIVER BASIN

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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1983 - 1996	
ANNUAL TOTAL	3316.83		6729.29			
ANNUAL MEAN	9.09		18.4		13.9	
HIGHEST ANNUAL MEAN					21.4	
LOWEST ANNUAL MEAN					6.63	
HIGHEST DAILY MEAN	59	Mar 9	172	Jan 28	248	Apr 5 1984
LOWEST DAILY MEAN	.85	Sep 19	.99	Oct 3	.85	Sep 19 1995
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 15	2.1	Aug 31	1.2	Sep 15 1995
INSTANTANEOUS PEAK FLOW			227	Jan 27	333	Apr 5 1984
INSTANTANEOUS PEAK STAGE			3.15	Jan 27	3.51	Apr 5 1984
INSTANTANEOUS LOW FLOW			.99	Oct 3	.85	Sep 18 1995
ANNUAL RUNOFF (CFSM)	1.19		2.40		1.81	
ANNUAL RUNOFF (INCHES)	16.13		32.72		24.65	
10 PERCENT EXCEEDS	18		40		30	
50 PERCENT EXCEEDS	6.3		9.6		8.7	
90 PERCENT EXCEEDS	2.5		3.5		2.9	

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 mi².

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 of bridge on Whitmore Avenue.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 22	1215	81	3.09	Jan. 24	1715	136	3.34
Jan. 20	0130	154	3.41	Jan. 28	*0130	*216	*3.63

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	1.6	12	11	8.2	e47	37	20	43	6.3	5.4	13	2.5
2	1.6	13	10	8.0	e40	32	36	46	5.9	6.0	13	2.4
3	1.6	13	9.0	8.0	e33	30	36	42	3.2	5.9	12	2.4
4	1.6	12	8.6	8.0	e29	27	33	38	2.4	5.3	11	2.3
5	1.6	12	8.2	8.0	e23	25	30	34	4.0	5.4	10	2.5
6	2.3	11	8.0	8.0	e21	25	27	34	5.0	5.8	10	2.2
7	2.5	11	8.0	8.0	e26	27	27	34	5.7	6.3	9.6	1.9
8	2.8	12	7.9	8.0	e23	29	27	32	6.2	6.6	9.3	2.1
9	3.1	12	7.8	8.0	e20	30	27	29	6.2	7.2	9.0	2.4
10	3.6	11	8.0	8.0	15	29	27	28	6.2	7.3	8.5	2.6
11	3.3	12	8.0	8.0	17	27	30	27	6.6	7.3	6.4	2.6
12	2.7	53	8.0	8.3	17	25	29	33	7.0	7.3	5.6	2.5
13	2.6	51	7.7	8.6	17	21	25	34	7.3	8.7	5.1	2.2
14	2.1	48	7.6	9.0	16	17	25	34	7.6	16	5.4	2.6
15	2.0	59	7.4	9.0	16	19	26	33	7.8	37	6.1	2.7
16	1.6	62	7.1	9.0	e13	22	46	33	7.2	52	6.0	2.6
17	1.7	56	7.1	9.0	e13	22	65	31	6.8	48	6.6	2.0
18	1.7	48	7.1	9.0	e15	21	63	28	6.9	38	7.0	4.7
19	1.7	43	7.2	23	16	22	54	25	5.9	32	6.6	6.2
20	1.4	38	7.6	122	16	44	47	22	5.4	27	6.2	5.7
21	1.2	34	7.6	101	18	53	40	21	5.6	24	5.7	5.2
22	1.6	56	7.6	88	23	49	35	21	6.0	20	5.6	5.0
23	2.7	54	7.8	74	40	41	31	20	6.1	18	5.6	4.8
24	5.0	30	8.0	98	51	35	27	19	6.2	16	5.5	4.5
25	6.5	28	8.0	117	56	29	22	17	6.3	16	5.5	4.5
26	6.3	25	8.3	100	58	25	20	16	6.1	16	5.3	4.5
27	12	24	8.2	124	54	21	19	14	6.0	16	5.0	4.6
28	17	20	8.1	200	49	19	18	13	5.0	16	4.4	4.7
29	16	13	8.1	157	41	20	18	11	4.4	16	3.5	5.1
30	14	11	8.1	128	---	20	25	8.8	4.8	15	3.0	5.2
31	13	---	8.5	106	---	19	---	6.7	---	14	2.7	---
TOTAL	138.4	884	249.6	1588.1	823	862	955	827.5	176.1	521.5	218.2	105.2
MEAN	4.46	29.5	8.05	51.2	28.4	27.8	31.8	26.7	5.87	16.8	7.04	3.51
MAX	17	62	11	200	58	53	65	46	7.8	52	13	6.2
MIN	1.2	11	7.1	8.0	13	17	18	6.7	2.4	5.3	2.7	1.9
CFSM	.49	3.22	.88	5.59	3.10	3.04	3.48	2.91	.64	1.84	.77	.38
IN.	.56	3.59	1.01	6.45	3.34	3.50	3.88	3.36	.72	2.12	.89	.43

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

MEAN	7.85	14.7	19.8	18.6	16.6	24.0	25.0	20.4	10.8	7.04	7.18	7.67
MAX	33.3	29.5	43.1	51.2	28.4	38.8	51.1	66.7	28.8	18.4	28.6	36.7
(WY)	1990	1996	1987	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

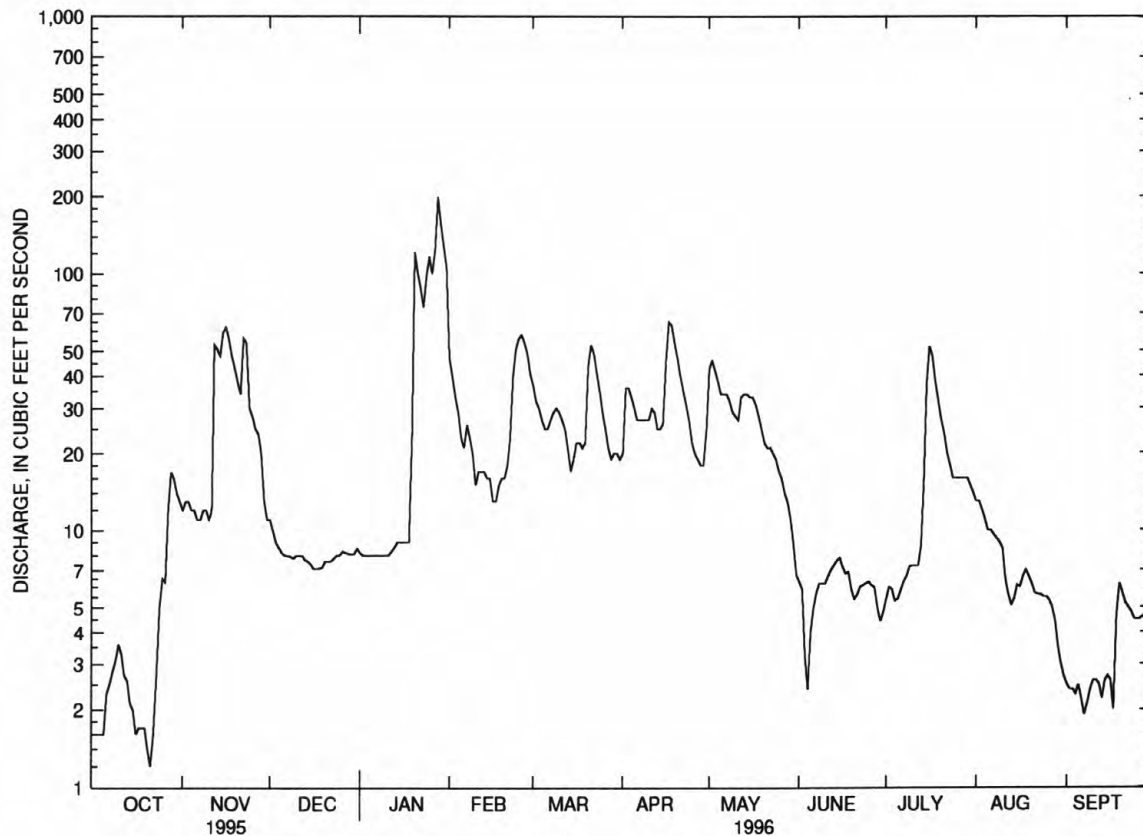
PASSAIC RIVER BASIN

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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1985 - 1996	
ANNUAL TOTAL	3786.9		7348.6		15.0	
ANNUAL MEAN	10.4		20.1		22.1	
HIGHEST ANNUAL MEAN					6.35	
LOWEST ANNUAL MEAN					206	
HIGHEST DAILY MEAN	62	Nov 16	200	Jan 28	206	May 17 1990
LOWEST DAILY MEAN	1.2	Oct 21	1.2	Oct 21	.20	Nov 20 1984
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 29	1.6	Oct 16	.20	Nov 17 1984
INSTANTANEOUS PEAK FLOW			216	Jan 28	243	Sep 13 1987
INSTANTANEOUS PEAK STAGE			3.63	Jan 28	3.70	Sep 13 1987
INSTANTANEOUS LOW FLOW			1.0	Oct 21	1.0	Oct 21 1995
ANNUAL RUNOFF (CFSM)	1.13		2.19		1.63	
ANNUAL RUNOFF (INCHES)	15.38		29.84		22.20	
10 PERCENT EXCEEDS	22		46		33	
50 PERCENT EXCEEDS	6.1		11		9.3	
90 PERCENT EXCEEDS	2.1		2.7		1.9	

e Estimated.



01379780 GREEN POND BK BLW PCTNY LK, AT PICATINNY ARSNL, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

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 mi².

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 of gage. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR---Peak discharges greater than base discharge of 130 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 20	0630	263	3.96	Jan. 27	2245	*313	*4.08
Jan. 25	1330	302	4.05				

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	2.8	21	18	e12	108	49	36	68	11	9.3	17	3.2
2	2.7	29	17	e13	92	46	68	61	10	8.5	16	2.9
3	1.9	28	15	e14	79	43	52	56	12	8.3	15	3.0
4	2.1	22	14	e14	68	39	48	52	11	7.7	13	2.9
5	23	20	14	e14	59	39	45	47	19	7.3	12	3.2
6	40	18	14	e13	52	49	41	50	12	7.5	12	3.5
7	12	22	15	e12	47	48	42	48	11	7.8	12	6.0
8	7.8	28	e13	e14	42	45	45	45	11	11	11	5.8
9	6.4	21	e13	e15	32	43	41	41	11	18	11	5.2
10	5.9	19	e14	e16	27	41	42	38	11	11	11	3.9
11	5.3	24	e13	e15	30	39	42	44	11	9.7	8.7	3.4
12	4.8	105	e12	e16	29	39	42	58	12	9.6	7.0	3.2
13	4.6	84	e11	e16	26	38	40	48	12	69	7.9	6.2
14	7.1	78	e11	e16	26	32	37	45	12	38	6.4	5.7
15	18	98	e12	e16	26	37	37	44	12	58	6.9	3.7
16	12	89	e12	e15	25	38	91	46	11	74	6.7	3.4
17	6.6	79	e12	e15	25	36	85	44	11	60	7.4	12
18	5.5	69	e12	e15	24	35	77	39	11	49	7.6	29
19	6.0	62	e12	86	23	35	69	36	11	41	7.4	14
20	5.0	56	e13	233	29	71	62	32	10	35	6.9	11
21	39	52	e13	162	56	65	55	29	9.5	31	6.4	9.0
22	23	59	e14	127	54	61	50	28	9.5	26	5.9	10
23	15	75	e15	107	61	54	46	28	9.8	23	7.2	10
24	14	48	e16	132	75	47	42	26	8.8	20	8.5	8.4
25	15	41	e15	208	72	42	35	24	8.9	19	5.9	7.8
26	14	37	e14	143	70	38	32	22	8.7	25	6.0	7.8
27	17	35	e13	200	67	34	30	20	8.0	22	5.5	6.9
28	42	31	e13	294	63	31	27	18	7.7	19	5.3	6.9
29	30	22	e12	224	55	35	39	16	5.9	18	4.4	9.9
30	24	18	e12	173	---	37	57	15	12	18	3.8	8.0
31	22	---	e12	137	---	36	---	12	---	19	3.5	---
TOTAL	434.5	1390	416	2487	1442	1322	1455	1180	320.8	779.7	265.3	215.9
MEAN	14.0	46.3	13.4	80.2	49.7	42.6	48.5	38.1	10.7	25.2	8.56	7.20
MAX	42	105	18	294	108	71	91	68	19	74	17	29
MIN	1.9	18	11	12	23	31	27	12	5.9	7.3	3.5	2.9
CFSM	1.11	3.68	1.07	6.37	3.95	3.38	3.85	3.02	.85	2.00	.68	.57
IN.	1.28	4.10	1.23	7.34	4.26	3.90	4.30	3.48	.95	2.30	.78	.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1996, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	12.2	21.9	31.0	28.7	28.6	42.6	48.3	32.8	19.0	15.4	11.0	11.9		
MAX	46.7	46.3	71.2	80.2	49.7	89.2	112	87.0	39.9	61.4	36.4	54.0		
(WY)	1990	1996	1984	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		

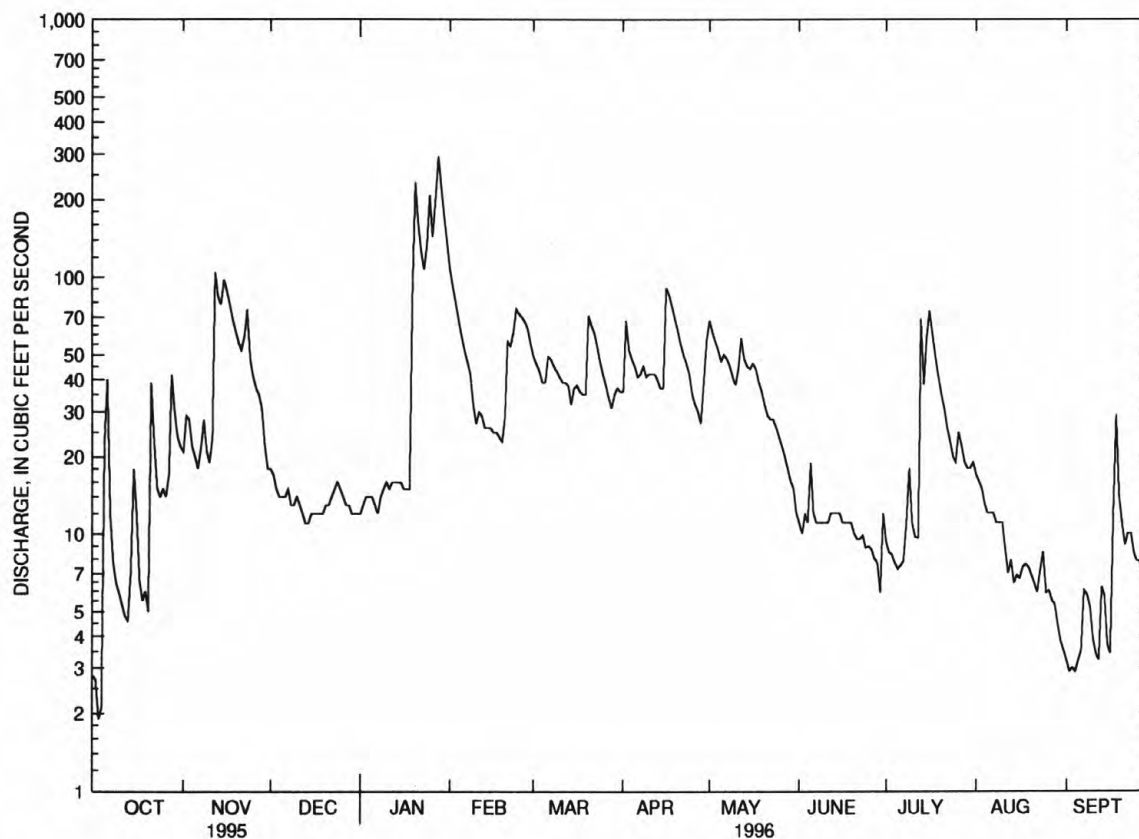
PASSAIC RIVER BASIN

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01379790 GREEN POND BROOK AT WHARTON, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1983 - 1996	
ANNUAL TOTAL	6601.1		11708.2			
ANNUAL MEAN	18.1		32.0		25.3	
HIGHEST ANNUAL MEAN					40.6	1984
LOWEST ANNUAL MEAN					12.5	1985
HIGHEST DAILY MEAN	105	Nov 12	294	Jan 28	512	Apr 6 1984
LOWEST DAILY MEAN	1.9	Oct 3	1.9	Oct 3	1.6	Sep 3 1991
ANNUAL SEVEN-DAY MINIMUM	2.5	Sep 10	3.2	Aug 31	1.8	Aug 29 1991
INSTANTANEOUS PEAK FLOW			313	Jan 27	572	Apr 5 1984
INSTANTANEOUS PEAK STAGE			4.08	Jan 27	5.11	Apr 5 1984
INSTANTANEOUS LOW FLOW			1.7	Oct 3	1.1	Oct 17 1994
ANNUAL RUNOFF (CFSM)	1.44		2.54		2.01	
ANNUAL RUNOFF (INCHES)	19.49		34.57		27.26	
10 PERCENT EXCEEDS	37		68		53	
50 PERCENT EXCEEDS	13		19		16	
90 PERCENT EXCEEDS	4.1		6.3		5.0	

e Estimated.



01379790 GREEN POND BROOK AT WHARTON, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

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 of bridge on Morris Avenue in Boonton, 1.8 mi upstream from dam at Boonton Reservoir.

DRAINAGE AREA.--116 mi².

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 of 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. The mean diversion during the water year from Taylortown Reservoir was 0.55 ft³/s. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1215	1,320	4.32	Jan. 28	0400	*2,660	*5.65
Nov. 15	1145	1,070	3.96	Apr. 16	1745	1,350	4.37
Jan. 20	0745	2,110	5.20	July 13	2300	1,500	4.56
Jan. 25	0500	1,370	4.39				

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	e56	234	186	107	679	366	300	777	119	192	139	32
2	e50	382	186	112	573	333	747	545	113	125	115	32
3	e47	354	169	120	459	319	537	452	155	118	101	31
4	e40	269	166	117	457	292	430	417	241	128	111	30
5	e47	226	153	97	330	287	375	368	628	93	104	29
6	e823	200	158	89	386	432	325	384	343	78	97	31
7	e355	213	149	97	398	535	323	375	213	68	85	94
8	e209	318	138	81	337	466	421	325	167	75	76	118
9	e150	266	140	108	327	378	376	300	146	262	72	104
10	e121	206	144	106	326	337	397	286	139	176	77	66
11	e100	210	123	131	319	309	374	289	136	102	68	49
12	e87	1060	129	126	315	302	314	569	171	82	62	42
13	e74	919	121	115	250	312	319	452	147	793	72	66
14	e67	753	117	105	255	336	300	363	127	1160	76	104
15	e307	978	130	118	236	357	279	306	114	587	64	70
16	e172	846	140	112	207	379	941	320	102	586	59	55
17	e116	664	146	103	214	316	1030	378	96	396	60	184
18	e96	553	134	91	214	295	689	308	112	280	57	417
19	85	491	125	176	189	291	533	282	124	221	50	262
20	78	464	103	1810	232	747	472	255	156	184	48	158
21	366	414	128	1360	552	598	433	227	137	150	47	113
22	598	362	138	1050	591	487	385	208	113	133	47	129
23	304	346	132	799	578	436	346	203	142	137	47	155
24	245	292	126	796	665	377	328	186	95	138	89	112
25	194	256	119	1260	623	326	294	167	87	124	60	94
26	179	235	116	991	511	302	275	155	79	153	47	81
27	146	220	107	1220	474	274	260	149	70	179	43	71
28	570	211	109	2260	458	256	236	145	66	128	42	66
29	474	199	104	1580	422	294	301	140	61	110	39	111
30	309	191	102	1160	---	320	516	134	154	107	36	88
31	254	---	103	915	---	329	---	126	---	129	34	---
TOTAL	6719	12332	4141	17312	11577	11388	12856	9591	4553	7194	2124	2994
MEAN	217	411	134	558	399	367	429	309	152	232	68.5	99.8
MAX	823	1060	186	2260	679	747	1030	777	628	1160	139	417
MIN	40	191	102	81	189	256	236	126	61	68	34	29

PASSAIC RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1996, BY WATER YEAR (WY)

MEAN	124	224	273	264	276	394	393	276	180	130	117	120
MAX	523	694	706	855	590	798	979	836	847	553	447	484
(WY)	1956	1973	1974	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

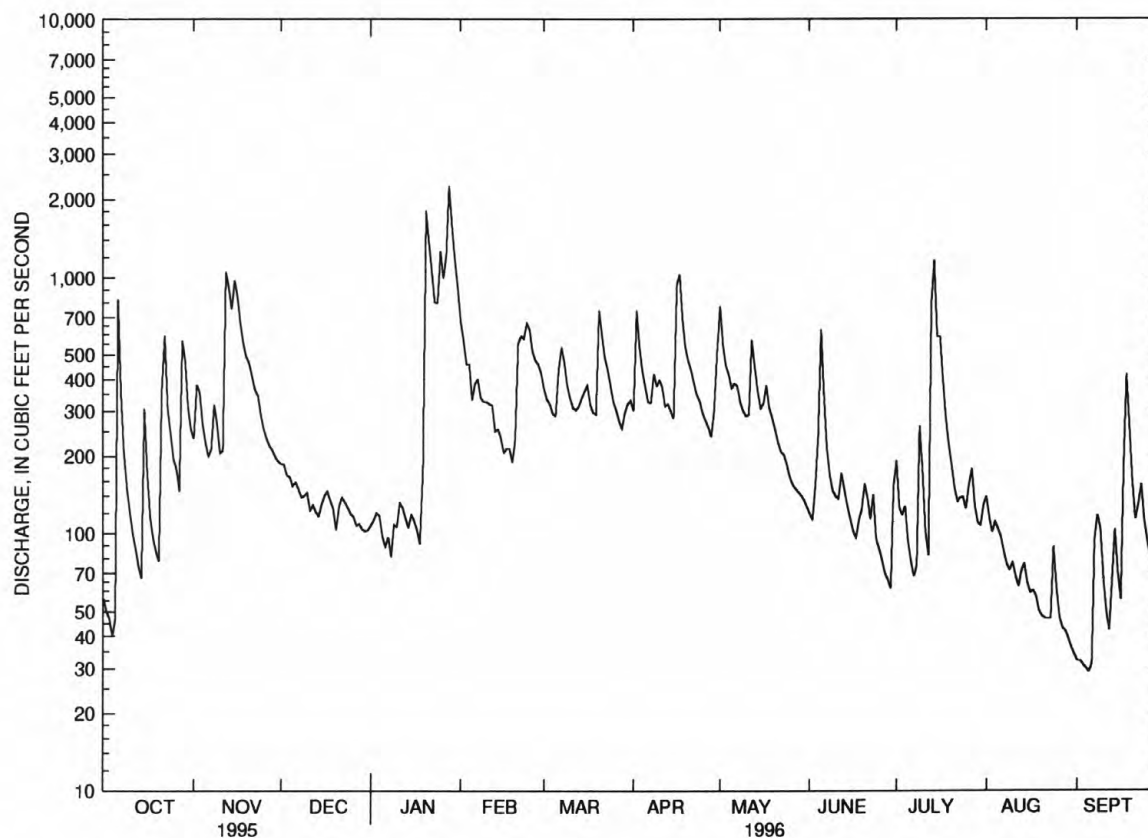
FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1938 - 1996

ANNUAL TOTAL	60660.5		102781									
ANNUAL MEAN	166		281									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	1060	Nov 12	2260	Jan 28	4220	Jan 25	1979					
LOWEST DAILY MEAN	6.0	Sep 6	29	Sep 5	6.0	Sep 6	1995					
ANNUAL SEVEN-DAY MINIMUM	8.5	Sep 2	31	Aug 31	8.5	Sep 2	1995					
INSTANTANEOUS PEAK FLOW			2660	Jan 28	5590	Apr 5	1984					
INSTANTANEOUS PEAK STAGE			5.65	Jan 28	7.23	Apr 5	1984					
10 PERCENT EXCEEDS	341		580		498							
50 PERCENT EXCEEDS	126		187		154							
90 PERCENT EXCEEDS	28		67		44							

e Estimated.



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

PASSAIC RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-79, 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 1995 TO SEPTEMBER 1996

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 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 1995													
26...	1002	189	224	7.8	11.5	748	9.3	87	<1.2	110	20	64	
JAN 1996													
23...	1115	797	198	7.2	0.0	753	13.7	95	E1.8	34	80	40	
MAR													
21...	1045	598	234	7.2	5.0	732	11.7	95	2.0	33	50	47	
MAY													
28...	1005	147	285	7.9	15.5	753	9.6	97	<1.0	170	20	80	
JUL													
22...	1115	132	249	7.7	21.0	748	7.0	80	E1.2	170	80	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)	ALKA-LINITY 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 1995													
26...	16	5.8	14	1.2	42	14	29	0.1	11	134	120	4	
JAN 1996													
23...	10	3.6	19	1.0	20	10	36	0.1	8.0	112	102	3	
MAR													
21...	12	4.1	24	0.90	26	11	43	<0.1	8.0	124	120	<1	
MAY													
28...	20	7.4	22	1.2	49	13	44	<0.1	8.4	186	147	5	
JUL													
22...	17	6.3	18	1.1	50	12	34	0.1	9.7	156	130	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. TOTAL (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (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 1995													
26...	0.004	0.76	0.06	<0.03	0.30	0.20	1.1	0.96	0.02	<0.01	5.2	0.3	
JAN 1996													
23...	<0.003	0.50	0.04	<0.03	0.20	0.08	0.70	0.58	0.02	<0.01	3.8	0.2	
MAR													
21...	<0.003	0.41	<0.03	<0.03	0.20	0.16	0.61	0.57	0.01	<0.01	3.0	0.4	
MAY													
28...	0.007	0.42	<0.03	<0.03	0.40	0.30	0.82	0.72	0.05	0.03	3.1	0.5	
JUL													
22...	0.005	0.34	0.09	0.06	0.20	0.22	0.54	0.56	<0.01	<0.01	4.1	0.3	

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 mi².

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 of 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	124	35	879	343	288	777	57	43	52	12
2	11	61	120	43	722	302	632	618	49	57	43	12
3	11	283	111	61	571	311	668	447	70	56	27	11
4	11	251	103	56	e437	241	448	391	177	75	25	11
5	19	191	94	47	e472	238	367	349	478	37	21	11
6	15	158	99	35	e302	333	317	345	409	23	17	12
7	12	159	87	34	e302	768	304	351	210	14	14	12
8	12	250	76	59	e287	586	372	312	129	14	15	12
9	12	239	83	44	277	389	362	277	92	54	14	12
10	12	182	89	54	286	339	366	258	83	110	14	12
11	12	165	62	58	278	302	351	254	75	51	14	12
12	12	973	45	62	274	283	307	479	100	21	14	12
13	12	1330	46	62	e212	288	293	456	98	535	14	12
14	13	986	54	54	e199	310	282	351	74	1610	13	12
15	13	1240	56	51	e189	331	252	290	56	814	13	12
16	12	1090	68	45	176	353	797	279	40	649	13	11
17	12	816	78	43	164	314	1370	340	30	444	13	13
18	12	627	73	51	167	279	859	299	34	274	13	12
19	12	507	71	267	161	269	386	261	44	182	13	11
20	11	447	59	2180	154	632	49	222	79	119	13	11
21	16	388	53	e1980	437	751	334	177	80	80	13	11
22	12	328	61	e1420	698	561	372	156	57	58	13	12
23	11	295	60	1010	682	446	357	146	68	53	12	12
24	11	261	59	881	753	371	287	128	43	59	12	11
25	11	212	54	1590	765	330	267	107	22	50	12	11
26	11	185	51	1340	607	294	237	95	14	54	12	11
27	12	163	39	1360	520	247	220	90	14	93	12	11
28	21	156	38	3090	487	222	197	86	13	64	12	12
29	12	141	38	2470	428	258	216	81	13	39	12	12
30	11	131	33	1710	---	289	477	68	16	27	12	11
31	11	---	33	1230	---	304	---	62	---	29	12	---
TOTAL	386	12227	2117	21422	11886	11284	12034	8552	2724	5788	509	349
MEAN	12.5	408	68.3	691	410	364	401	276	90.8	187	16.4	11.6
MAX	21	1330	124	3090	879	768	1370	777	478	1610	52	13
MIN	11	12	33	34	154	222	49	62	13	14	12	11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1996, BY WATER YEAR (WY)

MEAN	44.3	104	165	166	175	285	301	191	98.6	53.9	43.3	46.5
MAX	408	483	582	692	499	739	978	873	671	445	269	346
(WY)	1956	1973	1984	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

PASSAIC RIVER BASIN

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

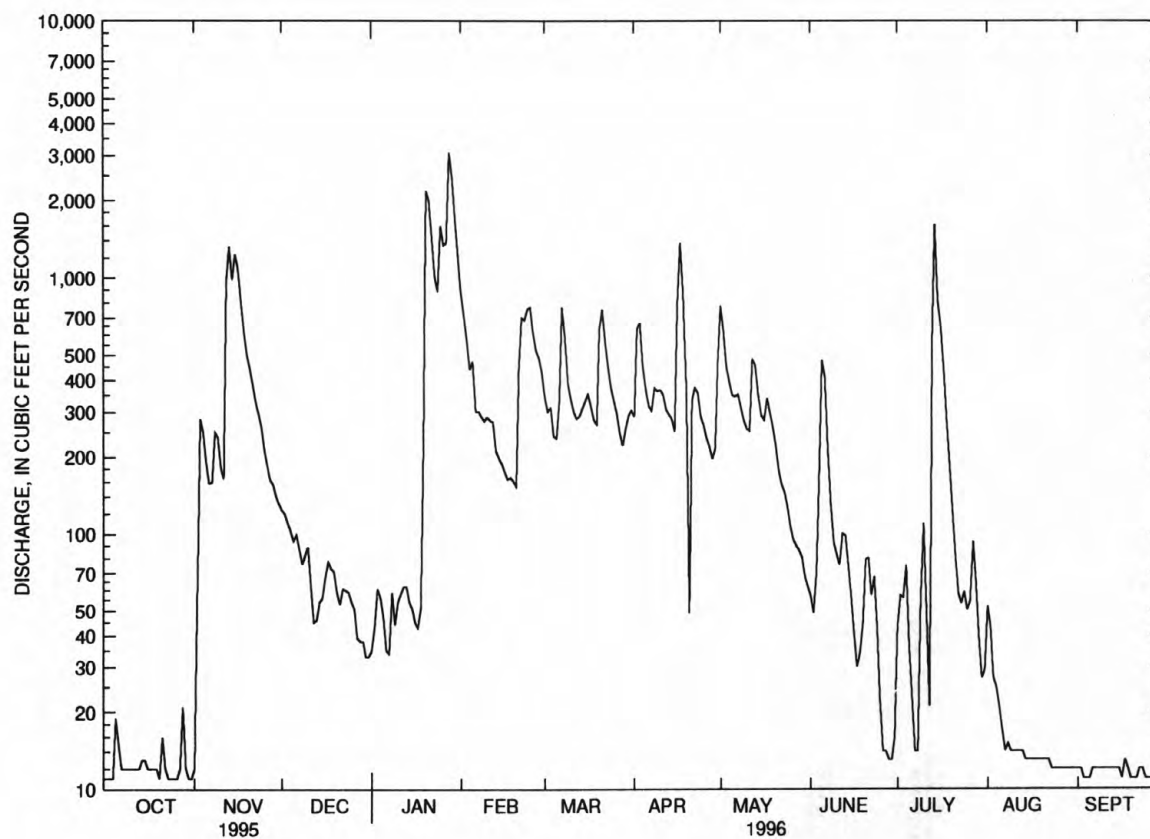
SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1950 - 1996	
ANNUAL TOTAL	36664.7		89278		139	
ANNUAL MEAN	100		244		296	
HIGHEST ANNUAL MEAN					7.19	
LOWEST ANNUAL MEAN					1952	
HIGHEST DAILY MEAN	1330	Nov 13	3090	Jan 28	3850	Apr 6 1984
LOWEST DAILY MEAN	9.8	Aug 4	11	Oct 1	.00	Jan 19 1959
ANNUAL SEVEN-DAY MINIMUM	10	Aug 4	11	Sep 19	.00	Dec 18 1963
INSTANTANEOUS PEAK FLOW			3400	Jan 28	7560ab	Oct 10 1903
INSTANTANEOUS PEAK STAGE			7.27	Jan 28	---	
INSTANTANEOUS LOW FLOW			10	Apr 19	.00a	
10 PERCENT EXCEEDS	238		628		368	
50 PERCENT EXCEEDS	42		86		38	
90 PERCENT EXCEEDS	11		12		.80	

a Since 1903; see period of record section.

b Maximum daily.

c Estimated.

† Sewage effluent, in cubic feet per second, from plant at Rockaway Valley Regional Sewage Authority.



— 01381000 ROCKAWAY RIVER BELOW RESERVOIR AT BOONTON, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

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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 of mouth.

DRAINAGE AREA.--136 mi².

PERIOD OF RECORD.--Water years 1963 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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATURATION (00301)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, FECAL, EC BROTH (MPN) (31615)	ENTEROCOCCUS, ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)
OCT 1995												
26...	0900	30	488	7.6	12.0	760	7.9	74	1.3	330	170	130
JAN 1996												
29...	1050	2300	224	7.5	1.0	767	13.5	94	2.4	240	200	44
MAR												
25...	1020	350	303	7.4	5.0	759	11.9	94	2.1	50	340	66
MAY												
28...	1230	93	328	7.5	16.5	758	7.8	80	<1.0	220	20	86
JUL												
22...	0925	74	355	7.6	20.0	756	6.4	71	2.2	240	110	91

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB AS CaCO3 (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT 1995												
26...	33	11	37	4.4	80	26	70	0.2	13	278	246	1
JAN 1996												
29...	11	3.9	23	1.2	24	11	41	<0.1	7.9	116	116	9
MAR												
25...	17	5.6	30	1.3	35	14	55	<0.1	8.6	166	156	3
MAY												
28...	22	7.6	28	1.9	51	16	51	0.1	6.7	210	170	15
JUL												
22...	23	8.1	29	2.4	61	17	53	0.1	10	212	188	20

DATE	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, DIS-SOLVED (MG/L AS N) (00602)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00665)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
OCT 1995												
26...	0.015	0.74	0.06	0.04	0.60	0.33	1.3	1.1	0.97	0.96	4.2	0.3
JAN 1996												
29...	0.005	0.51	0.06	0.08	0.40	0.14	0.91	0.65	<0.01	<0.01	3.6	0.3
MAR												
25...	0.006	0.71	<0.03	<0.03	0.20	0.15	0.91	0.86	0.06	0.04	2.8	0.4
MAY												
28...	0.014	1.40	0.07	0.06	0.60	0.40	2.0	1.8	0.29	0.23	3.2	0.9
JUL												
22...	0.025	2.00	0.09	0.08	0.60	0.35	2.6	2.4	0.37	0.25	3.9	1.1

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 mi².

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 good 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 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

[illegible]

01381400 WHIPPANY RIVER NEAR MORRISTOWN, NJ--Continued

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	4.6	19	19	7.6	65	38	45	108	18	22	14	e6.9
2	4.9	75	18	8.9	e62	39	154	49	17	14	12	e6.9
3	4.5	36	17	11	e59	38	67	48	33	12	11	e7.0
4	4.5	23	17	12	e53	36	52	48	30	11	12	e7.3
5	45	19	16	14	e46	40	49	41	82	10	10	e7.0
6	119	17	20	e16	e48	83	46	54	26	9.3	9.9	e9.0
7	18	28	17	e30	e42	91	51	44	21	8.8	9.6	e15
8	12	40	15	e120	e39	62	68	41	18	13	9.2	e24
9	9.1	16	17	e150	e53	50	52	37	17	26	10	e17
10	8.3	14	16	e91	47	50	65	35	17	13	11	e8.7
11	7.7	23	30	e35	52	48	50	43	28	9.5	8.9	e8.2
12	7.0	228	26	e37	45	45	43	110	34	11	8.8	e7.6
13	6.7	60	17	e17	44	50	47	46	24	270	11	e14
14	16	55	19	e22	43	50	41	39	19	100	9.6	e15
15	61	136	20	e16	30	46	38	37	16	81	e9.1	e8.2
16	15	56	19	e14	29	46	178	53	14	79	e8.9	e8.0
17	10	40	18	e16	32	37	109	54	14	29	e8.3	e70
18	8.7	36	16	e18	26	36	68	41	15	22	e8.1	e75
19	8.0	36	17	e240	24	40	59	38	24	26	e8.7	e13
20	7.8	31	44	e340	31	130	55	35	20	23	e10	e12
21	76	29	47	e75	116	60	51	32	18	15	e9.1	e9.0
22	56	26	47	e43	94	48	47	30	17	14	e8.8	e34
23	17	24	28	27	78	43	46	30	25	20	e9.0	e29
24	13	24	9.2	85	98	40	44	27	13	16	e8.3	e18
25	11	22	8.7	153	71	39	39	25	12	14	e7.5	e12
26	10	21	8.5	70	53	37	39	24	11	29	e7.6	e10
27	11	20	15	192	48	34	37	26	10	16	e7.6	e8.8
28	161	19	8.1	168	48	34	33	24	10	13	e7.2	e9.9
29	49	20	8.0	100	42	54	52	23	9.7	12	e7.3	e14
30	21	19	10	86	---	57	93	21	39	12	e6.8	e17
31	17	---	7.7	73	---	47	---	20	---	19	e6.9	---
TOTAL	819.8	1212	595.2	2287.5	1518	1548	1818	1283	651.7	969.6	286.2	501.5
MEAN	26.4	40.4	19.2	73.8	52.3	49.9	60.6	41.4	21.7	31.3	9.23	16.7
MAX	161	228	47	340	116	130	178	110	82	270	14	75
MIN	4.5	14	7.7	7.6	24	34	33	20	9.7	8.8	6.8	6.9
CFSM	1.89	2.89	1.37	5.27	3.74	3.57	4.33	2.96	1.55	2.23	.66	1.19
IN.	2.18	3.22	1.58	6.08	4.03	4.11	4.83	3.41	1.73	2.58	.76	1.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

	MEAN	26.4	40.4	19.2	73.8	52.3	49.9	60.6	41.4	21.7	31.3	9.23	11.6
MAX	26.4	40.4	19.2	73.8	52.3	49.9	60.6	41.4	21.7	31.3	9.23	16.7	
(WY)	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	
MIN	26.4	40.4	19.2	73.8	52.3	49.9	60.6	41.4	21.7	31.3	9.23	6.53	
(WY)	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1995	

SUMMARY STATISTICS

FOR 1996 WATER YEAR

WATER YEARS 1995 - 1996

ANNUAL TOTAL	13490.5		
ANNUAL MEAN	36.9		
HIGHEST ANNUAL MEAN		36.9	1996
LOWEST ANNUAL MEAN		36.9	1996
HIGHEST DAILY MEAN	340	Jan 20	1996
LOWEST DAILY MEAN	4.5	Oct 3	1995
ANNUAL SEVEN-DAY MINIMUM	7.0	Aug 30	1995
INSTANTANEOUS PEAK FLOW	547	Jul 13	1996
INSTANTANEOUS PEAK STAGE	5.93	Jul 13	1996
INSTANTANEOUS LOW FLOW	4.3	Oct 3	1995
ANNUAL RUNOFF (CFSM)	2.63		
ANNUAL RUNOFF (INCHES)	35.85		
10 PERCENT EXCEEDS	75		
50 PERCENT EXCEEDS	24		
90 PERCENT EXCEEDS	8.7		

e Estimated.

PASSAIC RIVER BASIN

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 mi².

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. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	0445	799	4.70	Jan. 27	2300	1,100	5.42
Nov. 12	0130	698	4.45	Apr. 16	0815	644	4.31
Jan. 20	0130	*1,160	*5.56	July 13	1715	808	4.72

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

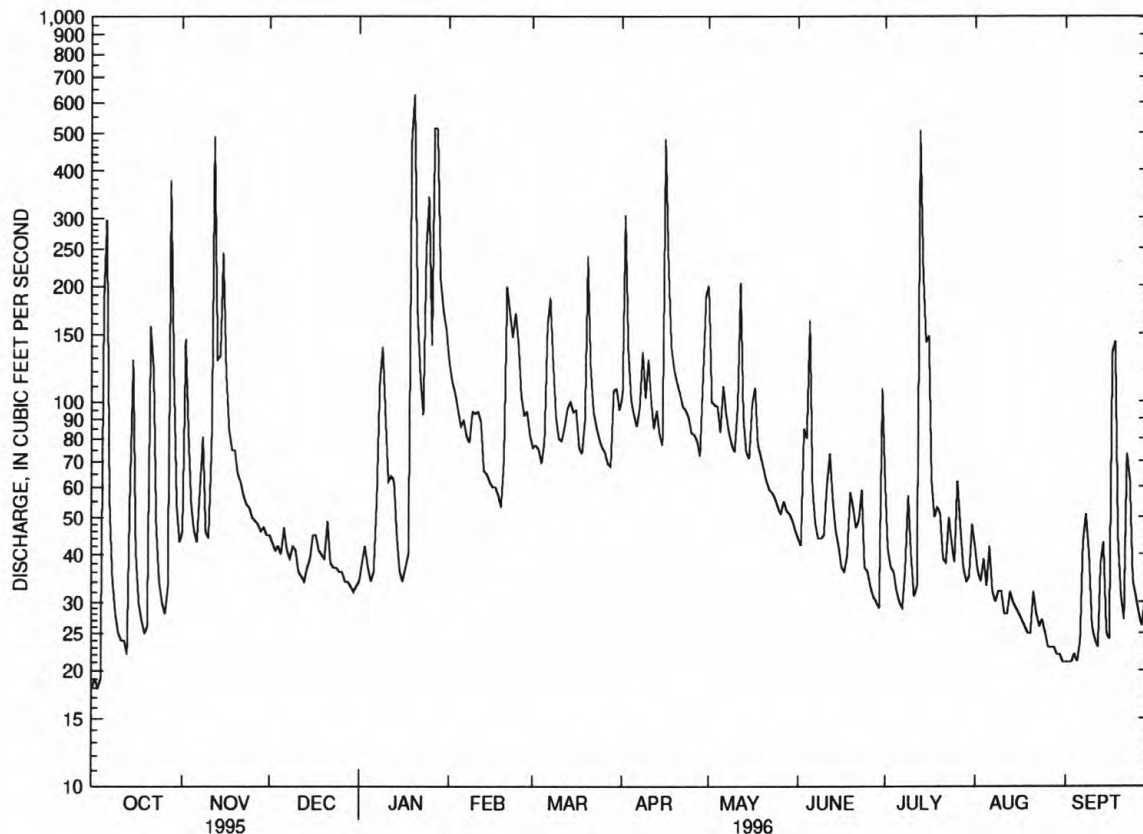
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	46	45	34	127	76	104	201	44	62	42	21
2	19	146	43	38	113	77	306	100	42	41	36	21
3	18	83	41	42	105	75	136	98	85	37	34	21
4	19	54	42	37	95	69	101	97	80	36	39	22
5	184	46	40	34	86	79	92	83	163	32	33	21
6	298	43	47	36	89	158	86	110	60	30	42	24
7	56	61	41	55	81	187	97	93	48	29	32	43
8	35	81	39	113	78	125	135	83	44	37	30	51
9	28	46	42	139	94	91	102	77	44	57	32	40
10	25	44	41	91	93	80	129	74	45	40	32	26
11	24	78	36	62	94	79	101	97	61	31	28	24
12	24	491	35	64	88	86	85	204	73	33	28	23
13	22	129	34	62	66	96	95	91	55	509	32	38
14	61	132	37	45	65	100	82	74	46	223	30	43
15	129	245	39	36	62	94	77	71	42	142	29	25
16	41	118	45	34	60	95	483	99	37	148	28	24
17	30	85	45	37	60	76	226	109	36	62	27	134
18	27	75	41	40	57	73	139	77	40	50	26	143
19	25	75	40	480	53	89	121	72	58	53	25	44
20	26	65	39	630	71	239	112	67	53	51	25	31
21	158	62	49	170	199	121	105	62	47	39	32	27
22	123	57	38	115	171	94	97	59	49	38	28	73
23	47	54	37	92	147	86	95	58	59	50	26	62
24	34	53	37	249	171	80	91	56	37	43	27	34
25	30	50	36	342	141	76	83	53	36	38	25	31
26	28	49	36	140	103	74	82	51	33	62	23	28
27	33	48	34	514	92	69	79	55	31	47	23	26
28	378	46	34	512	94	68	72	52	30	37	23	30
29	113	47	33	207	82	107	115	51	29	34	22	50
30	54	45	32	172	---	108	189	49	108	35	22	29
31	43	---	33	154	---	95	---	46	---	48	21	---
TOTAL	2150	2654	1211	4776	2837	3022	3817	2569	1615	2174	902	1209
MEAN	69.4	88.5	39.1	154	97.8	97.5	127	82.9	53.8	70.1	29.1	40.3
MAX	378	491	49	630	199	239	483	204	163	509	42	143
MIN	18	43	32	34	53	68	72	46	29	29	21	21
CFSM	2.36	3.01	1.33	5.24	3.33	3.32	4.33	2.82	1.83	2.39	.99	1.37
IN.	2.72	3.36	1.53	6.04	3.59	3.82	4.83	3.25	2.04	2.75	1.14	1.53

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	31.7	45.7	53.5	58.7	64.3	87.3	87.7	66.4	46.9	38.7	35.4	34.3
MAX	93.8	132	158	211	147	215	231	237	214	186	158	123
(WY)	1990	1933	1984	1979	1973	1936	1983	1989	1972	1975	1942	1971
MIN	8.72	13.3	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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1922 - 1996	
ANNUAL TOTAL	18066		28936			
ANNUAL MEAN	49.5		79.1		54.1	
HIGHEST ANNUAL MEAN					98.5	
LOWEST ANNUAL MEAN					23.3	
HIGHEST DAILY MEAN	491	Nov 12	630	Jan 20	1510	Aug 28 1971
LOWEST DAILY MEAN	13	Sep 16	18	Oct 1	4.2	Sep 10 1932
ANNUAL SEVEN-DAY MINIMUM	14	Sep 2	21	Aug 30	4.7	Sep 9 1932
INSTANTANEOUS PEAK FLOW			1160	Jan 20	2800	Aug 28 1971
INSTANTANEOUS PEAK STAGE			5.56	Jan 20	8.60	Aug 28 1971
INSTANTANEOUS LOW FLOW			16	Oct 3	2.8	Aug 27 1932
ANNUAL RUNOFF (CFSM)	1.68		2.69		1.84	
ANNUAL RUNOFF (INCHES)	22.86		36.61		25.02	
10 PERCENT EXCEEDS	77		141		104	
50 PERCENT EXCEEDS	38		54		36	
90 PERCENT EXCEEDS	19		27		15	



— 01381500 WHIPPANY RIVER AT MORRISTOWN, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1926, 1962 to current year.

REMARKS.--For February 20, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 SATUR- ATION) (00301)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, EC BROTH (MPN) (31615)
OCT 1995										
31...	1115	43	329	7.8	11.0	764	10.4	94	E1.2	1400
FEB 1996										
20...	1300	66	855	7.6	2.5	760	13.5	99	--	--
MAR										
20...	1050	297	279	7.0	6.0	736	11.2	93	3.6	1700
MAY										
28...	1003	52	369	7.9	15.0	755	10.3	103	E1.2	16000
JUL										
22...	1010	36	384	7.8	20.0	752	8.3	93	E1.5	1600

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)	ALKA- LINITY 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 1995										
31...	250	100	27	8.7	26	2.4	57	16	60	<0.1
FEB 1996										
20...	--	110	28	8.8	110	2.6	49	17	190	<0.1
MAR										
20...	1130	57	15	4.8	28	1.5	29	10	52	<0.1
MAY										
28...	390	110	27	9.5	26	1.9	58	16	64	<0.1
JUL										
22...	210	110	27	9.4	26	2.3	65	17	61	0.1

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITU- ENTS, 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 1995									
31...	16	202	196	5	0.009	1.3	<0.03	0.04	0.30
FEB 1996									
20...	15	458	409	9	--	1.80	--	--	0.80
MAR									
20...	10	156	143	--	0.018	0.90	0.08	0.05	0.70
MAY									
28...	16	240	201	9	0.016	1.40	<0.03	<0.03	0.40
JUL									
22...	18	246	207	9	0.025	1.50	0.07	0.08	0.30

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, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 1995									
31...	0.32	1.6	1.6	0.07	0.08	3.8	0.4	--	--
FEB 1996									
20...	0.83	2.6	2.6	0.07	0.05	2.7	0.6	--	--
MAR									
20...	0.26	1.6	1.2	0.20	0.03	4.1	2.6	76	61
MAY									
28...	0.25	1.8	1.7	0.10	0.05	2.1	0.6	--	--
JUL									
22...	0.27	1.8	1.8	0.09	0.04	2.5	0.6	--	--

PASSAIC RIVER BASIN

85

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 of bridges of Interstate 280, 0.4 mi upstream of 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 mi².

WATER-STAGE RECORDS

PERIOD OF RECORD.--November 1992 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 162 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 no gage-height record are not estimated and are noted by dashed lines (---).

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 8.38 ft, Jan. 29; minimum recorded, 1.59 ft, Sept. 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 8.38 ft, Jan. 29, 1996; minimum recorded, 1.40 ft, Aug. 6, 1993.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

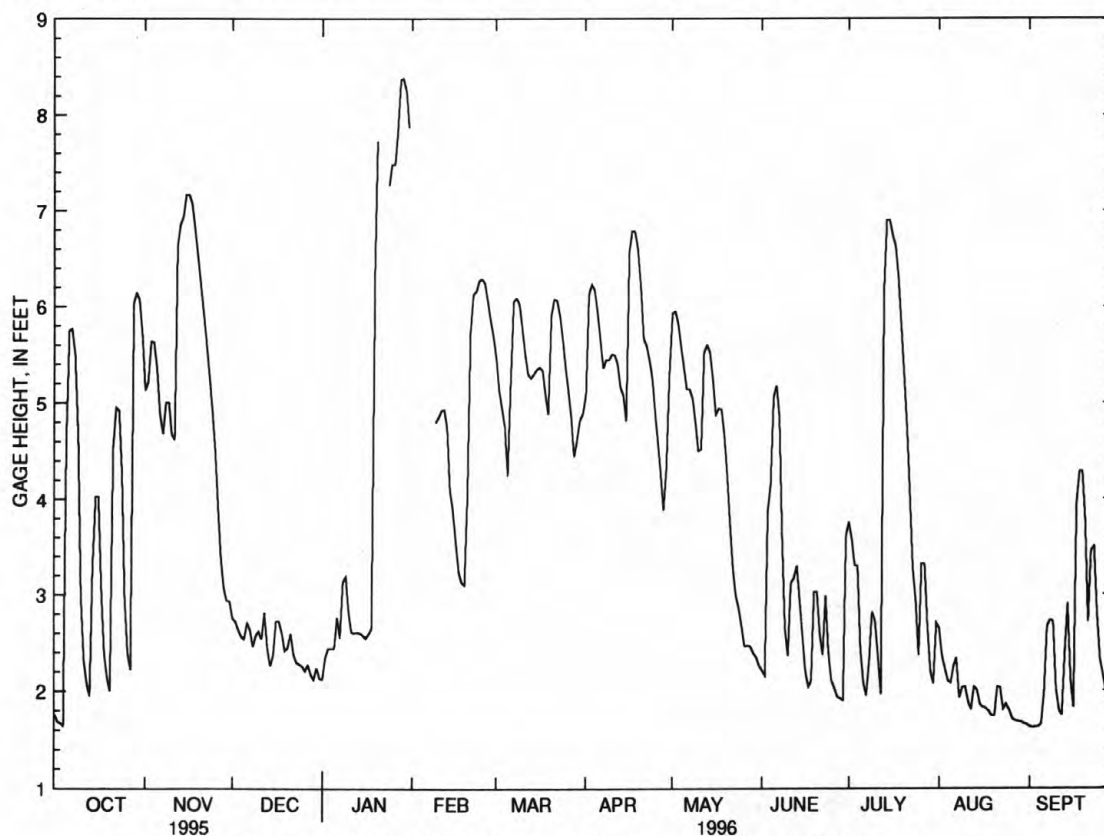
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.76	1.69	5.13	4.63	2.76	2.67	2.12	2.04	---	---	5.47	5.13
2	1.69	1.66	5.22	4.62	2.73	2.64	2.35	2.12	---	---	5.13	4.93
3	1.67	1.64	5.64	5.22	2.64	2.50	2.44	2.32	---	---	4.93	4.71
4	1.65	1.61	5.63	5.36	2.57	2.50	2.44	2.15	---	---	4.74	4.22
5	4.67	1.65	5.36	4.89	2.54	2.43	2.44	2.22	---	---	4.24	4.03
6	5.75	4.67	4.89	4.45	2.71	2.45	2.77	2.22	---	---	5.25	4.24
7	5.77	5.50	4.68	4.18	2.64	2.46	2.55	2.31	---	---	6.06	5.25
8	5.50	4.65	5.01	4.68	2.46	2.34	3.14	2.38	---	4.60	6.09	6.03
9	4.65	2.99	5.01	4.67	2.58	2.28	3.19	2.80	4.80	4.56	6.03	5.77
10	2.99	2.32	4.67	4.07	2.62	2.39	2.82	2.60	4.85	4.80	5.77	5.51
11	2.32	2.08	4.63	3.60	2.54	2.30	2.61	2.44	4.92	4.82	5.51	5.30
12	2.08	1.95	6.64	4.63	2.82	2.18	2.60	2.41	4.93	4.74	5.30	5.20
13	1.95	1.85	6.86	6.64	2.45	2.12	2.61	2.51	4.74	4.09	5.26	5.19
14	3.28	1.79	6.94	6.81	2.26	2.13	2.60	2.46	4.09	3.86	5.30	5.25
15	4.03	3.28	7.17	6.94	2.37	2.20	2.58	2.48	3.89	3.56	5.35	5.29
16	4.03	3.07	7.17	7.08	2.73	2.33	2.55	2.40	3.56	3.24	5.37	5.33
17	3.07	2.39	7.08	6.82	2.73	2.57	2.59	2.39	3.24	2.94	5.34	5.09
18	2.39	2.14	6.82	6.53	2.61	2.42	2.65	2.56	3.13	3.02	5.09	4.83
19	2.14	2.00	6.53	6.23	2.42	2.28	6.37	2.65	3.10	2.75	4.88	4.64
20	2.00	1.93	6.23	5.93	2.45	2.21	7.73	6.37	4.04	2.85	5.91	4.88
21	4.54	1.98	5.93	5.62	2.60	2.38	---	7.73	5.74	4.04	6.08	5.91
22	4.95	4.54	5.62	5.28	2.38	2.27	---	---	6.13	5.74	6.07	5.91
23	4.92	4.26	5.28	4.92	2.30	2.21	---	7.22	6.16	6.13	5.91	5.66
24	4.26	2.96	4.92	4.50	2.28	2.21	7.26	7.06	6.27	6.15	5.66	5.37
25	2.96	2.39	4.50	3.91	2.26	2.15	7.48	7.26	6.29	6.25	5.37	5.12
26	2.39	2.16	3.91	3.39	2.21	2.14	7.48	7.28	6.25	6.06	5.12	4.85
27	2.22	2.06	3.39	3.08	2.27	2.07	7.80	7.22	6.06	5.86	4.85	4.44
28	6.04	2.22	3.08	2.92	2.17	2.09	8.37	7.80	5.86	5.69	4.44	4.05
29	6.14	6.04	2.94	2.82	2.12	2.05	8.38	8.25	5.69	5.47	4.61	4.04
30	6.07	5.70	2.94	2.76	2.24	1.97	8.25	7.87	---	---	4.82	4.61
31	5.70	5.13	---	---	2.13	2.00	7.87	---	---	---	4.88	4.82
MONTH	6.14	1.61	7.17	2.76	2.82	1.97	---	---	---	---	6.09	4.03

PASSAIC RIVER BASIN

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.09	4.74	5.93	5.33	2.21	2.13	3.76	3.58	2.65	2.36	1.63	1.59
2	6.13	5.09	5.95	5.82	2.16	2.07	3.58	2.61	2.36	2.16	1.62	1.60
3	6.23	6.13	5.82	5.58	3.88	2.07	3.30	2.31	2.23	1.98	1.63	1.60
4	6.18	5.94	5.58	5.36	4.16	3.88	3.30	2.43	2.10	2.01	1.63	1.60
5	5.94	5.65	5.36	5.07	5.07	4.08	2.43	2.08	2.08	1.97	1.66	1.63
6	5.65	5.36	5.14	5.05	5.18	4.85	2.08	1.95	2.25	1.90	1.99	1.61
7	5.36	5.19	5.14	5.05	4.85	3.57	1.95	1.86	2.34	1.91	2.67	1.99
8	5.45	5.26	5.05	4.80	3.57	2.63	2.30	1.83	1.92	1.85	2.73	1.95
9	5.45	5.41	4.80	4.50	2.63	2.30	2.82	2.30	2.03	1.81	2.72	2.02
10	5.51	5.42	4.50	4.25	2.36	2.27	2.73	2.37	2.04	1.88	2.02	1.80
11	5.50	5.40	4.52	4.04	3.12	2.21	2.37	1.96	1.88	1.78	1.80	1.74
12	5.40	5.16	5.53	4.52	3.17	3.01	1.96	1.83	1.81	1.75	1.74	1.71
13	5.16	5.08	5.60	5.53	3.30	2.93	6.16	1.95	2.04	1.81	2.39	1.69
14	5.08	4.81	5.53	5.24	2.93	2.51	6.90	6.16	2.01	1.86	2.91	2.11
15	4.81	4.49	5.24	4.88	2.56	2.20	6.90	6.73	1.86	1.81	2.11	1.82
16	6.57	4.48	4.88	4.69	2.20	2.04	6.74	6.63	1.83	1.77	1.82	1.75
17	6.79	6.57	4.94	4.83	2.04	1.98	6.63	6.30	1.82	1.76	3.95	1.76
18	6.78	6.60	4.93	4.66	2.10	2.03	6.30	5.79	1.79	1.72	4.29	3.95
19	6.60	6.21	4.66	4.25	3.03	2.05	5.79	5.27	1.74	1.69	4.29	3.77
20	6.21	5.66	4.25	3.74	3.03	2.59	5.27	4.71	1.74	1.70	3.77	2.71
21	5.66	5.60	3.74	3.27	2.59	2.37	4.71	4.03	2.04	1.69	2.71	2.13
22	5.60	5.45	3.27	2.99	2.37	2.12	4.03	3.27	2.03	1.81	3.46	2.04
23	5.45	5.26	2.99	2.86	2.99	2.33	3.27	2.91	1.81	1.73	3.50	2.80
24	5.26	4.92	2.86	2.67	2.40	2.11	2.93	2.36	1.86	1.77	2.80	2.32
25	4.92	4.61	2.67	2.46	2.11	2.03	2.36	2.15	1.80	1.70	2.32	2.17
26	4.61	4.27	2.46	2.32	2.03	1.92	3.32	2.10	1.71	1.66	2.17	2.02
27	4.27	3.88	2.47	2.34	1.94	1.87	3.32	2.66	1.69	1.65	2.02	1.95
28	3.88	3.50	2.46	2.35	1.92	1.87	2.66	2.20	1.68	1.65	2.03	1.89
29	4.32	3.30	2.39	2.31	1.90	1.81	2.20	2.04	1.68	1.64	3.11	2.03
30	5.33	4.32	2.35	2.26	3.62	1.84	2.07	1.99	1.66	1.62	2.57	2.10
31	---	---	2.26	2.19	---	---	2.70	2.00	1.65	1.61	---	---
MONTH	6.79	3.30	5.95	2.19	5.18	1.81	6.90	1.83	2.65	1.61	4.29	1.59



01381800 WHIPPANY RIVER NEAR PINE BROOK, MAXIMUM DAILY GAGE HEIGHT

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

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

REMARKS.--For February 20, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 1995										
30...	1027	451	196	7.0	11.0	762	4.5	41	E1.7	790
FEB 1996										
20...	1114	129	770	7.4	2.5	763	12.7	93	--	--
MAR										
21...	1130	464	432	7.0	6.5	740	11.4	96	3.0	700
MAY										
28...	1225	83	468	7.6	15.5	758	7.7	78	<1.0	1400
JUL										
17...	1020	520	247	7.1	23.5	759	2.7	32	E1.5	800

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)	ALKA- LINITY 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 1995										
30...	140	54	14	4.6	14	2.5	36	13	22	<0.1
FEB 1996										
20...	--	140	38	12	84	2.8	73	25	160	<0.1
MAR										
21...	160	72	19	6.0	51	1.7	42	14	91	<0.1
MAY										
28...	20	140	36	12	35	2.6	76	23	76	<0.1
JUL										
17...	100	68	18	5.5	19	2.2	52	11	33	<0.1

DATE	SILICA, DIS- SOLVED (MG/L AS STO2) (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- PENDE (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 1995									
30...	8.5	118	102	4	0.008	0.40	0.03	<0.03	0.50
FEB 1996									
20...	14	428	382	4	--	0.64	--	--	0.20
MAR									
21...	7.4	236	218	--	0.009	0.67	<0.03	<0.03	0.50
MAY									
28...	14	314	254	42	0.028	2.10	0.16	0.11	0.80
JUL									
17...	9.4	134	130	4	0.017	0.24	0.07	<0.03	0.80

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- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 1995									
30...	0.50	0.90	0.90	0.13	0.08	8.8	0.5	--	--
FEB 1996									
20...	0.14	0.84	0.78	0.03	0.02	2.0	0.2	--	--
MAR									
21...	0.30	1.2	0.97	0.12	0.04	5.3	0.6	33	41
MAY									
28...	0.56	2.9	2.7	0.39	0.19	3.0	1.7	--	--
JUL									
17...	0.58	1.0	0.82	0.14	0.08	9.1	0.5	--	--

PASSAIC RIVER BASIN

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 mi².

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 ft³/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 ft³/s, Sept. 22, 1964.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 16	0545	2,890	18.99	Apr. 18	0415	2,370	18.48
Jan. 21	2300	3,690	19.81	July 16	0915	2,220	18.32
Jan. 29	0730	*4,340	*20.36				

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	151	1130	403	228	3030	1310	916	999	272	543	377	107
2	129	1080	393	245	2560	1110	1170	1290	252	522	397	104
3	120	1160	374	282	2190	972	1610	1410	339	411	334	106
4	113	1260	360	307	1860	857	1730	1330	696	460	273	108
5	217	1190	344	287	1640	741	1640	1170	781	346	239	108
6	849	1060	356	283	1360	791	1500	1080	881	253	213	109
7	931	946	357	274	1110	1040	1310	1040	818	208	202	215
8	828	947	331	332	963	1490	1230	984	602	190	184	203
9	662	947	311	395	870	1600	1200	918	422	341	178	314
10	416	882	334	382	874	1520	1240	840	341	440	182	268
11	271	767	294	360	889	1380	1260	773	321	375	164	196
12	211	1200	257	347	899	1230	1210	915	475	266	156	154
13	179	1960	241	354	830	1140	1130	1070	567	648	170	153
14	169	2390	237	344	720	1130	1040	1140	508	1450	200	281
15	472	2740	251	333	647	1140	943	1090	423	2080	180	228
16	530	2870	286	309	562	1170	1220	998	320	2210	160	175
17	414	2720	347	293	458	1130	2050	959	274	2160	150	374
18	297	2440	351	312	451	1060	2350	948	255	1950	141	683
19	241	2170	330	678	440	966	2210	877	288	1690	135	726
20	215	1920	288	2100	464	1070	1830	761	433	1420	132	649
21	429	1710	286	3500	807	1460	1600	641	448	1100	133	479
22	701	1490	308	3620	1220	1660	1490	553	384	884	152	365
23	737	1210	307	3310	1600	1620	1330	493	405	674	139	455
24	634	1010	300	3020	1760	1500	1150	447	337	507	156	386
25	444	854	287	3120	1860	1290	996	397	266	378	163	317
26	320	688	277	3140	1840	1100	872	345	227	339	141	260
27	258	557	260	3170	1740	962	751	327	201	434	127	225
28	788	481	250	3870	1630	820	634	329	199	388	121	208
29	1190	440	243	4310	1500	746	572	319	187	299	118	321
30	1350	423	231	4000	---	811	740	309	280	246	115	316
31	1300	---	225	3500	---	880	---	293	---	254	112	---
TOTAL	15566	40642	9419	47005	36774	35696	38924	25045	12202	23466	5644	8593
MEAN	502	1355	304	1516	1268	1151	1297	808	407	757	182	286
MAX	1350	2870	403	4310	3030	1660	2350	1410	881	2210	397	726
MIN	113	423	225	228	440	741	572	293	187	190	112	104

PASSAIC RIVER BASIN

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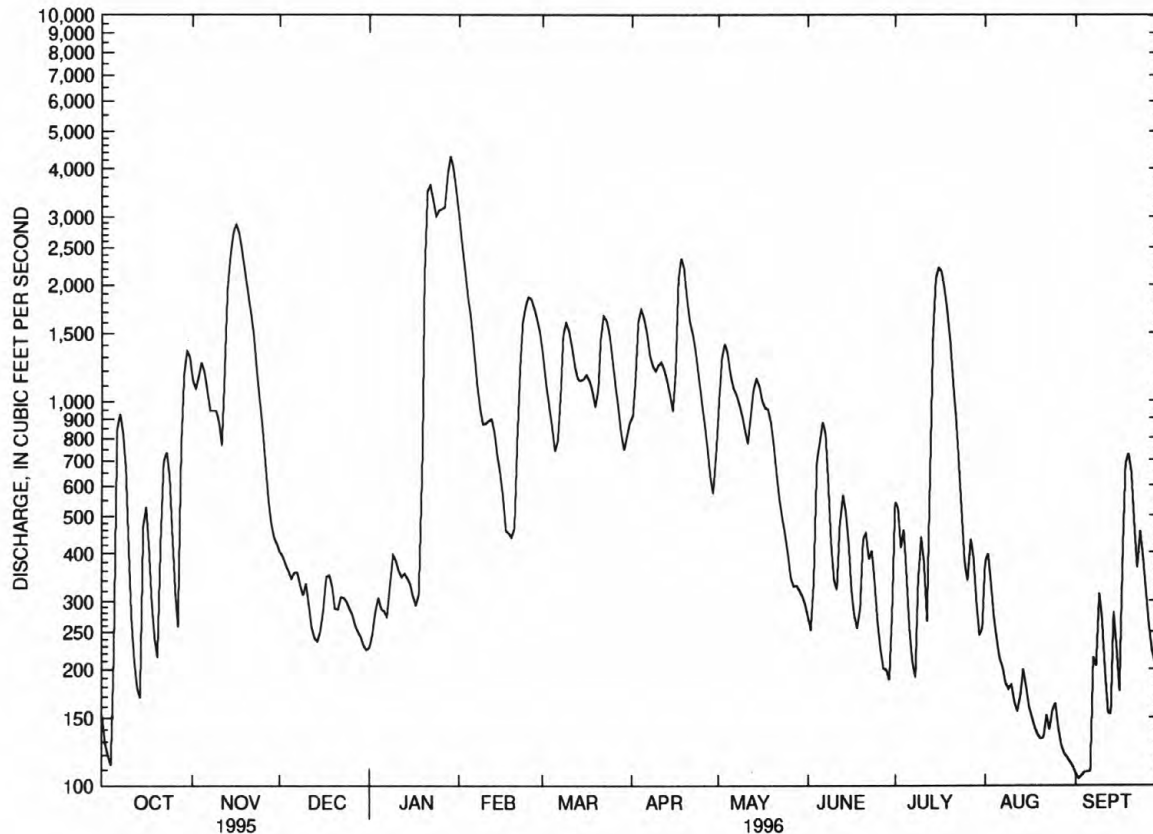
01381900 PASSAIC RIVER AT PINE BROOK, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1996, BY WATER YEAR (WY)

MEAN	356	581	737	645	774	1026	1209	801	528	379	267	261
MAX	1205	1355	2286	1516	1268	2204	2842	2537	1482	1485	1024	849
(WY)	1990	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 1995 CALENDAR YEAR			FOR 1996 WATER YEAR			WATER YEARS 1980 - 1996		
ANNUAL TOTAL	167543			298976					
ANNUAL MEAN	459			817			629		
HIGHEST ANNUAL MEAN							1125		
LOWEST ANNUAL MEAN							276		
HIGHEST DAILY MEAN	2870			4310			7910		
LOWEST DAILY MEAN	84			104			72		
ANNUAL SEVEN-DAY MINIMUM	86			108			78		
INSTANTANEOUS PEAK FLOW				4340			8000		
INSTANTANEOUS PEAK STAGE				20.36			22.90a		
INSTANTANEOUS LOW FLOW				101			70		
10 PERCENT EXCEEDS	1040			1730			1500		
50 PERCENT EXCEEDS	303			507			357		
90 PERCENT EXCEEDS	119			181			125		

a Affected by backwater.



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

PASSAIC RIVER BASIN

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 of Willard Lane, 5.0 mi downstream from Rockaway River, 0.9 mi southeast of Towaco, and 6.5 mi upstream from confluence with Pompton River.

DRAINAGE AREA.--355 mi².

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 poor. 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, 11.89 ft, Jan. 22; minimum recorded, 4.31 ft, Oct. 4.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 11.89 ft, Jan. 22, 1996; minimum recorded, 4.06 ft, Sept. 16, 1995.

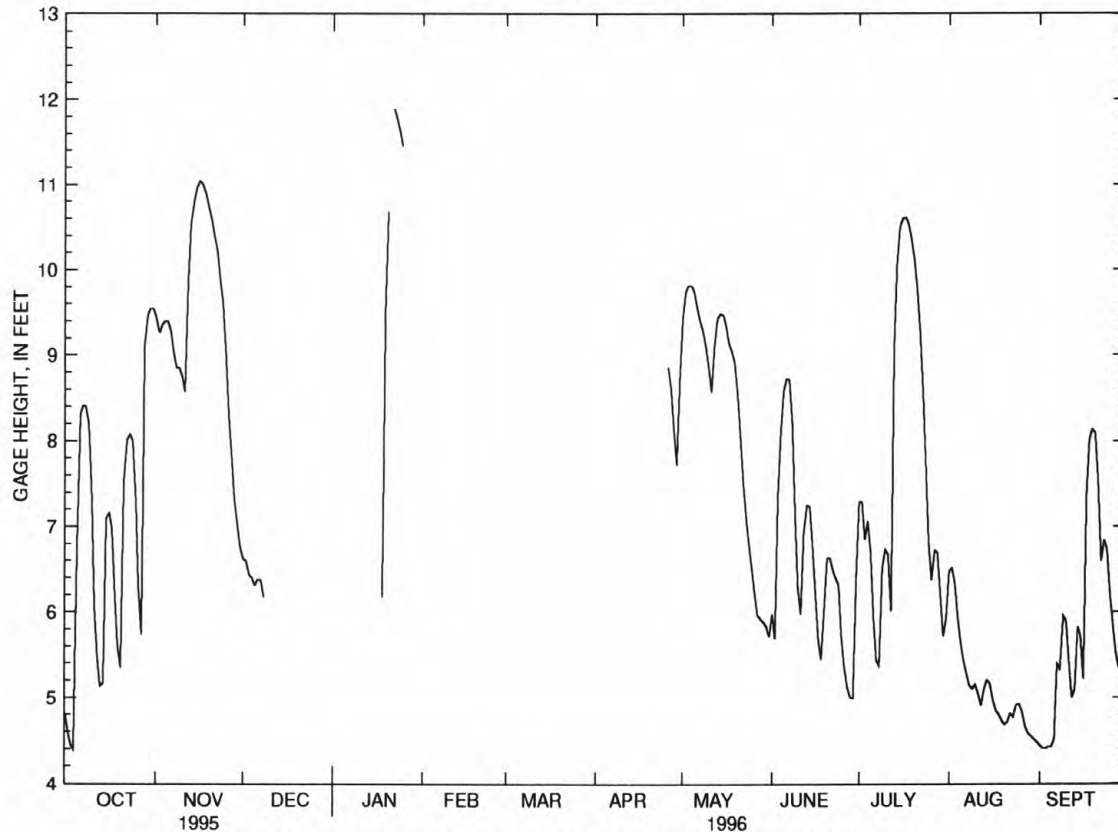
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.82	4.57	9.45	9.25	6.62	6.59	---	---	---	---	---	---
2	4.57	4.44	9.26	9.22	6.60	6.52	---	---	---	---	---	---
3	4.44	4.39	9.35	9.26	6.44	6.39	---	---	---	---	---	---
4	4.39	4.31	9.40	9.35	6.41	6.31	---	---	---	---	---	---
5	6.75	4.32	9.40	9.28	6.31	6.21	---	---	---	---	---	---
6	8.32	6.75	9.28	9.03	6.38	6.21	---	---	---	---	---	---
7	8.41	8.32	9.03	8.83	6.38	6.28	---	---	---	---	---	---
8	8.41	8.20	8.85	8.83	6.17	6.12	---	---	---	---	---	---
9	8.20	7.30	8.85	8.82	---	---	---	---	---	---	---	---
10	7.30	6.06	8.75	8.55	6.16	5.99	---	---	---	---	---	---
11	6.06	5.45	8.57	8.18	---	---	---	---	---	---	---	---
12	5.45	5.13	9.87	8.57	5.66	5.66	---	---	---	---	---	---
13	5.13	4.94	10.54	10.24	---	---	---	---	---	---	---	---
14	5.17	4.85	10.80	10.54	---	---	---	---	---	---	---	---
15	7.10	5.17	10.96	10.80	---	---	---	---	---	---	---	---
16	7.16	6.96	11.04	10.96	---	---	---	---	---	---	---	---
17	6.96	6.16	11.01	10.90	6.25	6.20	---	---	---	---	---	---
18	6.16	5.61	10.90	10.76	---	---	6.17	6.09	---	---	---	---
19	5.61	5.34	10.76	10.60	---	---	9.45	6.17	---	---	---	---
20	5.34	5.21	10.60	10.42	---	---	10.68	10.41	---	---	---	---
21	7.52	5.22	10.42	10.23	---	---	---	---	---	---	---	---
22	8.01	7.52	10.23	9.85	---	---	11.89	11.87	---	---	---	---
23	8.07	8.00	9.85	9.61	---	---	11.78	11.62	---	---	---	---
24	8.00	7.28	9.61	8.94	---	---	11.62	11.45	---	---	---	---
25	7.28	6.31	8.94	8.59	---	---	11.45	11.44	---	---	---	---
26	6.31	5.73	8.30	7.89	---	---	---	---	---	---	---	---
27	5.73	5.45	7.76	7.32	---	---	---	---	---	---	---	---
28	9.10	5.53	7.31	6.99	---	---	---	---	---	---	---	---
29	9.47	9.10	6.99	6.81	---	---	---	---	---	---	---	---
30	9.54	9.47	6.75	6.71	---	---	---	---	---	---	---	---
31	9.54	9.45	---	---	---	---	---	---	---	---	---	---
MONTH	9.54	4.31	11.04	6.71	---	---	---	---	---	---	---	---

01381950 PASSAIC RIVER AT TOWACO, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	9.42	8.73	5.98	5.55	7.29	6.39	6.48	5.93	4.44	4.39
2	---	---	9.74	9.42	5.69	5.33	7.29	6.79	6.51	6.33	4.40	4.36
3	---	---	9.81	9.74	7.36	5.28	6.84	6.26	6.33	5.93	4.40	4.38
4	---	---	9.81	9.74	8.08	7.36	7.07	6.70	5.93	5.65	4.42	4.39
5	---	---	9.74	9.55	8.58	8.08	6.70	5.93	5.65	5.43	4.42	4.40
6	---	---	9.55	9.40	8.72	8.57	5.93	5.43	5.43	5.25	4.51	4.39
7	---	---	9.40	9.28	8.71	8.20	5.43	5.12	5.28	5.14	5.39	4.51
8	---	---	9.28	9.10	8.20	7.10	5.37	5.05	5.14	5.04	5.33	5.05
9	---	---	9.10	8.86	7.11	6.25	6.51	5.37	5.10	4.99	5.95	5.30
10	---	---	8.86	8.57	6.27	5.91	6.73	6.51	5.15	5.04	5.89	5.42
11	---	---	8.57	8.36	5.97	5.77	6.67	6.01	5.04	4.89	5.42	4.99
12	---	---	9.10	8.48	6.94	5.97	6.01	5.45	4.90	4.85	4.99	4.76
13	---	---	9.42	9.10	7.25	6.94	9.07	5.46	5.10	4.85	5.10	4.70
14	---	---	9.48	9.41	7.23	6.75	10.07	9.07	5.20	5.10	5.83	5.10
15	---	---	9.47	9.34	6.75	6.20	10.51	10.07	5.16	4.98	5.71	5.21
16	---	---	9.34	9.13	6.20	5.68	10.60	10.51	4.98	4.85	5.21	4.90
17	---	---	9.13	9.04	5.68	5.44	10.61	10.53	4.85	4.79	7.37	4.90
18	---	---	9.04	8.91	5.44	5.36	10.53	10.35	4.80	4.72	8.02	7.37
19	---	---	8.91	8.55	6.03	5.39	10.35	10.11	4.73	4.67	8.13	8.02
20	---	---	8.55	8.05	6.63	6.03	10.11	9.76	4.68	4.64	8.09	7.53
21	---	---	8.05	7.51	6.63	6.48	9.76	9.27	4.71	4.62	7.53	6.56
22	---	---	7.51	7.11	6.49	6.08	9.27	8.56	4.81	4.71	6.59	6.12
23	---	---	7.11	6.79	6.39	6.10	8.56	7.70	4.77	4.67	6.84	6.59
24	---	---	6.79	6.51	6.31	5.70	7.70	6.82	4.91	4.68	6.72	6.21
25	---	---	6.51	6.19	5.70	5.36	6.82	6.18	4.92	4.83	6.21	5.85
26	8.86	8.62	6.21	5.95	5.36	5.12	6.37	6.04	4.83	4.66	5.85	5.52
27	8.61	8.13	5.96	5.87	5.13	4.93	6.72	6.37	4.66	4.57	5.52	5.34
28	8.13	7.62	5.92	5.87	5.00	4.91	6.69	6.19	4.58	4.54	5.34	5.23
29	7.72	7.43	5.88	5.79	4.99	4.84	6.19	5.71	4.55	4.50	6.24	5.28
30	8.73	7.72	5.83	5.70	6.39	4.84	5.71	5.45	4.51	4.47	6.23	5.83
31	---	---	5.71	5.59	---	---	5.93	5.41	4.48	4.43	---	---
MONTH	---	---	9.81	5.59	8.72	4.84	10.61	5.05	6.51	4.43	8.13	4.36



— 01381950 PASSAIC RIVER AT TOWACO, MAXIMUM DAILY GAGE HEIGHT

PASSAIC RIVER BASIN

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 mi².

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 TEMPERATURES: October 1962 to May 1969 (once daily), June 1969 to September 1974.

DISSOLVED OXYGEN: June 1969 to September 1974.

REMARKS.--For the 9-5-96 sample, the dissolved solids sum (70301) does not include contributions from dissolved ammonia (00608) or dissolved nitrite plus nitrate (00631). They are generally a small percentage of the sum.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, and selected BOD's on the following dates were performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories: 10-24-95, 1-16, 3-27, 5-23, and 7-17-96. Other BOD's were performed by the U.S. Geological Survey, New Jersey District Field Laboratory. Beginning October 1994, BOD results from 0 to 1.9 mg/L were reported as estimates (remark code of "E"). Some samples were collected by USGS personnel for the Long Island-New Jersey Coastal Plain NAWQA study.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	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 1995												
24...	0930	758	299	7.2	--	13.0	763	6.5	62	E1.8	1700	230
NOV												
30...	1055	476	372	7.5	--	4.5	759	10.3	80	2.0	--	--
JAN 1996												
16...	1120	340	1040	7.3	--	0.0	773	11.4	77	3.0	79	60
FEB												
08...	1115	1140	400	7.0	--	0.0	755	9.5	66	E0.8	--	--
MAR												
27...	1045	1150	416	7.5	--	8.5	771	11.8	100	2.3	79	100
APR												
25...	1200	1170	360	7.4	--	15.5	755	8.2	83	2.7	--	--
MAY												
08...	1105	1170	347	7.4	--	13.5	763	7.7	74	2.3	--	--
23...	1035	562	423	7.4	--	20.5	755	4.8	54	2.9	130	30
23...	1040	562	419	7.5	25.0	21.0	755	4.8	54	--	--	--
JUN												
10...	1100	377	435	7.3	--	23.0	760	4.7	55	2.1	--	--
19...	1130	290	528	7.5	20.0	23.0	758	4.5	53	--	--	--
27...	1020	216	541	7.7	--	23.5	761	6.9	81	2.2	--	--
JUL												
16...	1230	2760	225	7.0	30.0	23.5	758	3.8	45	--	--	--
17...	1115	2700	226	7.1	--	23.5	759	3.4	40	E1.4	330	240
AUG												
20...	1110	137	613	8.6	24.0	24.5	765	11.0	131	--	--	--
21...	1040	134	640	8.0	--	24.0	761	9.4	112	2.7	--	--
SEP												
05...	1115	112	731	8.1	--	24.0	760	10.0	119	2.8	--	--
23...	1050	526	423	7.6	16.0	16.5	750	6.5	68	--	--	--
25...	0927	358	420	7.6	--	15.5	757	7.0	71	E1.7	--	--

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT 1995											
24...	77	20	6.6	23	3.2	--	48	--	24	35	<0.1
NOV											
30...	100	25	9.2	30	2.8	--	57	--	23	51	0.1
JAN 1996											
16...	150	40	13	120	4.2	--	72	--	32	230	0.1
FEB											
08...	83	21	7.4	38	2.2	--	40	--	20	73	<0.1
MAR											
27...	85	22	7.3	41	2.0	--	45	--	20	77	<0.1
APR											
25...	85	22	7.3	32	2.1	--	50	--	18	59	<0.1
MAY											
08...	78	20	6.8	31	1.7	--	50	--	18	55	<0.1
23...	100	26	9.0	36	2.8	--	65	--	23	66	0.1
23...	110	28	9.5	38	2.9	81	65	66	22	67	0.1
JUN											
10...	110	29	9.8	38	3.2	--	65	--	25	68	0.1
19...	130	34	12	49	0.80	95	80	78	30	81	0.2
27...	140	35	12	49	4.4	--	81	--	32	81	0.1
JUL											
16...	55	14	4.9	19	1.7	45	38	37	11	32	0.1
17...	58	15	5.0	19	2.1	--	40	--	12	31	<0.1
AUG											
20...	160	39	14	56	5.5	102	92	84	45	93	0.2
21...	160	39	14	60	5.2	--	92	--	47	94	0.1
SEP											
05...	170	43	16	72	6.7	--	101	--	53	120	0.2
23...	110	28	9.3	37	3.5	73	62	60	34	57	0.1
25...	110	28	9.5	37	3.2	--	63	--	31	60	<0.1
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	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 1995											
24...	11	178	159	--	--	--	--	9.0	1.1	30	61
NOV											
30...	14	200	201	--	--	--	--	5.7	0.5	--	--
JAN 1996											
16...	15	550	516	2	--	--	--	3.9	0.1	--	--
FEB											
08...	12	210	205	--	--	--	--	4.1	0.2	--	--
MAR											
27...	5.8	232	206	6	--	--	--	4.5	0.6	--	--
APR											
25...	5.1	190	179	--	--	--	--	6.1	1.1	--	--
MAY											
08...	8.2	200	176	--	--	--	--	5.3	0.8	--	--
23...	11	256	221	26	--	--	--	5.4	1.2	--	--
23...	12	249	228	--	90	270	210	5.2	1.2	28	42
JUN											
10...	12	236	234	--	--	--	--	5.2	0.5	--	--
19...	17	340	288	--	140	60	220	5.6	0.7	27	21
27...	16	326	297	--	--	--	--	5.3	1.3	--	--
JUL											
16...	7.8	138	115	--	40	130	36	7.2	0.9	32	238
17...	8.5	144	119	45	--	--	--	8.1	0.8	--	--
AUG											
20...	14	334	340	--	150	15	72	4.2	1.7	24	9.0
21...	14	358	352	--	--	--	--	3.9	1.5	--	--
SEP											
05...	13	426	384	--	--	--	--	--	--	--	--
23...	15	240	233	--	120	180	110	6.3	0.8	27	39
25...	15	262	232	--	--	--	--	6.7	0.8	--	--

PASSAIC RIVER BASIN

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
AUG 1996 20...	1015	FIELD BLANK	0.30

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE U.S. GEOLOGICAL SURVEY
NATIONAL WATER QUALITY LABORATORY

DATE	TIME	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, 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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 1995 24...	0930	0.02	1.40	0.02	0.60	0.49	2.0	1.9	0.36	0.26	0.27
NOV 30...	1055	<0.01	2.50	0.09	0.50	0.39	3.0	2.9	0.43	0.35	0.05
JAN 1996 16...	1120	0.03	3.80	0.32	0.80	0.84	4.6	4.6	0.64	0.56	0.49
FEB 08...	1115	0.02	1.60	0.11	0.40	0.31	2.0	1.9	0.18	0.17	0.13
MAR 27...	1045	--	0.96	0.02	0.40	0.29	1.4	1.2	0.17	0.12	--
APR 25...	1200	0.02	0.69	0.06	0.60	0.40	1.3	1.1	0.22	0.13	0.13
MAY 08...	1105	0.02	1.10	0.07	0.60	0.39	1.7	1.5	0.25	0.16	0.15
23...	1035	0.05	1.60	0.24	0.90	0.60	2.5	2.2	0.50	0.24	0.26
23...	1040	0.05	1.70	0.17	0.60	0.60	2.3	2.3	0.45	0.30	0.25
JUN 10...	1100	0.06	2.10	0.26	0.90	0.58	3.0	2.7	0.46	0.28	0.25
19...	1130	0.07	3.60	0.23	0.90	0.70	4.5	4.3	0.55	0.37	0.31
27...	1020	0.06	4.00	0.07	0.90	0.47	4.9	4.5	0.64	0.38	0.38
JUL 16...	1230	0.02	0.33	0.11	0.60	0.60	0.93	0.93	0.23	0.14	0.13
17...	1115	0.02	0.34	0.09	1.0	0.54	1.3	0.88	0.30	0.14	0.15
AUG 20...	1110	0.03	4.80	0.03	1.0	0.30	5.8	5.1	0.82	0.66	0.64
21...	1040	0.03	4.80	<0.015	0.70	0.29	5.5	5.1	0.75	0.62	0.65
SEP 05...	1115	--	--	--	--	--	--	--	--	--	--
23...	1050	0.02	2.60	0.12	0.70	0.60	3.3	3.2	0.45	0.33	0.37
25...	0927	0.02	2.20	0.06	0.70	0.51	2.9	2.7	0.49	0.36	0.36

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 1995 24...	0930	0.011	0.04	0.04
JAN 1996 16...	1120	0.033	0.36	0.31
MAR 27...	1045	0.014	<0.03	<0.03
MAY 23...	1035	0.043	0.18	0.18
JUL 17...	1115	0.018	0.10	<0.03

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels on p. 18). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels on p. 18). 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 ZINE, WATER, DISS, REC (UG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
APR 1996												
25...	1100	<0.002	<0.002	0.007	E0.004	<0.002	<0.003	<0.003	<0.004	<0.004	E0.003	0.015
MAY												
23...	1040	<0.002	0.017	0.009	<0.002	<0.002	E0.044	<0.003	<0.004	0.150	<0.002	0.008
JUN												
19...	1130	<0.002	0.011	0.072	E0.002	<0.002	E0.095	E0.012	0.009	<0.004	E0.001	<0.020
JUL												
16...	1230	<0.002	0.006	0.015	E0.004	<0.002	E0.100	<0.003	0.009	<0.004	E0.003	0.063
AUG												
20...	1110	<0.002	<0.002	0.008	<0.002	<0.002	<0.003	<0.003	0.007	<0.004	<0.002	0.018
SEP												
23...	1050	<0.002	<0.002	0.004	<0.002	<0.002	E0.031	<0.003	<0.004	<0.004	<0.002	0.016
DATE		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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
APR 1996												
25...		<0.001	<0.003	<0.002	<0.005	0.007	<0.004	<0.004	<0.003	<0.004	<0.004	E0.014
MAY												
23...		<0.001	<0.003	<0.002	<0.005	0.006	<0.004	<0.004	<0.003	<0.004	<0.004	0.023
JUN												
19...		<0.001	<0.003	<0.002	<0.005	0.029	<0.004	<0.004	<0.003	<0.004	<0.004	0.030
JUL												
16...		<0.001	<0.003	<0.002	<0.005	0.021	<0.004	<0.004	<0.003	<0.004	<0.004	0.046
AUG												
20...		<0.001	<0.003	<0.002	<0.005	0.016	<0.004	<0.004	<0.003	<0.004	<0.004	0.040
SEP												
23...		<0.001	<0.003	<0.002	<0.005	0.020	<0.004	<0.004	<0.003	<0.004	<0.004	0.035
DATE		SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, WAT FLT GF 0.7U REC (UG/L) (49310)	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)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
APR 1996												
25...		0.011	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
MAY												
23...		0.065	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
JUN												
19...		0.018	<0.010	<0.013	<0.001	<0.002	E0.030	<0.035	<0.035	<0.020	<0.035	<0.018
JUL												
16...		0.010	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
AUG												
20...		0.018	<0.010	<0.013	<0.001	0.004	--	--	--	--	--	--
SEP												
23...		0.010	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of records section entitled, "Water Quality-Control Data."]

				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 (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	
DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)											
AUG 1996 20...	1020	FIELD BLANK		<0.002	<0.002	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	
DATE		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)	PONOFOS WATER FLTRD DISS REC (UG/L) (04095)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN LACHLOR WATER DISSOLV (UG/L) (39415)	SEN- COR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 1996 20...	<0.002	<0.002	<0.001	<0.003	<0.002	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004
DATE		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- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, WAT,FLT GF 0.7U REC (UG/L) (49310)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (39732)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
AUG 1996 20...	<0.018	<0.005	<0.010	<0.013	<0.001	0.004	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018	<0.018

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for volatile organic compounds (VOCs) on custom method schedule 9090 (listed with minimum reporting levels on p. 19). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE	FREON-113 WATER UNFLTRD	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-PROPANE	METHANE BROMO CHLORO-WAT UNFLTRD	DI-CHLORO-BROMO METHANE
		TOTAL (UG/L) (34506)	REC (UG/L) (77652)	TOTAL (UG/L) (34496)	TOTAL (UG/L) (34541)	REC (UG/L) (77297)	TOTAL (UG/L) (32101)
APR 1996							
25...	1100	E0.010	<0.100	<0.100	<0.100	<0.200	E0.050
MAY 23...	1039	<0.100	<0.100	<0.100	<0.100	<0.200	0.400
JUN 19...	1129	E0.070	<0.100	<0.100	<0.100	<0.200	0.690
JUL 16...	1229	<0.100	<0.100	<0.100	<0.100	<0.200	E0.060
AUG 20...	1109	E0.070	<0.100	E0.050	<0.100	E0.010	0.920
SEP 23...	1049	E0.010	<0.100	<0.100	<0.100	<0.200	0.570

PASSAIC RIVER BASIN

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01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TRI - CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BENZENE TOTAL (UG/L) (34030)	STYRENE TOTAL (UG/L) (77128)	BENZENE 124 - TRI METHYL UNFILTR RECOVER (UG/L) (77222)	O- XYLENE WHOLE TOTAL (UG/L) (77135)	META/ PARA - XYLENE WATER UNFLTRD REC (UG/L) (85795)	ETHYL- BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	P-ISO- PROPYL - TOLUENE WATER WHOLE REC (UG/L) (77356)
APR 1996										
25...	<0.100	E0.010	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
MAY										
23...	<0.100	E0.030	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
JUN										
19...	<0.100	E0.080	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
JUL										
16...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
AUG										
20...	<0.100	E0.080	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
SEP										
23...	E0.010	E0.010	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
DATE	BENZENE O - DI - CHLORO - WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4 - DI - CHLORO - WATER UNFLTRD REC (UG/L) (34571)	CHLORO - BENZENE TOTAL (UG/L) (34301)	METHYL - ETHYL - KETONE WATER TOTAL (UG/L) (81595)	ACETONE WATER TOTAL (UG/L) (81552)	ETHER ETHYL - WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT - BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA - HYDRO - WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT - PENTYL METHYL - UNFLTRD RECOVER (UG/L) (50005)	CARBON DI . SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
APR 1996										
25...	<0.100	<0.100	<0.100	<10	<10	<0.20	0.310	<10.0	<0.200	<0
MAY										
23...	<0.100	<0.100	<0.100	<10	<10	<0.20	0.300	<10.0	<0.200	<0
JUN										
19...	<0.100	<0.100	<0.100	<10	<10	<0.20	0.410	<10.0	<0.200	<0
JUL										
16...	<0.100	<0.100	<0.100	<10	4	<0.20	<0.200	<10.0	<0.200	<0
AUG										
20...	<0.100	<0.100	<0.100	<10	<10	<0.20	0.350	<10.0	<0.200	E0
SEP										
23...	<0.100	<0.100	E0.010	<10	<10	<0.20	0.370	<10.0	<0.200	E0

PASSAIC RIVER BASIN

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 of 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 mi².

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 of Macopin Intake Dam, at datum 36.35 ft higher. May 22, 1970 to March 5, 1990, at site just upstream of 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	11	21	3.6	293	197	105	467	7.4	12	11	1.3
2	2.0	16	20	3.9	232	173	318	343	6.2	5.2	8.0	1.3
3	2.0	17	19	5.1	219	157	221	234	14	11	10	1.3
4	2.1	13	18	8.4	170	123	179	213	22	17	21	1.2
5	9.3	10	16	6.0	131	114	153	187	50	10	15	1.2
6	30	9.5	16	5.6	120	203	123	183	45	6.4	7.7	1.5
7	22	11	15	5.7	101	267	125	165	24	4.5	5.8	4.2
8	4.7	18	14	55	98	206	174	135	17	5.7	4.8	12
9	3.1	16	13	150	103	151	158	117	13	6.4	4.5	16
10	2.5	12	13	34	102	120	172	122	12	5.2	5.7	14
11	2.3	11	19	14	98	105	144	140	11	3.0	4.0	9.7
12	2.3	140	16	9.6	96	98	104	354	10	2.1	2.7	4.2
13	2.2	645	18	14	66	97	122	245	10	134	5.7	5.1
14	4.2	478	12	9.0	54	114	130	179	11	532	5.3	11
15	17	631	12	7.4	53	148	107	144	8.4	514	3.6	9.3
16	7.1	531	12	5.7	51	199	460	130	5.9	309	2.9	4.3
17	4.0	367	11	6.0	49	166	524	134	4.9	161	3.1	11
18	3.3	257	10	7.0	46	137	352	100	5.7	125	3.0	42
19	3.1	211	10	341	35	138	260	84	5.7	135	2.3	29
20	3.1	160	16	316	32	454	214	70	7.1	133	1.9	21
21	28	125	13	1110	276	379	180	62	6.7	127	1.8	20
22	34	94	9.0	637	457	277	146	55	4.6	111	1.8	18
23	28	73	8.1	429	443	219	127	40	4.9	76	1.7	18
24	18	58	7.4	567	529	172	123	23	3.6	24	2.1	17
25	8.7	48	6.7	803	524	142	83	17	2.9	5.5	2.0	16
26	7.0	45	6.2	553	427	120	67	14	4.2	14	1.7	13
27	6.2	41	8.1	1030	333	105	70	12	2.8	13	1.5	5.7
28	23	36	5.3	1370	293	77	65	11	2.7	7.3	1.5	5.1
29	27	27	4.9	990	247	101	86	11	2.2	7.6	1.7	12
30	21	23	4.7	616	---	110	348	12	3.8	11	1.6	14
31	16	---	4.1	432	---	107	---	9.0	---	11	1.3	---
TOTAL	345.3	4134.5	378.5	9544.0	5678	5176	5440	4012.0	328.7	2538.9	146.7	339.4
MEAN	11.1	138	12.2	308	196	167	181	129	11.0	81.9	4.73	11.3
MAX	34	645	21	1370	529	454	524	467	50	532	21	42
MIN	2.0	9.5	4.1	3.6	32	77	65	9.0	2.2	2.1	1.3	1.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1996, BY WATER YEAR (WY)

MEAN	15.2	32.9	37.6	42.5	50.4	100	132	65.8	31.3	19.4	14.9	19.1
MAX	288	309	236	308	270	572	506	263	360	238	228	211
(WY)	1956	1928	1973	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

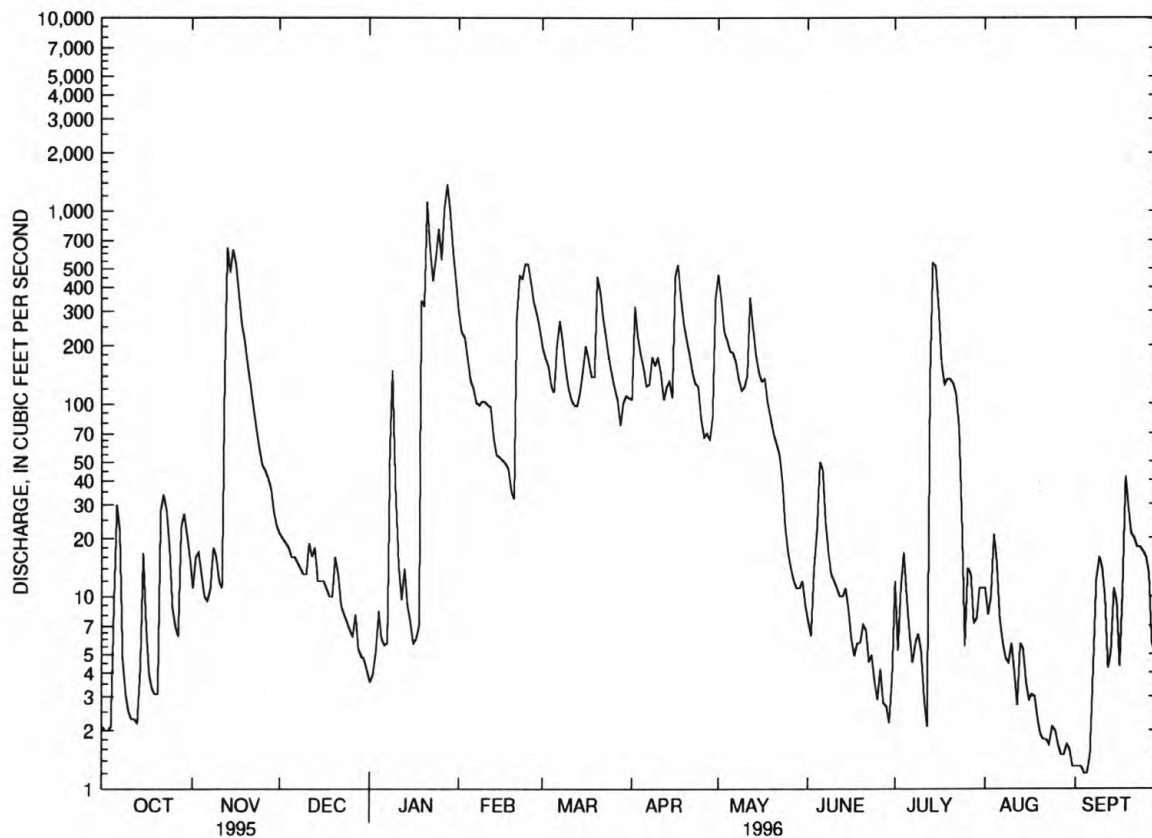
PASSAIC RIVER BASIN

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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1923 - 1996	
ANNUAL TOTAL	13842.6		38062.0			
ANNUAL MEAN	37.9		104		46.6	
HIGHEST ANNUAL MEAN					109	
LOWEST ANNUAL MEAN					.12	
HIGHEST DAILY MEAN	645	Nov 13	1370	Jan 28	3170	Apr 6 1984
LOWEST DAILY MEAN	1.1	Sep 8	1.2	Sep 4	.00	Oct 1 1922
ANNUAL SEVEN-DAY MINIMUM	1.3	Sep 3	1.3	Aug 31	.00	Oct 18 1922
INSTANTANEOUS PEAK FLOW			1960	Jan 19	6100	Oct 10 1903
INSTANTANEOUS PEAK STAGE			6.31	Jan 19	17.40a	Oct 10 1903
INSTANTANEOUS LOW FLOW			1.2	Many days	.00	Many days
10 PERCENT EXCEEDS	73		311		141	
50 PERCENT EXCEEDS	13		18		4.9	
90 PERCENT EXCEEDS	2.5		3.1		.00	

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



— 01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER 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 1995 19...	0900	3.0	264	7.6	9.0	754	10.8	94	E1.7	20
JAN 1996 30...	1015	548	101	7.0	1.5	745	13.7	100	E1.5	5
MAR 20...	1130	630	123	7.2	4.0	730	12.5	100	2.2	<2
MAY 22...	1040	55	148	7.4	18.5	740	8.5	94	E1.8	2
JUL 18...	1025	100	135	7.6	17.5	749	8.9	95	<1.1	46

DATE	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM 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)	ALKA-LINITY 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 1995 19...	20	68	17	6.2	20	1.2	38	17	42	<0.1
JAN 1996 30...	10	25	6.1	2.3	9.0	0.50	13	7.6	15	<0.1
MAR 20...	10	29	7.0	2.7	11	0.50	15	8.4	18	<0.1
MAY 22...	10	36	8.9	3.3	12	0.60	22	9.6	22	<0.1
JUL 18...	30	34	8.4	3.2	10	0.60	23	8.3	18	<0.1

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, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 1995 19...	10	146	141	<1	<0.003	1.10	0.03	0.03	0.16
JAN 1996 30...	5.4	56	55	--	<0.003	0.20	<0.03	<0.03	0.20
MAR 20...	6.3	72	64	2	<0.003	0.21	<0.03	<0.03	0.20
MAY 22...	5.1	92	75	5	0.003	0.10	0.04	<0.03	0.30
JUL 18...	5.6	72	68	1	0.004	0.05	<0.03	<0.03	0.30

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, 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 1995 19...	0.17	1.3	1.3	<0.01	<0.01	4.6	0.2	--	--
JAN 1996 30...	0.15	0.40	0.35	0.04	0.01	3.7	0.3	5	7.1
MAR 20...	0.15	0.41	0.36	0.01	0.02	3.0	0.4	--	--
MAY 22...	0.25	0.40	0.35	<0.01	<0.01	3.6	0.3	--	--
JUL 18...	0.27	0.35	0.32	<0.01	<0.01	3.9	0.3	--	--

PASSAIC RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 19...	0900	14	<1	<10	40	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 19...	260	<1	70	<0.1	<1	<1	<10

PASSAIC RIVER BASIN

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 of 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 mi².

PERIOD OF RECORD.--Crest-stage gage water years 1981-82. October 1993 to current year.

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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	70	53	e15	e350	257	167	630	22	29	29	9.5
2	8.0	117	58	e20	e280	232	482	441	20	20	24	9.6
3	7.3	101	56	e25	e250	214	337	313	62	31	42	9.0
4	7.5	77	55	e25	e220	173	261	271	115	30	60	9.0
5	105	61	50	e20	e185	162	223	244	254	23	43	9.6
6	138	52	52	e20	e170	294	184	246	127	18	29	10
7	60	66	58	e20	e150	365	189	224	79	16	22	20
8	29	96	55	e70	e145	305	254	189	55	56	19	26
9	20	75	48	e130	e150	225	231	166	43	50	26	22
10	16	60	47	e55	e150	181	248	172	37	24	20	20
11	15	69	39	e40	e145	159	211	216	33	18	17	19
12	15	449	32	e40	e145	151	166	506	34	16	15	14
13	14	784	32	e50	e110	155	187	320	30	543	19	20
14	30	585	32	e35	e100	179	187	239	28	772	19	23
15	58	861	36	e30	e100	218	160	194	25	656	16	18
16	29	653	35	e25	e95	266	1060	196	21	391	15	14
17	20	423	e35	e25	e90	228	901	198	19	209	14	71
18	17	298	e30	e30	e90	194	537	153	20	153	14	85
19	16	256	e30	e655	e75	199	384	130	22	156	12	50
20	e15	204	e40	e680	e70	732	298	110	25	148	12	33
21	e95	167	e40	e690	e270	547	253	94	22	136	12	29
22	e140	135	e30	e420	e635	374	214	81	20	121	12	42
23	94	112	e30	e420	653	290	191	66	18	98	12	35
24	70	96	e30	e470	787	236	181	46	17	49	13	31
25	47	84	e25	e815	736	200	134	37	15	25	12	28
26	36	80	e25	e520	564	172	112	31	15	43	11	24
27	35	75	e30	e760	426	151	111	30	14	35	10	19
28	228	70	e20	e1580	396	120	105	28	15	24	10	19
29	152	63	e20	e850	316	150	143	27	14	21	10	32
30	105	57	e20	e540	---	164	476	27	32	25	9.8	25
31	81	---	e20	e450	---	161	---	24	---	32	9.8	---
TOTAL	1711.1	6296	1163	9525	7853	7454	8587	5649	1253	3968	588.6	775.7
MEAN	55.2	210	37.5	307	271	240	286	182	41.8	128	19.0	25.9
MAX	228	861	58	1580	787	732	1060	630	254	772	60	85
MIN	7.3	52	20	15	70	120	105	24	14	16	9.8	9.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

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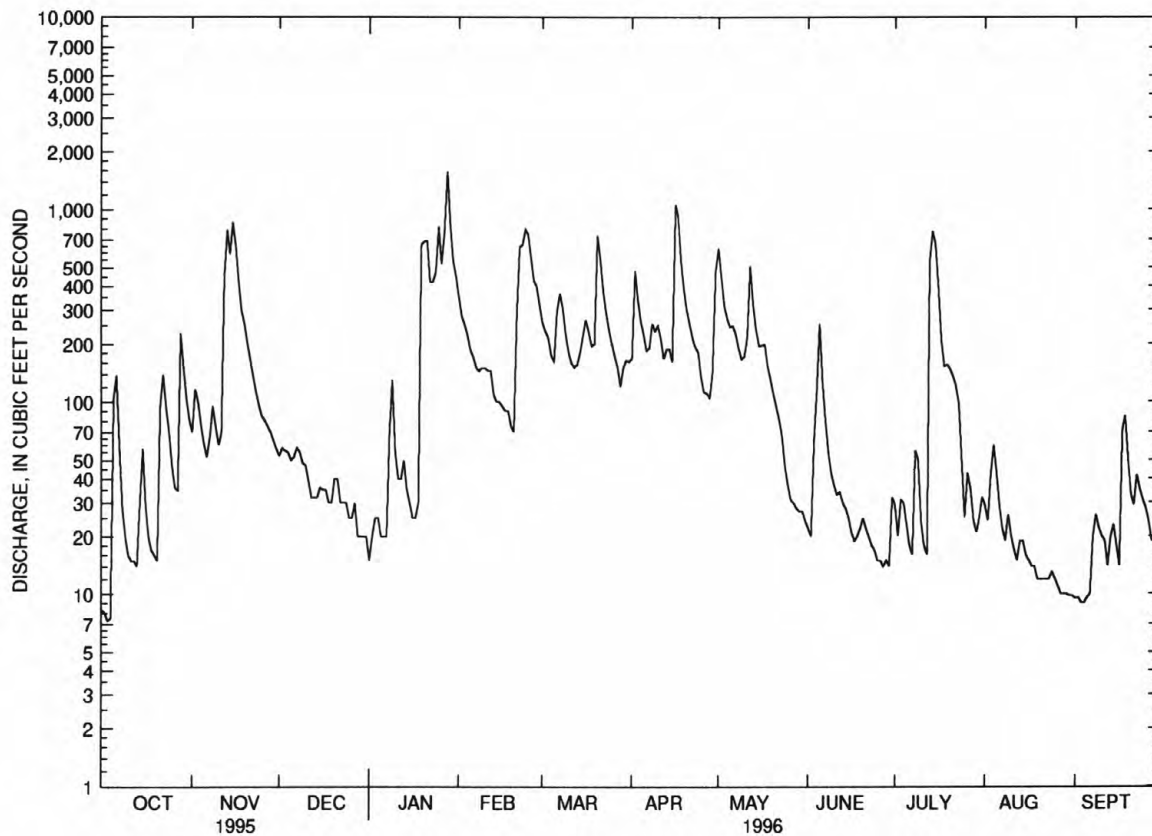
PASSAIC RIVER BASIN

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01382800 PEQUANNOCK RIVER AT RIVERDALE, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1994 - 1996	
ANNUAL TOTAL	24493.3		54823.4		105	
ANNUAL MEAN	67.1		150		150	
HIGHEST ANNUAL MEAN					150	
LOWEST ANNUAL MEAN					50.2	
HIGHEST DAILY MEAN	861	Nov 15	1580	Jan 28	1580	Jan 28 1996
LOWEST DAILY MEAN	5.0	Sep 8	7.3	Oct 3	5.0	Sep 8 1995
ANNUAL SEVEN-DAY MINIMUM	5.6	Sep 3	9.5	Aug 30	5.6	Sep 3 1995
INSTANTANEOUS PEAK FLOW			5570		5570	
INSTANTANEOUS PEAK STAGE			9.36		9.36	
INSTANTANEOUS LOW FLOW			6.3		3.6	
10 PERCENT EXCEEDS	132		421		262	
50 PERCENT EXCEEDS	40		60		40	
90 PERCENT EXCEEDS	9.8		15		11	

e Estimated.



— 01382800 PEQUANNOCK RIVER AT RIVERDALE, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

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 mi².

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.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1945	407	3.58	Feb. 24	2230	214	3.11
Jan. 20	0715	656	4.03	Apr. 17	1445	207	3.09
Jan. 25	1115	397	3.56	July 14	0715	324	3.40
Jan. 28	0600	*1,250	*4.90				

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

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	4.5	79	40	16	234	113	56	160	13	11	27	4.5
2	4.5	82	44	18	176	105	113	164	12	12	27	4.4
3	4.5	81	36	27	152	95	120	145	22	14	34	4.3
4	4.3	72	38	26	122	83	112	138	45	18	40	4.3
5	4.5	58	34	23	100	77	104	121	74	18	35	4.7
6	4.7	50	35	21	85	87	92	121	73	14	30	5.8
7	5.2	49	34	22	73	105	89	107	61	12	25	5.9
8	7.9	63	32	47	67	111	101	94	53	16	21	9.3
9	10	57	36	44	64	98	97	83	45	19	19	19
10	9.8	48	41	38	60	86	99	85	38	20	17	19
11	9.5	49	36	32	58	77	90	90	35	14	14	17
12	9.0	288	31	33	57	72	81	137	31	11	9.7	14
13	8.3	378	27	35	53	69	81	129	31	124	15	15
14	9.4	331	28	30	52	68	81	112	29	310	15	21
15	33	389	32	27	50	76	72	95	26	251	13	17
16	32	357	30	24	50	88	137	89	22	199	12	14
17	30	274	29	23	52	86	203	90	19	151	15	29
18	25	206	27	23	47	83	187	81	19	114	14	117
19	22	169	27	145	44	82	163	75	19	87	11	135
20	21	135	35	638	47	119	144	68	21	70	9.0	110
21	65	111	32	537	91	124	123	64	21	47	7.6	87
22	126	96	29	385	141	115	103	61	18	36	7.3	79
23	122	77	26	274	165	103	87	51	18	34	6.7	83
24	102	71	24	258	193	88	84	45	13	30	7.3	69
25	87	63	22	381	209	70	66	35	14	27	7.1	61
26	70	57	22	321	191	67	58	27	11	33	5.8	51
27	57	52	20	552	170	62	57	25	7.3	35	5.3	42
28	103	50	19	1150	152	54	48	23	9.3	29	5.2	37
29	124	53	18	768	131	59	60	22	6.6	25	4.7	49
30	107	46	17	492	---	56	113	21	8.8	25	4.5	46
31	90	---	17	334	---	55	---	16	---	23	4.6	---
TOTAL	1312.1	3891	918	6744	3086	2633	3021	2574	815.0	1829	468.8	1174.2
MEAN	42.3	130	29.6	218	106	84.9	101	83.0	27.2	59.0	15.1	39.1
MAX	126	389	44	1150	234	124	203	164	74	310	40	135
MIN	4.3	46	17	16	44	54	48	16	6.6	11	4.5	4.3

PASSAIC RIVER BASIN

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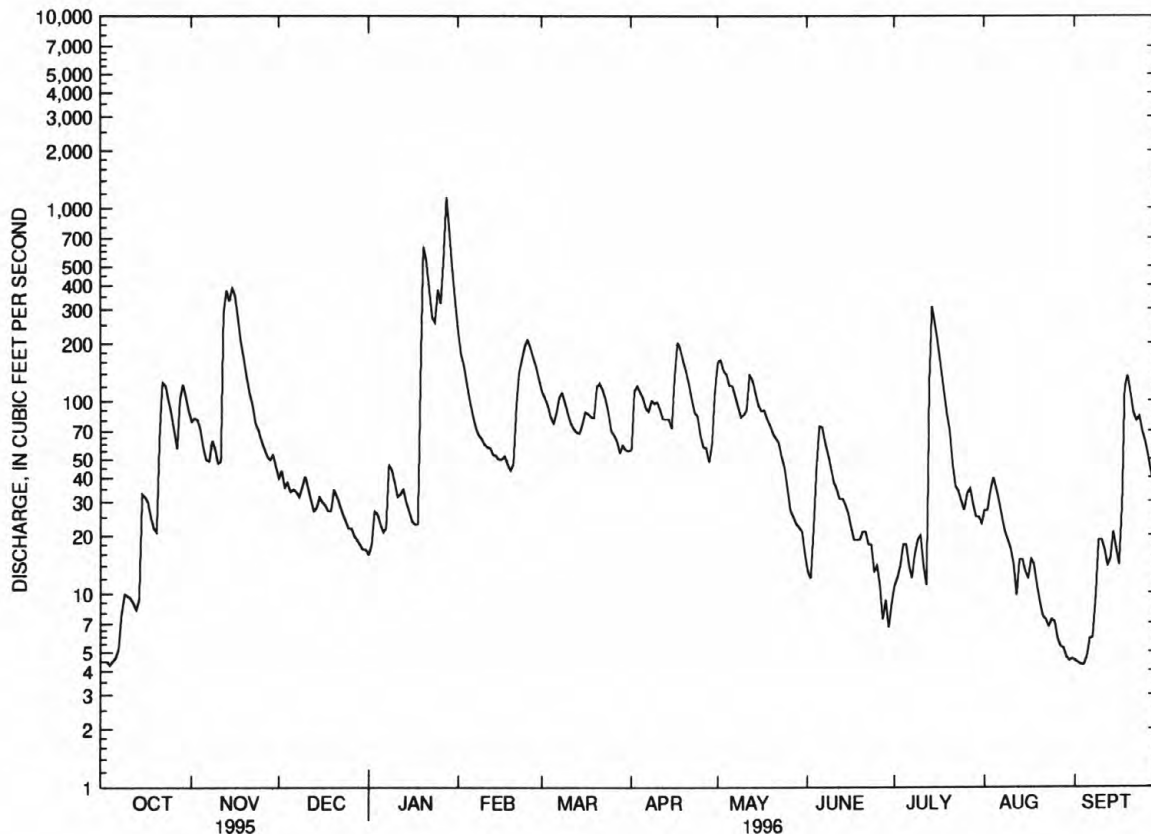
01383500 WANAQUE RIVER AT AWOSTING, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1996, BY WATER YEAR (WY)

MEAN	28.1	56.1	64.7	63.4	63.9	103	96.0	60.8	36.6	26.7	26.4	28.3
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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1919 - 1996	
ANNUAL TOTAL	14789.2		28466.1			
ANNUAL MEAN	40.5		77.8		54.4	
HIGHEST ANNUAL MEAN					105	1984
LOWEST ANNUAL MEAN					19.9	1965
HIGHEST DAILY MEAN	389	Nov 15	1150	Jan 28	2350	Apr 6 1984
LOWEST DAILY MEAN	2.1	Jun 27	4.3	Oct 4	.00	Oct 15 1928
ANNUAL SEVEN-DAY MINIMUM	2.9	Jun 24	4.5	Aug 29	.00	Jul 27 1929
INSTANTANEOUS PEAK FLOW			1250	Jan 28	2800a	Apr 5 1984
INSTANTANEOUS PEAK STAGE			4.90	Jan 28	6.65	Apr 5 1984
INSTANTANEOUS LOW FLOW			4.3	Many days	.00	Many days
10 PERCENT EXCEEDS	83		152		126	
50 PERCENT EXCEEDS	24		48		32	
90 PERCENT EXCEEDS	3.7		9.6		4.8	

a From rating curve extended above 750 ft³/s based on theoretical weir formula.



— 01383500 WANAQUE RIVER AT AWOSTING, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

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 mi².

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 ft³/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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0415	480	12.11	Jan. 24	1915	319	11.76
Nov. 15	0515	236	11.55	Jan. 27	1730	*906	*12.87
Jan. 19	2000	733	12.59	July 13	1445	315	11.75

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	.97	35	24	9.9	e105	66	38	130	12	21	13	1.3
2	.89	45	23	11	e85	60	112	101	10	14	11	1.1
3	.97	41	21	13	e75	55	75	90	35	15	13	1.1
4	.98	34	20	14	e65	46	64	90	63	15	17	1.1
5	9.1	29	19	23	e60	44	58	74	105	13	13	1.0
6	59	26	19	40	e50	67	53	84	52	11	11	.91
7	19	32	18	19	e45	68	55	70	37	9.4	9.9	1.9
8	11	47	17	47	43	57	69	61	31	12	8.8	15
9	8.0	34	17	116	42	53	58	55	26	17	9.0	15
10	6.2	30	17	45	41	46	64	63	24	12	8.7	6.8
11	4.5	37	15	30	42	41	56	68	23	10	7.8	4.8
12	3.6	349	15	24	39	41	50	114	21	8.9	7.0	3.9
13	3.0	177	14	23	34	45	55	80	22	163	8.6	4.3
14	4.6	156	13	20	29	54	50	67	22	133	9.4	8.6
15	23	216	14	18	27	63	45	59	18	80	8.4	5.5
16	16	159	16	14	30	68	169	60	15	70	6.9	4.4
17	12	123	16	15	27	56	145	64	14	51	7.7	16
18	9.5	100	15	15	24	52	113	53	15	40	6.5	59
19	8.4	89	14	248	25	52	94	49	16	34	5.4	33
20	7.8	74	14	365	30	102	81	42	20	28	4.6	21
21	35	62	16	210	104	76	70	36	19	22	4.3	17
22	48	55	15	144	123	65	62	33	16	18	3.9	19
23	32	47	14	113	124	57	55	29	15	19	3.5	22
24	26	41	13	183	149	51	50	25	13	18	2.9	18
25	23	37	12	229	137	46	42	22	12	15	3.1	18
26	20	33	12	153	119	42	39	20	10	20	3.1	15
27	19	30	11	462	101	38	37	18	8.9	17	2.8	14
28	90	28	11	536	93	36	33	18	9.3	13	2.4	13
29	64	27	10	299	77	38	71	16	8.9	12	2.1	23
30	46	25	10	200	---	40	105	15	13	12	2.0	18
31	39	---	10	148	---	40	---	13	---	12	1.6	---
TOTAL	650.51	2218	475	3786.9	1945	1665	2068	1719	706.1	935.3	218.4	382.71
MEAN	21.0	73.9	15.3	122	67.1	53.7	68.9	55.5	23.5	30.2	7.05	12.8
MAX	90	349	24	536	149	102	169	130	105	163	17	59
MIN	.89	25	10	9.9	24	36	33	13	8.9	8.9	1.6	.91
CFSM	1.10	3.87	.80	6.40	3.51	2.81	3.61	2.90	1.23	1.58	.37	.67
IN.	1.27	4.32	.93	7.38	3.79	3.24	4.03	3.35	1.38	1.82	.43	.75

PASSAIC RIVER BASIN

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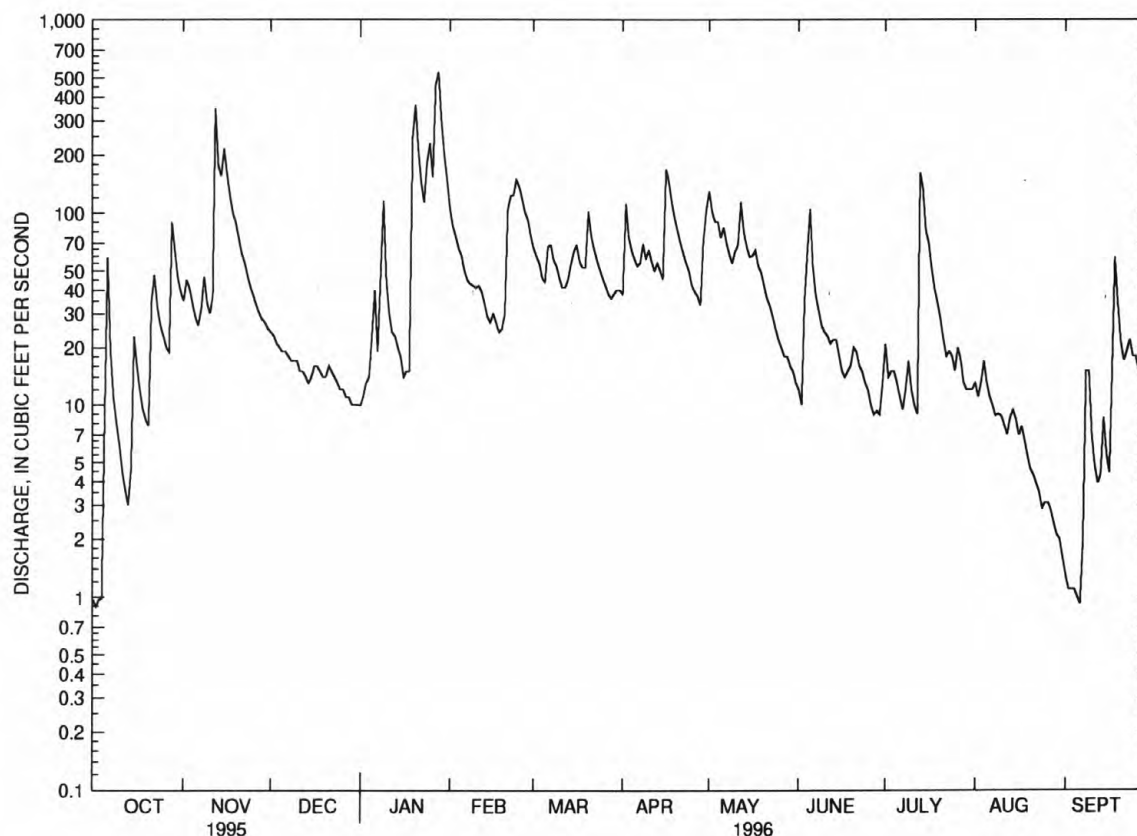
01384500 RINGWOOD CREEK NEAR WANAQUE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1996, BY WATER YEAR (WY)

MEAN	15.7	32.9	42.3	41.9	41.3	66.5	59.1	39.4	22.6	14.7	13.1	11.8
MAX	131	88.8	103	149	109	157	123	131	121	86.1	107	59.0
(WY)	1956	1973	1974	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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1935 - 1996
ANNUAL TOTAL	8897.67	16769.92	
ANNUAL MEAN	24.4	45.8	33.4
HIGHEST ANNUAL MEAN			54.4
LOWEST ANNUAL MEAN			13.2
HIGHEST DAILY MEAN	349 Nov 12	536 Jan 28	756 Aug 19 1955
LOWEST DAILY MEAN	.18 Aug 31	.89 Oct 2	.00 Sep 11 1963
ANNUAL SEVEN-DAY MINIMUM	.27 Sep 7	1.2 Aug 31	.16 Sep 5 1944
INSTANTANEOUS PEAK FLOW		906 Jan 27	1570 Mar 30 1951
INSTANTANEOUS PEAK STAGE		12.87 Jan 27	13.74 Mar 30 1951
INSTANTANEOUS LOW FLOW		.80 Oct 2	.00 Many days
ANNUAL RUNOFF (CFSM)	1.28	2.40	1.75
ANNUAL RUNOFF (INCHES)	17.33	32.66	23.74
10 PERCENT EXCEEDS	49	104	77
50 PERCENT EXCEEDS	17	26	20
90 PERCENT EXCEEDS	.91	6.9	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 mi², considered as 94 mi² 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 of Wanauke Reservoir, and since 1928 by Wanauke Reservoir (see Passaic River basin, reservoirs in). North Jersey District Water Supply Commission diverts water for municipal supply from Wanauke Reservoir. Water is diverted to Wanauke Reservoir from Posts Brook at Wanauke 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	8.9	7.8	7.4	231	167	50	342	18	17	17	17
2	7.3	9.0	7.8	7.3	266	148	223	325	18	17	17	17
3	7.3	8.6	7.8	7.3	250	127	205	263	19	17	18	17
4	7.3	8.6	8.1	7.3	179	92	174	241	19	17	17	17
5	9.6	8.6	7.8	7.3	126	74	160	194	20	17	17	17
6	8.3	8.7	7.8	7.3	97	121	128	192	18	17	18	18
7	7.7	8.7	7.8	7.6	64	208	126	169	17	17	18	18
8	7.8	8.1	8.0	8.3	48	207	161	141	17	17	17	17
9	7.8	8.1	8.0	7.3	39	148	146	119	17	17	17	18
10	7.9	8.2	7.9	7.3	30	115	183	119	17	17	17	17
11	8.2	9.2	8.6	7.3	28	98	132	132	17	17	17	17
12	8.4	10	8.3	7.3	29	84	99	290	17	17	17	17
13	8.4	8.3	7.8	7.2	19	73	94	261	18	20	17	18
14	9.1	9.1	7.8	7.3	17	83	113	213	17	17	17	17
15	8.7	9.3	7.8	8.5	17	114	69	170	17	17	17	17
16	8.1	8.4	7.8	12	17	152	436	145	17	17	17	17
17	7.8	15	7.5	7.8	17	151	627	148	17	19	17	18
18	7.8	17	7.5	7.5	17	130	446	118	17	19	17	18
19	7.8	17	7.8	12	17	123	307	96	17	25	17	17
20	7.9	12	7.5	9.2	17	273	236	77	17	61	17	18
21	9.3	7.8	7.5	7.9	18	288	191	68	21	23	17	17
22	8.2	7.7	7.3	8.3	122	235	152	46	18	17	17	18
23	8.2	7.8	7.3	11	337	191	123	23	25	17	17	17
24	8.2	7.8	7.3	19	507	140	128	28	18	18	17	17
25	8.3	7.8	7.3	18	560	108	53	22	29	17	17	17
26	8.6	7.8	7.3	17	450	90	34	15	26	17	17	18
27	9.1	8.0	7.8	24	348	80	52	15	18	17	17	17
28	11	7.7	7.7	19	303	33	21	17	22	17	17	17
29	9.1	7.8	7.3	18	235	56	33	18	17	17	17	17
30	8.8	7.8	7.3	17	---	47	155	21	18	17	17	17
31	8.8	---	7.6	61	---	42	---	18	---	18	17	---
TOTAL	258.1	278.8	238.9	380.7	4405	3998	5057	4046	563	594	530	519
MEAN	8.33	9.29	7.71	12.3	152	129	169	131	18.8	19.2	17.1	17.3
MAX	11	17	8.6	61	560	288	627	342	29	61	18	18
MIN	7.3	7.7	7.3	7.2	17	33	21	15	17	17	17	17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1996, BY WATER YEAR (WY)

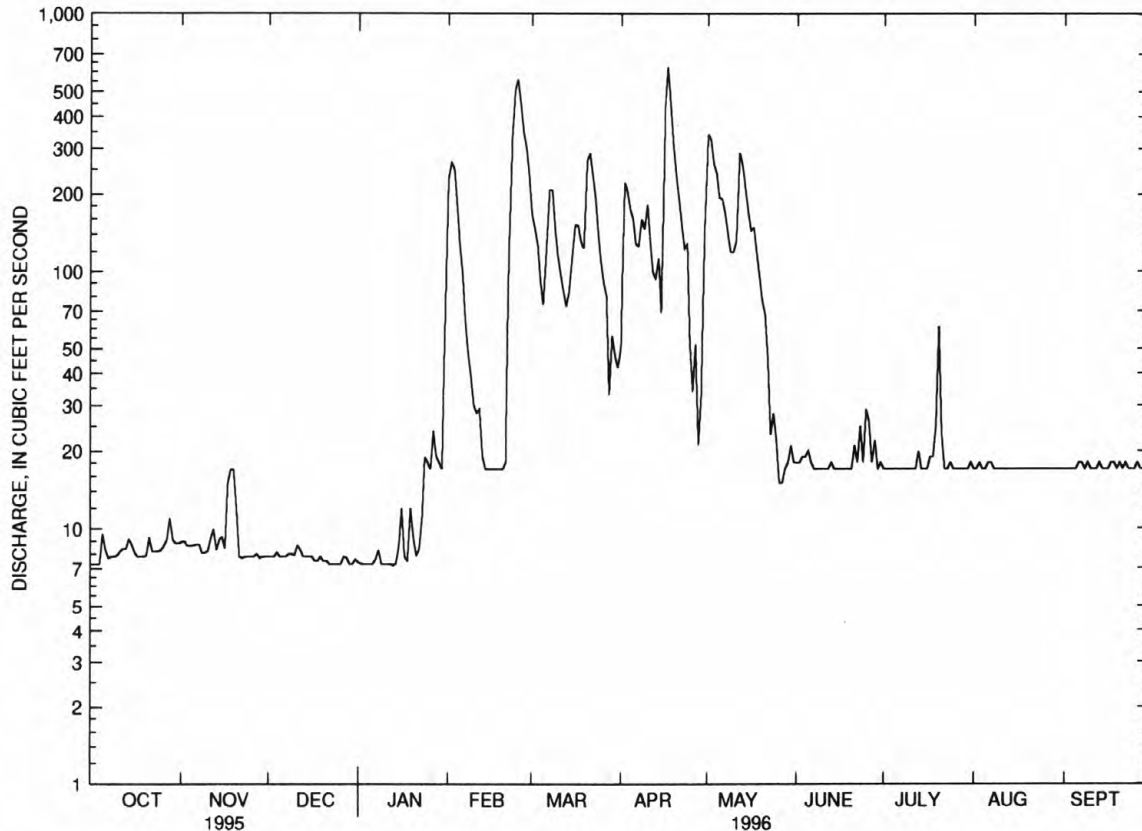
MEAN	36.6	47.8	63.1	70.4	78.1	163	184	100	59.2	40.1	28.6	35.2
MAX	258	435	434	453	471	758	806	545	416	247	258	477
(WY)	1956	1928	1921	1915	1915	1920	1984	1989	1972	1938	1927	1927
MIN	1.82	1.70	1.48	.76	2.05	1.91	1.54	1.72	2.17	1.73	1.53	1.51
(WY)	1966	1966	1950	1950	1966	1966	1966	1966	1966	1965	1965	1965

PASSAIC RIVER BASIN

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01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1912 - 1996	
ANNUAL TOTAL	5275.7		20868.5		73.9	
ANNUAL MEAN	14.5		57.0		231	
HIGHEST ANNUAL MEAN					1.93	
LOWEST ANNUAL MEAN					1920	
HIGHEST DAILY MEAN	20	Jan 20	627	Apr 17	5470	Apr 6 1984
LOWEST DAILY MEAN	6.8	Sep 14	7.2	Jan 13	.06	Oct 11 1984
ANNUAL SEVEN-DAY MINIMUM	7.3	Sep 28	7.4	Dec 20	.50	Dec 14 1949
INSTANTANEOUS PEAK FLOW			709	Apr 16	10500	Apr 5 1984
INSTANTANEOUS PEAK STAGE			4.36	Apr 16	10.82	Apr 5 1984
INSTANTANEOUS LOW FLOW			6.9	Many days		
10 PERCENT EXCEEDS	18		171		206	
50 PERCENT EXCEEDS	17		17		19	
90 PERCENT EXCEEDS	7.8		7.8		15	



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 mi².

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.--17 years, 172 ft³/s, unadjusted.

COOPERATION.--Figures of pumpage from well field provided by United Water New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft³/s, Apr. 5, 1984, gage height, 15.38 ft, from rating curve extended above 5,400 ft³/s; minimum discharge, 1.7 ft³/s, Sept. 7, 1995, gage height, 1.04 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 6,600 ft³/s, Mar. 12, 1936, by computation of flow over dam at site 0.65 mi upstream, drainage area, 90.6 mi².

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	1830	1,110	5.63	Jan. 25	0830	1,420	6.34
Nov. 12	1415	3,710	9.89	Jan. 28	0145	3,990	10.15
Nov. 15	1915	1,580	6.67	July 14	0200	2,900	9.01
Jan. 20	0215	*4,970	*10.99				

Minimum discharge, 8.0 ft³/s, Oct. 3, 4, 5, gage height, 1.31 ft.

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	9.6	244	111	48	447	288	199	682	51	149	88	11
2	9.0	251	118	51	378	265	527	523	41	105	83	13
3	8.4	232	108	94	337	248	467	410	146	173	86	12
4	8.0	191	106	e130	e280	217	351	406	586	231	99	12
5	33	151	96	e100	e230	206	304	346	718	149	88	11
6	285	132	95	e90	e220	286	277	347	459	101	71	12
7	122	141	90	e85	e200	350	268	332	305	75	59	17
8	65	239	82	e100	193	307	348	283	233	86	48	63
9	47	203	83	e90	199	269	334	253	186	218	44	95
10	36	160	95	e80	203	232	345	260	154	201	46	60
11	30	184	e80	e75	205	213	338	279	139	126	37	38
12	24	3190	e75	e70	203	208	314	549	121	92	30	27
13	20	1930	e70	e65	153	216	331	436	128	1260	40	23
14	21	967	e70	e65	150	248	315	336	155	2370	62	50
15	97	1460	78	e65	126	328	278	286	107	1010	42	39
16	91	1210	72	e65	116	381	741	282	81	645	34	26
17	65	733	72	e70	e130	325	923	313	67	423	53	73
18	50	527	69	e70	e110	289	620	265	81	310	48	615
19	45	444	64	e1000	106	269	475	243	101	262	33	545
20	42	371	207	3950	126	528	399	218	140	227	26	254
21	147	313	373	1690	480	498	344	183	147	167	23	165
22	477	270	322	811	702	395	298	165	117	133	20	134
23	292	235	272	578	641	331	271	132	93	135	18	180
24	194	212	177	713	670	285	248	113	74	141	16	140
25	138	188	75	1330	645	254	215	95	72	118	23	124
26	113	169	59	863	513	233	200	81	62	148	22	103
27	99	154	e58	1750	421	206	198	76	48	148	16	86
28	850	139	e55	3260	388	181	163	72	43	106	14	76
29	772	133	e52	1480	342	195	240	68	38	87	13	159
30	399	121	50	837	---	206	512	64	67	81	13	148
31	275	---	49	608	---	210	---	58	---	82	12	---
TOTAL	4864.0	14894	3383	20283	8914	8667	10843	8156	4760	9559	1307	3311
MEAN	157	496	109	654	307	280	361	263	159	308	42.2	110
MAX	850	3190	373	3950	702	528	923	682	718	2370	99	615
MIN	8.0	121	49	48	106	181	163	58	38	75	12	11
†	13	15	14	11	12	12	12	12	14	11	10	12

PASSAIC RIVER BASIN

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01387420 RAMAPO RIVER AT SUFFERN, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1996, BY WATER YEAR (WY)

MEAN	93.3	189	206	197	211	322	356	220	107	64.6	51.8	59.2
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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1979 - 1996

ANNUAL TOTAL	52397.2		98941.0									
ANNUAL MEAN	144		270					172				
ANNUAL MEAN (†)	12		12									
HIGHEST ANNUAL MEAN								295			1984	
LOWEST ANNUAL MEAN								78.2			1985	
HIGHEST DAILY MEAN	3190	Nov 12	3950	Jan 20				7110		Apr 5	1984	
LOWEST DAILY MEAN	2.3	Sep 7	8.0	Oct 4				2.3		Sep 7	1995	
ANNUAL SEVEN-DAY MINIMUM	3.1	Sep 7	12	Aug 31				3.1		Sep 7	1995	
10 PERCENT EXCEEDS	275		558					371				
50 PERCENT EXCEEDS	80		150					88				
90 PERCENT EXCEEDS	11		38					13				

† Diversion, in cubic feet per second, by pumpage from well field upstream of station.
e Estimated.

PASSAIC RIVER BASIN

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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	1745	1,590	6.65	Jan. 25	1700	1,450	6.56
Nov. 12	1345	*4,330	*8.88	Jan. 28	1030	3,420	8.69
Nov. 15	1615	1,800	6.90	July 14	0130	3,160	8.47
Jan. 20	1300	4,250	8.83				

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	10	305	144	52	587	351	262	790	72	207	118	23
2	9.5	359	150	56	487	329	700	598	61	145	112	24
3	8.7	314	135	68	428	308	575	477	264	260	120	22
4	8.4	246	134	71	390	268	431	476	765	450	123	22
5	113	196	119	56	346	258	371	403	938	226	107	22
6	522	171	121	60	305	390	337	413	576	152	84	23
7	169	206	111	43	268	468	335	388	370	117	68	34
8	83	328	99	70	258	394	443	330	274	168	58	67
9	59	256	102	135	269	341	412	296	220	299	68	102
10	46	203	117	101	275	288	440	318	187	256	59	59
11	37	293	97	80	273	269	415	342	189	168	48	41
12	31	3790	79	74	279	269	379	677	166	130	42	32
13	26	2260	71	92	229	282	409	510	187	1550	56	44
14	35	1200	71	84	204	320	382	386	239	2610	73	68
15	137	1690	90	77	198	412	337	330	154	1230	51	46
16	106	1390	93	68	185	477	1020	360	119	863	43	33
17	73	904	90	70	182	401	1130	394	97	518	69	143
18	57	665	83	82	180	356	746	321	114	371	55	689
19	50	567	77	1080	169	341	570	290	141	309	41	589
20	49	477	80	3470	166	674	480	259	190	266	36	264
21	222	405	103	1990	344	605	414	227	203	204	32	170
22	667	348	80	967	677	482	358	210	158	168	31	165
23	386	297	74	658	e810	405	327	179	132	180	30	196
24	239	260	72	698	e750	347	301	156	107	181	30	151
25	171	232	71	1330	e800	312	258	136	104	153	33	136
26	136	213	67	1050	e650	287	244	121	86	182	31	113
27	120	197	76	1150	e550	255	241	116	68	177	27	92
28	1240	180	59	3050	473	233	209	110	69	132	26	82
29	1010	172	56	1830	415	254	314	102	58	112	25	195
30	511	158	52	1050	---	263	618	92	138	106	24	158
31	347	---	52	774	---	263	---	81	---	119	23	---
TOTAL	6678.6	18282	2825	20436	11147	10902	13458	9888	6446	12009	1743	3805
MEAN	215	609	91.1	659	384	352	449	319	215	387	56.2	127
MAX	1240	3790	150	3470	810	674	1130	790	938	2610	123	689
MIN	8.4	158	52	43	166	233	209	81	58	106	23	22
CFSM	1.80	5.08	.76	5.49	3.20	2.93	3.74	2.66	1.79	3.23	.47	1.06
IN.	2.07	5.67	.88	6.34	3.46	3.38	4.17	3.07	2.00	3.72	.54	1.18

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

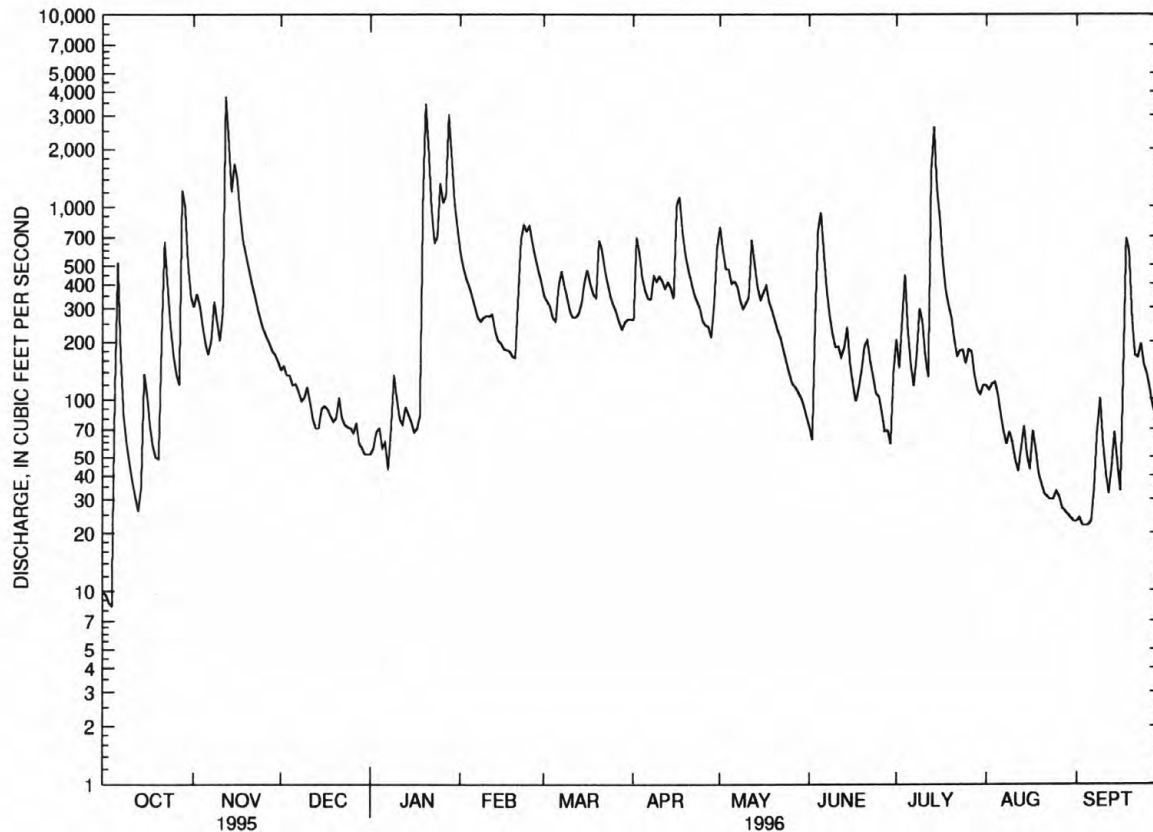
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1996, BY WATER YEAR (WY)

MEAN	142	227	271	268	280	444	404	258	152	101	101	108
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 1995 CALENDAR YEAR			FOR 1996 WATER YEAR			WATER YEARS 1903 - 1996		
ANNUAL TOTAL	64042.3			117619.6					
ANNUAL MEAN	175			321					
HIGHEST ANNUAL MEAN							229		
LOWEST ANNUAL MEAN							461		
HIGHEST DAILY MEAN	3790			3790			8920		
LOWEST DAILY MEAN	2.7			8.4			1.2		
ANNUAL SEVEN-DAY MINIMUM	3.7			23			3.7		
INSTANTANEOUS PEAK FLOW				4330			15500a		
INSTANTANEOUS PEAK STAGE				8.88			13.35		
INSTANTANEOUS LOW FLOW				7.3			.20		
ANNUAL RUNOFF (CFSM)	1.46			2.68			1.91		
ANNUAL RUNOFF (INCHES)	19.85			36.46			25.97		
10 PERCENT EXCEEDS	343			677			510		
50 PERCENT EXCEEDS	97			195			138		
90 PERCENT EXCEEDS	14			46			28		

a From rating curve extended above 6,500 ft³/s.

e Estimated.



— 01387500 RAMAPO RIVER NEAR MAHWAH, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

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 1995 TO SEPTEMBER 1996

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 1995										
17...	1055	73	404	7.3	11.5	761	10.2	94	E2.0	490
JAN 1996										
23...	1044	660	284	7.5	1.5	759	13.4	96	E1.4	>2400
MAR										
21...	1045	610	301	7.7	5.5	737	12.4	102	2.7	70
MAY										
21...	1050	230	327	7.9	19.5	743	9.6	107	E1.7	220
JUL										
23...	0955	170	390	7.8	18.5	752	8.5	92	<1.0	9200

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)	ALKA- LINITY 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 1995										
17...	80	89	25	6.5	37	2.4	53	24	63	<0.1
JAN 1996										
23...	290	57	16	4.2	29	0.90	29	11	56	0.1
MAR										
21...	20	54	15	4.0	33	0.80	31	12	58	<0.1
MAY										
21...	<10	79	22	5.8	31	1.2	49	13	55	0.1
JUL										
23...	1800	94	26	7.0	34	1.4	65	14	64	0.1

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- PENDE (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 1995									
17...	7.6	214	197	--	0.010	--	0.12	0.13	0.40
JAN 1996									
23...	7.0	140	145	3	0.007	0.64	0.14	0.11	0.40
MAR									
21...	6.2	158	150	5	0.011	0.48	0.08	0.05	0.30
MAY									
21...	5.5	182	166	5	0.016	0.62	<0.03	0.03	0.30
JUL									
23...	8.7	234	200	8	0.011	1.20	0.10	0.09	0.20

PASSAIC RIVER BASIN

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01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995 17...	0.31	--	--	0.24	0.21	3.9	0.7	14	2.8
JAN 1996 23...	0.26	1.0	0.90	0.04	0.02	3.1	0.3	--	--
MAR 21...	0.20	0.78	0.68	0.05	0.03	2.7	0.6	--	--
MAY 21...	0.32	0.92	0.94	0.07	0.07	2.9	0.5	--	--
JUL 23...	0.19	1.4	1.4	0.10	0.07	3.2	0.7	--	--

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 TOTAL RECOV- ERABLE (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 1995 17...	1055	20	<1	<10	60	<1	<1	3
MAY 1996 21...	1050	13	<1	<10	30	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 17...	550	4	60	<0.1	1	<1	<10
MAY 1996 21...	220	<1	60	<0.1	<1	<1	<10

WATER-QUALITY QUALITY-CONTROL DATA

[The following analyses are quality-assurance samples processed during the 1996 water year and are defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
MAY 1996 21...	1048	ISOKINETIC SAMPLER BLANK	--	--	--	--	<1
21...	1049	ISOKINETIC SAMPLER & CHURN BLANK	--	--	--	--	3
21...	1050	FIELD BLANK	<1	<1	<0.1	<1	2

PASSAIC RIVER BASIN

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 of bridge on Paterson-Hamburg Turnpike, and 2.0 mi upstream from mouth. Water samples collected upstream of dam at water-supply intake, on right bank. Water-quality monitor is 450 ft downstream of dam.

DRAINAGE AREA.--160 mi².

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. Satellite telemeter at auxiliary station 700 ft below station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1830	3,930	12.24	Jan. 28	0730	4,740	12.52
Nov. 15	2300	1,940	11.45	Apr. 16	2400	1,810	11.39
Jan. 20	0930	*5,410	*12.74	July 14	0915	3,540	12.10
Jan. 25	1300	1,920	11.44				

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	31	308	214	101	801	491	371	1030	95	265	183	35
2	30	413	218	107	655	453	832	890	86	212	164	34
3	28	368	206	121	572	424	857	666	207	219	188	34
4	29	199	200	108	501	373	629	650	962	641	184	34
5	47	102	187	87	415	348	523	557	1290	349	169	34
6	496	159	189	88	374	483	472	525	924	239	141	34
7	117	173	183	96	345	678	447	522	565	177	116	45
8	22	354	165	88	342	575	588	450	414	225	101	62
9	28	284	151	112	353	467	572	419	330	432	130	107
10	22	208	163	140	372	409	592	423	282	368	132	101
11	18	101	147	114	364	375	580	443	266	259	92	72
12	22	3030	130	79	373	369	511	898	255	194	80	57
13	19	2850	123	83	299	389	535	789	228	1190	84	55
14	18	1520	125	92	272	436	521	564	323	3210	108	98
15	29	1830	133	85	259	516	464	466	243	1840	96	86
16	29	1740	146	75	243	630	1280	464	181	1320	79	63
17	21	1180	149	72	241	553	1680	589	150	794	82	157
18	25	863	143	78	231	486	1180	466	143	544	96	570
19	16	719	138	1020	203	450	864	409	180	437	74	830
20	23	610	141	4950	226	821	711	361	221	388	63	452
21	45	523	133	2800	667	860	608	306	268	305	57	262
22	312	454	142	1350	1100	678	512	277	222	249	55	214
23	301	392	129	909	1070	567	458	243	189	242	51	280
24	114	350	126	961	1100	483	436	209	153	259	60	226
25	102	315	123	1840	1090	428	358	185	136	222	55	192
26	136	294	125	1420	880	393	327	165	121	226	54	166
27	23	276	109	1800	728	356	316	157	103	254	52	138
28	937	258	116	4340	655	325	282	146	98	197	50	118
29	1150	241	108	2530	583	338	332	136	90	172	44	203
30	524	232	104	1440	---	375	728	120	130	160	40	242
31	388	---	104	1060	---	396	---	108	---	173	37	---
TOTAL	5102	20346	4570	28146	15314	14925	18566	13633	8855	15762	2917	5001
MEAN	165	678	147	908	528	481	619	440	295	508	94.1	167
MAX	1150	3030	218	4950	1100	860	1680	1030	1290	3210	188	830
MIN	16	101	104	72	203	325	282	108	86	160	37	34

PASSAIC RIVER BASIN

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01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	147	270	315	323	350	551	516	346	205	139	135	142
MAX	1154	954	1135	1035	838	1670	1465	1195	973	895	889	725
(WY)	1956	1933	1984	1979	1970	1936	1983	1989	1972	1945	1955	1927
MIN	13.6	22.2	12.8	27.5	83.0	67.8	24.8	72.0	39.9	5.89	6.17	10.8
(WY)	1981	1981	1981	1981	1969	1985	1985	1965	1965	1985	1985	1964

SUMMARY STATISTICS

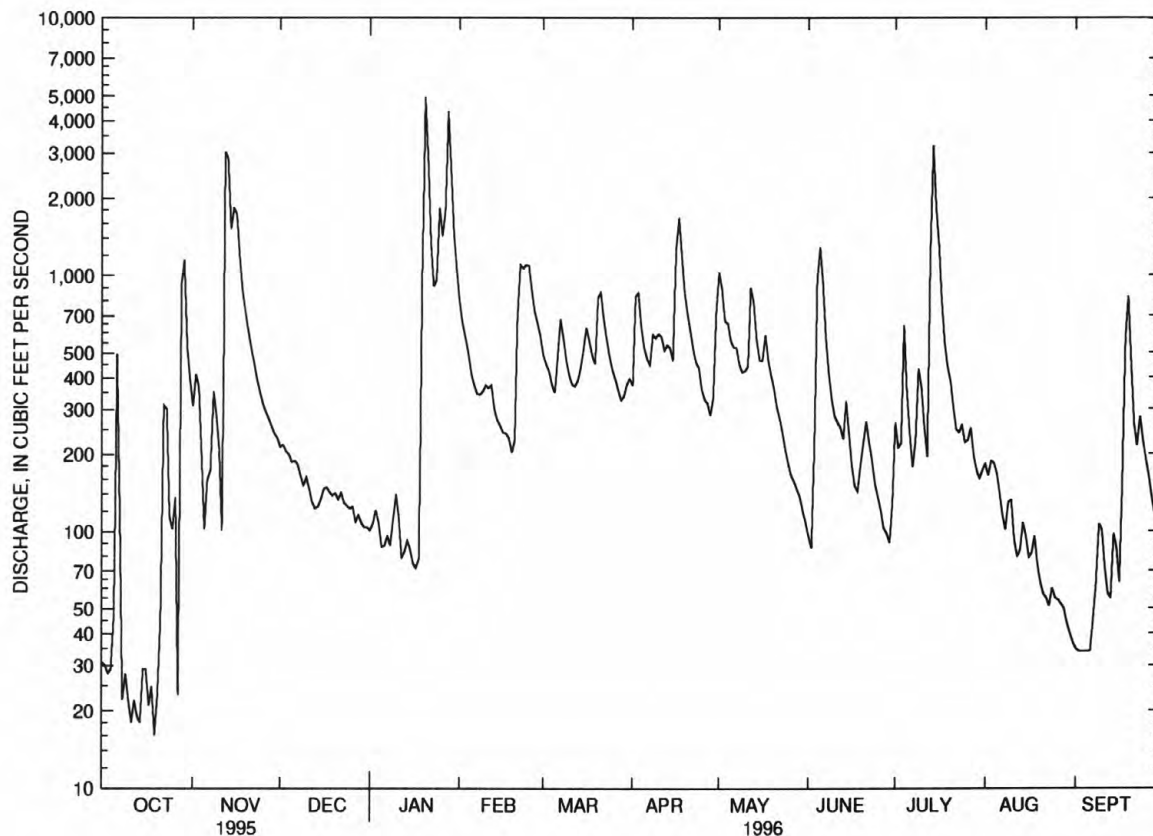
FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1922 - 1996

ANNUAL TOTAL	67684.3	153137	
ANNUAL MEAN	185	418	286
HIGHEST ANNUAL MEAN			512
LOWEST ANNUAL MEAN			73.1
HIGHEST DAILY MEAN	3030	Nov 12	4950
LOWEST DAILY MEAN	2.4	Sep 16	16
ANNUAL SEVEN-DAY MINIMUM	5.5	Sep 10	21
INSTANTANEOUS PEAK FLOW			5410
INSTANTANEOUS PEAK STAGE			12.74
INSTANTANEOUS LOW FLOW			10
10 PERCENT EXCEEDS	375		901
50 PERCENT EXCEEDS	94		246
90 PERCENT EXCEEDS	17		55
			10400
			.00
			.00
			15400
			15.21a
			.00
			643
			162
			36

a From gage well, outside high-water marks at 15.33 ft.



01388000 RAMAPO RIVER AT POMPTON LAKES, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

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 to September 1996 (discontinued).

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. Data recorded at hourly intervals.

REMARKS.--Discrete water-quality samples were collected upstream of dam at water supply intake, on right bank. Water-quality monitor is 450 ft downstream of dam. Interruptions in the daily record were due to the water level dropping below the intakes, Oct. 1-5, instrument or pump malfunction Dec. 16-Jan. 4, and loss of power to the station Aug. 6-8. Beginning October 1994, BOD results from 0 to 1.9 mg/L were reported as estimates (remark code of "E"). For the 9-5-96 sample, the dissolved solids sum (70301) does not include contributions from dissolved ammonia (00608) or dissolved nitrite plus nitrate (00631). They are generally a small percentage of the sum.

EXTREMES FOR PERIOD OF DAILY RECORD.--

FROM WATER-QUALITY MONITOR DOWNSTREAM OF DAM.

SPECIFIC CONDUCTANCE: maximum, 678 μ S/cm, Jan. 19, 1996; minimum, 105 μ S/cm, Oct. 21, 1989.

WATER TEMPERATURE: maximum recorded, 31.0 °C, July 8-11, 1993, Aug. 3, 1995, but may have been higher during period of instrument malfunction and low stream stage July 12-Aug. 13, 1993; 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 OF DAM.

SPECIFIC CONDUCTANCE: maximum, 678 μ S/cm, Jan. 19; minimum, 116 μ S/cm, Nov. 13.

WATER TEMPERATURE: maximum, 27.5 °C, June 15; minimum, 0.0 °C, Jan. 20.

DISSOLVED OXYGEN: maximum, 14.8 mg/L, Jan. 20, 21; minimum, 6.6 mg/L, Aug. 31-Sept. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER 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 AS (MG/L) (00310)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT 1995											
26...	1020	200	267	7.6	14.0	757	8.1	79	E1.6	67	19
NOV											
30...	1325	228	303	7.3	4.0	759	11.1	85	E0.5	84	23
JAN 1996											
16...	1040	77	532	7.6	0.5	770	12.8	88	E0.9	120	33
FEB											
08...	1035	340	375	6.8	1.0	751	12.8	91	E0.6	84	23
MAR											
27...	1023	362	342	7.7	7.5	769	12.1	100	E1.1	78	22
APR											
25...	1152	351	316	8.0	15.5	756	9.6	97	E1.5	78	22
MAY											
08...	1215	443	280	7.5	14.5	761	10.0	98	E1.2	64	18
23...	1337	237	307	8.1	21.5	755	7.5	86	2.4	76	21
JUN											
10...	1215	276	249	7.6	21.0	759	5.9	66	E1.7	61	17
27...	1215	104	379	8.5	23.5	760	10.6	125	2.4	94	26
JUL											
18...	1037	558	214	7.5	23.5	760	7.5	89	E0.9	51	14
AUG											
21...	0940	56	447	7.8	23.5	760	9.0	106	2.1	120	33
SEP											
05...	1010	34	460	8.8	25.5	759	13.0	160	2.1	110	29
25...	1347	191	289	7.8	16.5	758	7.3	75	2.0	75	21

PASSAIC RIVER BASIN

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01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	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)	ALKA- LINITY 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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT 1995											
26...	4.8	20	1.5	41	17	41	0.1	7.9	152	147	0.02
NOV											
30...	6.5	24	1.2	52	14	44	0.1	9.6	156	158	0.02
JAN 1996											
16...	8.8	53	2.3	68	18	100	0.1	9.1	260	273	0.04
FEB											
08...	6.5	34	1.4	49	14	67	<0.1	9.4	204	190	0.03
MAR											
27...	5.7	32	1.2	43	14	64	<0.1	5.8	186	173	0.01
APR											
25...	5.7	28	1.1	46	14	55	<0.1	4.6	180	160	0.01
MAY											
08...	4.7	25	0.80	40	13	48	0.1	5.4	158	141	0.01
23...	5.6	26	1.2	48	13	52	0.1	4.7	170	154	0.02
JUN											
10...	4.5	21	1.0	39	11	40	<0.1	6.4	122	126	0.02
27...	7.1	34	1.4	65	14	62	<0.1	8.2	216	194	0.04
JUL											
18...	3.8	18	1.1	38	10	31	0.1	7.8	130	110	0.02
AUG											
21...	9.3	40	1.8	82	16	83	<0.1	5.6	256	241	0.02
SEP											
05...	9.8	40	1.8	72	16	83	<0.1	0.20	236	223	--
25...	5.5	24	1.3	49	13	45	<0.1	7.8	166	150	0.02
DATE	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)	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- PENDE TOTAL (MG/L AS C) (00689)
OCT 1995											
26...	2.40	0.03	0.50	0.30	2.9	2.7	0.11	0.09	0.05	4.2	0.8
NOV											
30...	0.89	0.05	0.20	0.19	1.1	1.1	0.07	0.04	0.03	2.8	0.4
JAN 1996											
16...	1.60	0.11	0.30	0.39	1.9	2.0	0.10	0.10	0.07	2.6	0.2
FEB											
08...	1.10	0.08	0.30	0.12	1.4	1.2	0.01	0.01	0.03	2.2	0.1
MAR											
27...	0.53	<0.015	0.30	0.14	0.83	0.67	0.06	0.03	0.01	2.4	0.2
APR											
25...	0.35	0.03	0.30	0.24	0.65	0.59	0.06	0.02	<0.01	2.4	0.1
MAY											
08...	0.41	0.05	0.30	0.21	0.71	0.62	0.06	0.03	0.02	2.8	0.8
23...	0.34	0.02	0.50	0.23	0.84	0.57	0.09	0.02	0.02	2.6	1.6
JUN											
10...	0.41	0.09	0.50	0.34	0.91	0.75	0.10	0.06	0.04	3.1	1.0
27...	0.61	0.03	0.60	0.16	1.2	0.77	0.06	<0.01	0.02	3.3	1.2
JUL											
18...	0.32	0.11	0.50	0.34	0.82	0.66	0.06	0.03	0.04	4.0	0.2
AUG											
21...	0.58	0.06	0.60	0.30	1.2	0.88	0.04	<0.01	<0.01	2.8	0.6
SEP											
05...	--	--	--	--	--	--	--	--	--	--	--
25...	0.63	0.04	0.50	0.33	1.1	0.96	0.08	0.06	0.05	4.0	1.2

PASSAIC RIVER BASIN

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	205	191	197	327	316	322	---	---	---
2	---	---	---	220	205	213	335	327	333	---	---	---
3	---	---	---	232	220	224	343	334	337	---	---	---
4	---	---	---	240	230	234	355	343	349	---	---	---
5	---	---	---	243	235	238	359	355	358	546	542	543
6	434	370	406	253	242	246	367	357	361	549	545	546
7	370	353	358	255	250	253	371	367	370	554	549	552
8	354	346	350	267	251	259	374	371	372	556	553	554
9	356	351	354	269	264	267	376	372	374	562	556	559
10	359	356	358	269	263	266	379	376	377	563	562	563
11	361	342	360	272	264	268	385	379	382	563	561	562
12	362	361	362	264	127	196	390	384	387	561	554	558
13	363	362	363	131	116	121	410	390	400	554	544	549
14	366	359	364	161	131	145	423	410	418	544	529	537
15	367	360	364	177	161	170	430	423	425	529	526	527
16	372	366	369	186	177	184	---	---	---	540	528	534
17	375	372	374	195	186	191	---	---	---	557	540	548
18	379	374	378	206	195	201	---	---	---	574	557	566
19	380	378	379	219	206	213	---	---	---	678	574	601
20	382	379	380	232	219	225	---	---	---	602	241	329
21	389	374	381	245	231	237	---	---	---	269	243	257
22	393	361	383	253	244	248	---	---	---	279	269	276
23	361	301	329	263	253	257	---	---	---	286	279	283
24	301	277	288	270	263	267	---	---	---	310	286	292
25	285	269	278	277	270	274	---	---	---	322	259	294
26	274	268	270	286	276	281	---	---	---	259	249	251
27	274	269	272	295	286	290	---	---	---	269	239	257
28	273	208	243	304	294	298	---	---	---	239	154	177
29	208	174	187	305	301	303	---	---	---	199	156	176
30	184	174	179	316	304	309	---	---	---	235	199	218
31	194	182	186	---	---	---	---	---	---	264	235	250
MONTH	434	174	327	316	116	236	---	---	---	678	154	421

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	291	264	278	303	295	298	458	433	447	349	282	314
2	315	291	302	312	303	307	461	415	447	282	260	268
3	329	315	322	329	312	322	415	366	383	261	257	258
4	340	329	335	341	326	332	366	340	349	271	260	265
5	349	340	344	354	341	347	342	332	338	275	269	272
6	361	349	356	371	354	362	332	328	330	281	272	275
7	372	361	367	405	371	393	333	330	331	280	277	278
8	376	372	374	427	404	417	334	329	331	286	279	281
9	386	376	379	432	419	424	334	332	333	295	285	290
10	414	386	399	436	432	434	347	334	340	308	295	303
11	453	414	433	447	436	443	373	347	361	313	308	310
12	473	453	461	463	447	455	384	369	376	311	293	306
13	481	473	478	475	463	468	384	374	381	293	271	278
14	482	479	480	484	475	480	374	358	366	272	264	267
15	480	478	479	489	480	485	358	350	353	270	263	267
16	487	479	481	481	459	468	351	280	325	277	269	273
17	489	487	488	462	430	447	280	241	256	285	277	281
18	493	489	490	430	407	417	249	242	245	285	281	282
19	501	493	497	407	387	398	258	247	254	287	281	283
20	507	501	506	387	372	377	274	257	266	291	285	287
21	558	506	520	375	343	355	285	274	279	299	290	295
22	560	454	521	343	324	333	296	284	290	310	297	305
23	454	349	394	326	320	321	308	296	302	317	310	313
24	349	305	324	324	320	322	316	308	311	328	317	323
25	305	287	296	331	324	328	331	316	323	333	328	330
26	287	277	282	342	331	337	341	331	334	346	333	339
27	280	276	278	343	336	340	350	341	345	359	345	349
28	288	279	283	347	339	343	356	349	352	370	358	362
29	296	288	292	356	346	351	363	356	359	381	367	372
30	---	---	---	374	356	364	366	349	362	378	375	378
31	---	---	---	436	374	408	---	---	---	383	376	379
MONTH	560	264	394	489	295	383	461	241	336	383	257	303

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	397	383	388	411	394	401	379	373	375	463	461	462
2	406	394	398	417	404	410	383	377	380	464	461	462
3	406	395	402	417	404	410	395	381	388	464	460	462
4	414	331	386	405	361	385	402	395	398	463	460	461
5	331	223	269	361	314	330	404	401	403	466	460	462
6	223	203	209	314	275	289	---	---	---	474	466	472
7	214	204	208	281	270	276	---	---	---	477	472	473
8	227	213	220	280	272	275	---	---	---	484	477	482
9	247	226	235	301	272	287	410	407	409	495	482	487
10	266	243	254	305	298	302	409	407	408	504	495	500
11	280	263	271	311	301	306	410	409	410	516	502	507
12	295	274	286	309	305	306	411	410	410	526	516	522
13	310	292	300	307	219	289	414	411	413	527	524	526
14	324	302	309	219	125	152	417	414	415	538	523	529
15	328	321	324	163	126	143	423	416	418	539	534	537
16	331	327	328	192	163	179	431	423	427	539	535	538
17	334	327	330	211	190	201	431	427	428	535	512	527
18	337	331	333	231	211	218	431	426	428	512	446	489
19	341	336	338	248	230	237	440	431	435	446	305	367
20	348	340	342	262	240	252	458	438	446	305	258	274
21	366	348	360	276	262	270	463	454	459	260	247	251
22	385	365	378	298	276	285	462	457	459	261	253	255
23	387	384	386	311	296	301	467	456	460	266	257	261
24	387	380	383	326	310	317	466	462	464	286	266	275
25	384	379	381	350	323	337	466	462	464	295	286	289
26	381	379	380	349	339	343	470	463	467	305	293	297
27	382	380	381	360	344	350	474	470	472	317	304	308
28	383	380	382	366	353	362	472	469	471	322	317	319
29	389	383	386	371	366	367	473	470	472	326	321	323
30	394	389	392	374	370	372	473	468	471	345	326	337
31	---	---	---	375	373	374	469	462	467	---	---	---
MONTH	414	203	331	417	125	301	474	373	433	539	247	415

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

PASSAIC RIVER BASIN

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

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

PASSAIC RIVER BASIN

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01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	10.5	10.5	10.5	11.9	11.7	11.8	---	---	---
2	---	---	---	10.5	10.2	10.4	12.1	11.7	11.9	---	---	---
3	---	---	---	10.2	9.8	10.0	12.1	11.8	12.0	---	---	---
4	---	---	---	10.2	9.8	10.0	11.9	11.8	11.8	---	---	---
5	---	---	---	10.5	10.2	10.4	12.1	11.9	12.0	14.5	14.1	14.3
6	8.7	8.5	8.6	10.7	10.4	10.6	12.0	11.8	11.9	14.7	14.2	14.5
7	8.5	7.3	8.3	10.7	10.5	10.6	12.1	11.9	12.0	14.2	13.7	14.1
8	8.1	7.2	7.8	11.1	10.6	10.9	12.3	12.0	12.2	13.7	13.5	13.6
9	8.4	7.4	8.1	11.5	11.1	11.3	12.3	12.1	12.2	13.8	13.4	13.6
10	8.6	7.6	8.1	11.6	11.4	11.5	12.5	12.1	12.4	13.8	13.4	13.6
11	8.5	7.4	8.0	11.5	10.9	11.3	12.8	12.5	12.7	14.3	13.8	14.1
12	8.9	7.9	8.3	11.0	10.7	10.9	13.0	12.8	12.9	14.0	13.3	13.7
13	9.2	7.6	8.4	11.5	11.0	11.3	13.0	12.7	12.9	13.7	13.3	13.4
14	8.8	7.7	8.1	11.5	11.3	11.4	12.8	12.5	12.6	13.9	13.4	13.6
15	9.0	7.6	8.4	11.5	11.2	11.3	12.8	12.5	12.7	14.2	13.5	13.9
16	8.9	8.1	8.7	11.8	11.5	11.6	---	---	---	14.6	14.1	14.3
17	9.6	8.9	9.1	11.9	11.7	11.8	---	---	---	14.1	13.7	13.9
18	9.8	9.1	9.4	11.9	11.8	11.9	---	---	---	14.0	13.7	13.8
19	9.9	8.3	9.2	11.9	11.7	11.8	---	---	---	13.9	13.0	13.5
20	9.5	8.0	9.0	11.7	11.5	11.6	---	---	---	14.8	13.9	14.5
21	9.5	8.5	9.1	11.5	11.3	11.4	---	---	---	14.8	14.6	14.8
22	10.0	9.5	9.8	11.5	11.3	11.4	---	---	---	14.6	14.2	14.4
23	10.1	9.9	10.0	11.7	11.5	11.6	---	---	---	14.2	13.8	14.0
24	10.0	9.7	9.9	11.8	11.6	11.7	---	---	---	13.8	13.3	13.4
25	9.9	9.7	9.8	11.9	11.8	11.8	---	---	---	14.0	13.3	13.6
26	10.0	9.2	9.8	11.9	11.7	11.8	---	---	---	14.4	14.0	14.3
27	9.9	9.0	9.5	11.7	11.6	11.7	---	---	---	14.3	13.3	13.7
28	9.9	9.5	9.7	11.7	11.6	11.7	---	---	---	14.1	13.3	13.7
29	10.2	9.8	10.0	11.8	11.7	11.8	---	---	---	14.3	13.9	14.2
30	10.4	10.2	10.4	12.0	11.8	11.9	---	---	---	13.9	13.4	13.7
31	10.5	10.4	10.5	---	---	---	---	---	---	13.6	13.4	13.5
MONTH	10.5	7.2	9.1	12.0	9.8	11.3	---	---	---	14.8	13.0	13.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.9	13.5	13.8	13.1	12.7	13.0	11.4	11.2	11.3	10.5	10.3	10.4
2	13.9	13.8	13.9	13.1	12.9	12.9	11.5	11.1	11.3	10.4	10.1	10.3
3	14.1	13.9	14.0	13.3	12.9	13.0	11.4	11.1	11.3	10.3	10.2	10.3
4	14.2	14.1	14.2	13.7	13.3	13.5	11.3	11.0	11.2	10.3	10.3	10.3
5	14.3	14.1	14.2	13.5	12.9	13.2	11.3	11.0	11.2	10.5	9.9	10.2
6	14.2	14.0	14.1	12.9	12.8	12.9	11.5	11.2	11.3	10.4	10.1	10.2
7	14.0	13.8	13.9	13.1	12.9	13.0	11.3	11.2	11.2	10.6	10.4	10.5
8	13.8	13.4	13.6	13.7	13.1	13.3	11.5	11.3	11.4	10.5	10.1	10.4
9	13.4	13.3	13.4	14.2	13.7	14.0	11.7	11.4	11.6	10.6	10.3	10.5
10	13.4	13.0	13.2	14.3	13.9	14.1	11.8	11.5	11.6	10.3	10.1	10.2
11	13.0	12.7	12.9	14.0	13.5	13.9	11.8	11.2	11.5	10.1	9.6	9.9
12	13.1	12.8	12.9	13.5	13.1	13.4	11.7	10.8	11.2	10.0	9.6	9.8
13	13.3	13.0	13.2	13.2	12.8	13.0	11.5	11.0	11.3	10.3	10.0	10.2
14	13.3	13.1	13.1	12.9	12.4	12.7	11.2	11.0	11.1	10.5	10.2	10.4
15	13.4	13.1	13.3	12.4	12.1	12.3	11.4	11.0	11.2	10.6	10.3	10.5
16	13.5	13.3	13.4	12.5	12.2	12.3	11.3	11.0	11.2	10.4	10.3	10.4
17	13.4	13.3	13.3	12.5	12.2	12.4	11.7	11.3	11.5	10.4	10.0	10.3
18	13.7	13.3	13.4	12.4	12.1	12.2	11.9	11.5	11.7	10.2	10.0	10.1
19	14.0	13.7	13.9	12.1	11.8	12.0	11.5	11.1	11.3	10.0	9.5	9.9
20	13.8	13.6	13.7	12.0	11.8	11.9	11.2	10.8	11.0	9.6	9.1	9.4
21	13.6	13.4	13.5	12.0	11.9	11.9	10.9	10.4	10.7	9.3	8.8	9.0
22	13.4	13.1	13.2	12.1	12.0	12.0	10.7	10.0	10.4	9.1	8.8	8.9
23	13.1	12.8	13.0	12.4	12.0	12.3	10.2	9.6	10.0	9.1	8.7	8.9
24	12.8	12.5	12.6	12.6	12.2	12.4	10.0	9.6	9.8	9.0	8.6	8.8
25	12.6	12.4	12.5	12.3	11.8	12.1	10.1	9.6	9.8	9.0	8.6	8.8
26	12.6	12.4	12.5	11.9	11.6	11.8	9.9	9.4	9.7	9.2	8.6	9.0
27	12.7	12.3	12.5	12.1	11.7	11.9	10.1	9.6	9.9	9.5	9.0	9.2
28	12.3	12.0	12.2	12.0	11.4	11.7	10.3	9.9	10.1	9.4	9.2	9.3
29	12.7	12.2	12.6	12.2	11.4	11.9	10.2	9.9	10.0	9.5	9.2	9.3
30	---	---	---	12.3	11.4	11.9	10.3	10.1	10.2	9.7	9.3	9.5
31	---	---	---	11.8	11.3	11.6	---	---	---	9.7	9.0	9.4
MONTH	14.3	12.0	13.3	14.3	11.3	12.6	11.9	9.4	10.9	10.6	8.6	9.8

PASSAIC RIVER BASIN

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.7	9.0	9.4	8.2	8.0	8.1	8.2	7.9	8.0	7.8	6.6	7.1
2	9.5	8.8	9.2	8.0	7.7	7.8	8.0	7.6	7.8	7.7	6.6	7.1
3	9.5	8.8	9.0	8.0	7.4	7.7	7.9	7.6	7.9	7.7	6.6	7.1
4	9.6	9.2	9.4	8.3	8.0	8.2	8.1	7.7	7.9	7.7	6.7	7.1
5	9.8	9.2	9.5	8.5	8.0	8.3	8.0	7.4	7.8	7.8	6.9	7.2
6	9.6	8.8	9.2	8.3	7.8	8.2	---	---	---	7.9	6.9	7.3
7	9.2	8.5	8.9	7.8	7.4	7.7	---	---	---	7.9	7.2	7.5
8	8.9	8.3	8.6	7.8	7.3	7.5	---	---	---	7.9	7.4	7.7
9	8.7	8.3	8.5	7.8	7.5	7.6	7.6	7.1	7.3	8.2	7.8	8.0
10	8.6	8.2	8.4	8.2	7.5	7.9	7.7	7.2	7.4	8.1	7.6	7.9
11	8.5	8.1	8.3	8.6	8.0	8.3	7.7	7.2	7.4	8.1	7.6	7.8
12	8.5	8.0	8.3	8.4	7.9	8.2	7.7	7.2	7.5	7.9	7.6	7.7
13	8.3	7.8	8.1	8.6	7.9	8.3	7.9	7.5	7.7	8.0	7.6	7.8
14	8.3	7.8	8.0	8.6	8.5	8.5	8.1	7.6	7.8	8.4	8.0	8.3
15	8.3	7.3	7.9	8.5	8.2	8.4	8.1	7.7	7.9	8.5	8.3	8.4
16	8.4	7.6	8.1	8.4	8.1	8.2	8.1	7.7	7.9	8.6	8.3	8.4
17	8.2	7.5	7.9	8.2	7.9	8.1	8.0	7.3	7.7	8.9	8.3	8.7
18	8.0	7.6	7.7	8.0	7.8	7.9	7.8	7.2	7.5	9.5	8.9	9.2
19	8.2	7.6	8.0	7.8	7.6	7.7	7.7	6.9	7.3	9.7	9.5	9.5
20	8.3	8.1	8.2	8.0	7.6	7.8	7.6	7.0	7.3	9.7	9.3	9.5
21	8.3	7.8	8.1	8.1	7.8	8.0	7.4	6.9	7.2	9.6	9.3	9.5
22	8.2	7.9	8.1	8.1	7.8	8.0	7.6	6.9	7.3	9.4	9.3	9.3
23	8.5	7.9	8.2	8.2	8.0	8.1	7.7	6.9	7.2	9.5	9.4	9.5
24	8.4	7.9	8.1	8.3	8.1	8.2	7.6	6.9	7.2	9.7	9.5	9.6
25	8.1	7.6	7.9	8.2	7.9	8.1	7.7	6.9	7.2	9.8	9.6	9.7
26	8.2	7.6	7.9	8.0	7.8	7.9	7.9	6.9	7.4	10.2	9.8	10.0
27	8.2	7.3	7.8	8.2	7.8	8.0	7.8	7.0	7.3	10.0	9.7	9.9
28	7.9	7.3	7.6	8.2	7.6	7.9	7.9	7.0	7.4	9.7	9.4	9.6
29	7.8	7.4	7.6	8.1	7.7	7.9	8.0	6.8	7.3	9.7	9.4	9.5
30	8.0	7.5	7.8	8.0	7.9	7.9	7.8	6.7	7.1	9.8	9.6	9.7
31	---	---	---	8.0	7.9	7.9	7.7	6.6	7.1	---	---	---
MONTH	9.8	7.3	8.3	8.6	7.3	8.0	8.2	6.6	7.5	10.2	6.6	8.5

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 mi².

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 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 Reservoirs 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1915	5,630	13.91	Jan. 28	0900	*9,490	*16.96
Nov. 15	1115	3,580	12.09	Apr. 16	2400	4,220	12.61
Jan. 20	1200	7,840	15.72	July 14	1330	5,270	13.56
Jan. 25	1500	3,790	12.26				

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	59	518	323	148	1980	1370	781	2470	186	382	293	75
2	57	792	325	156	1810	1230	2050	2210	171	303	261	72
3	55	669	314	179	1670	1110	1960	1810	432	363	311	71
4	56	385	307	166	1410	876	1580	1690	1480	956	341	72
5	207	252	296	138	1080	769	1370	1490	2230	489	292	73
6	1090	285	294	134	913	1230	1180	1440	1540	322	243	73
7	267	329	293	140	783	1780	1110	1380	940	254	198	106
8	95	635	281	136	736	1600	1490	1170	642	394	175	131
9	82	487	256	196	741	1260	1410	1030	491	739	227	171
10	67	363	276	227	752	1010	1520	1020	411	527	228	163
11	57	257	234	183	731	865	1380	1130	379	357	166	139
12	59	4630	201	141	744	819	1150	2140	369	280	146	128
13	52	4890	190	149	557	829	1210	1940	333	2160	156	134
14	67	2890	193	154	491	948	1210	1520	449	4910	179	197
15	169	3470	207	145	462	1190	1020	1280	340	3270	160	162
16	109	3140	232	135	432	1500	2980	1190	273	2360	141	135
17	75	2280	235	133	426	1370	3870	1390	219	1530	141	342
18	72	1760	213	148	401	1170	2780	1090	212	1070	155	989
19	58	1510	205	1800	349	1060	2150	899	266	883	132	1160
20	61	1270	214	7320	392	2250	1820	763	308	847	119	579
21	253	1030	203	5550	1410	2230	1580	650	355	633	112	360
22	643	842	209	2860	2290	1850	1350	555	302	511	108	333
23	496	699	189	2030	2490	1560	1170	442	277	474	103	382
24	247	610	184	2230	2760	1290	1130	366	212	415	116	321
25	208	532	178	3660	2840	1050	799	320	194	321	108	291
26	223	488	176	2840	2420	910	665	292	184	352	103	259
27	92	458	157	4160	2060	808	668	282	151	378	100	209
28	1780	420	165	8970	1880	635	569	272	158	296	95	182
29	1960	391	154	5550	1670	748	675	253	140	272	87	318
30	962	361	149	3040	---	822	1730	234	228	261	81	326
31	660	---	148	2270	---	838	---	205	---	282	78	---
TOTAL	10338	36643	7001	55088	36680	36977	44357	32923	13872	26591	5155	7953
MEAN	333	1221	226	1777	1265	1193	1479	1062	462	858	166	265
MAX	1960	4890	325	8970	2840	2250	3870	2470	2230	4910	341	1160
MIN	52	252	148	133	349	635	569	205	140	254	78	71

PASSAIC RIVER BASIN

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1996, BY WATER YEAR (WY)

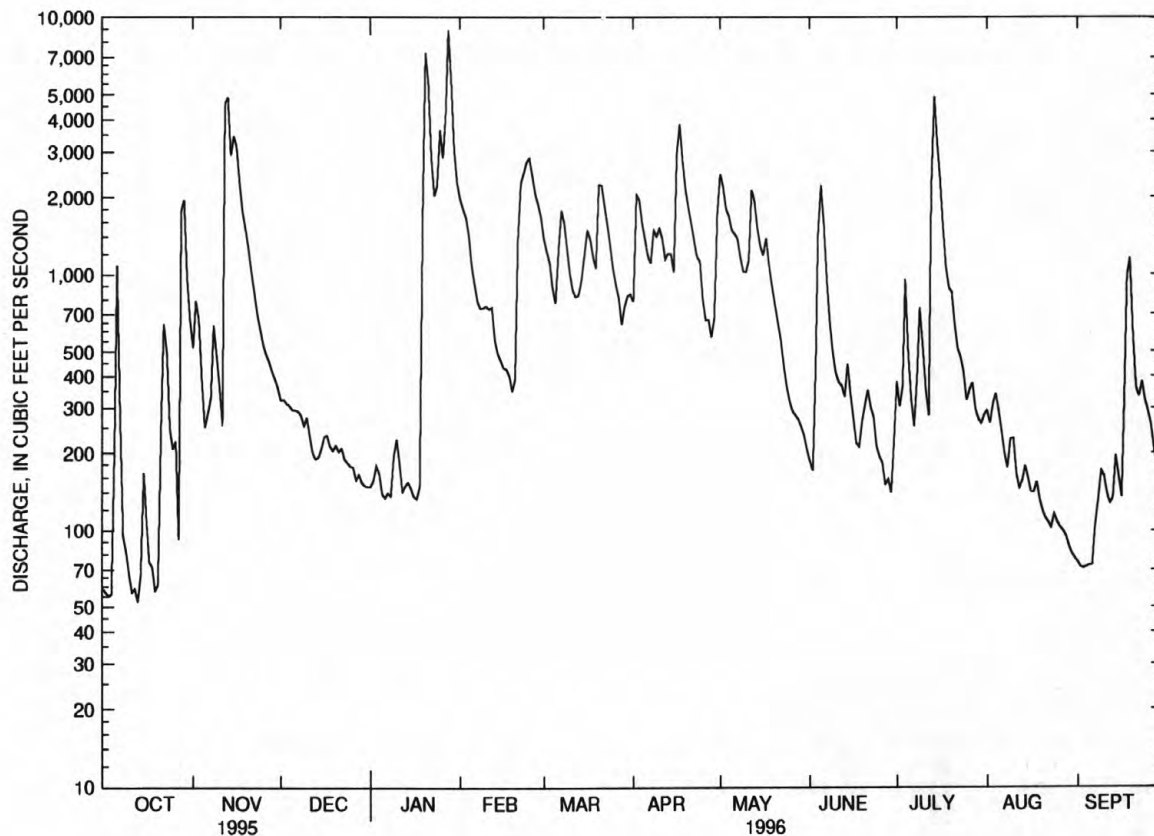
MEAN	284	422	511	517	564	934	962	615	376	242	217	222
MAX	2369	1417	1543	1777	1654	2477	2995	2778	2177	1530	1520	1057
(WY)	1904	1956	1984	1996	1973	1983	1983	1989	1972	1945	1955	1971
MIN	40.2	52.3	34.8	39.2	149	118	62.7	110	62.9	34.2	34.2	46.7
(WY)	1981	1981	1981	1981	1969	1981	1985	1965	1965	1965	1966	1980

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1903 - 1996	
ANNUAL TOTAL	121112		313578			
ANNUAL MEAN	332		857		487	
HIGHEST ANNUAL MEAN					906	1952
LOWEST ANNUAL MEAN					117	1965
HIGHEST DAILY MEAN	4890	Nov 13	8970	Jan 28	28300	Oct 10 1903
LOWEST DAILY MEAN	26	Sep 16	52	Oct 13	.00	Aug 18 1904
ANNUAL SEVEN-DAY MINIMUM	33	Sep 10	68	Oct 8	1.7	Aug 14 1904
INSTANTANEOUS PEAK FLOW			9490	Jan 28	28300a	Oct 10 1903
INSTANTANEOUS PEAK STAGE			16.96	Jan 28	14.30bc	Oct 10 1903
INSTANTANEOUS LOW FLOW			46	Oct 14	.00	Aug 18 1904
10 PERCENT EXCEEDS	625		2080		1130	
50 PERCENT EXCEEDS	180		391		244	
90 PERCENT EXCEEDS	52		125		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 mi².

PERIOD OF RECORD.--Water years 1979 to current year.

COOPERATION.--Analyses of fecal coliform bacteria by the MPN method, enterococcus bacteria by the membrane filtration method, and selected BOD's on the following dates were performed by the New Jersey Department of Health, Public Health, and Environmental Laboratories: 10-25-95, 1-16, 3-26, 5-23, and 7-18-96. Other BOD's were performed by the U.S. Geological Survey, New Jersey District Field Laboratory. Beginning October 1994, BOD results from 0 to 1.9 mg/L were reported as estimates (remark code of "E"). For the 9-5-96 sample, the dissolved solids sum (70301) does not include contributions from dissolved ammonia (00608) or dissolved nitrite plus nitrate (00631). They are generally a small percentage of the sum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 (PER- CENT SATUR- ATION) (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 1995										
25...	1045	140	286	7.6	13.5	760	9.0	87	E1.3	330
NOV										
30...	1100	375	322	7.6	4.0	760	13.3	102	E0.6	--
JAN 1996										
16...	1315	135	490	7.8	0.0	770	15.5	105	E1.5	540
FEB										
08...	1233	745	325	7.0	1.0	751	13.7	98	E0.6	--
MAR										
26...	1108	935	268	7.9	7.5	760	11.3	95	E1.1	17
APR										
25...	0950	835	272	7.8	13.5	754	10.4	101	E1.2	--
MAY										
08...	1033	1210	235	7.3	12.5	761	10.7	101	E0.6	--
23...	1106	455	286	7.6	19.5	755	8.8	97	2.8	490
JUN										
10...	1000	420	264	7.6	21.5	759	8.0	92	E1.9	--
27...	1010	155	351	8.0	21.0	761	8.5	96	E1.6	--
JUL										
18...	1217	1070	221	8.1	23.0	758	7.6	89	<1.0	230
AUG										
21...	1155	115	391	8.0	23.0	761	9.1	106	E1.3	--
SEP										
05...	1302	75	394	7.9	24.5	760	8.8	106	E1.5	--
25...	1130	295	284	7.7	16.0	758	8.2	84	E1.5	--

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)	ALKA- LITY LAB (MG/L AS CaCO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl) (00940)
OCT 1995									
25...	30	72	20	5.4	21	1.7	46	19	43
NOV									
30...	--	82	22	6.5	28	1.2	50	14	50
JAN 1996									
16...	10	110	30	8.2	49	2.1	62	19	92
FEB									
08...	--	71	19	5.6	30	1.2	40	14	56
MAR									
26...	40	65	18	4.8	25	1.1	34	13	49
APR									
25...	--	68	19	5.1	23	1.1	40	14	46
MAY									
08...	--	55	15	4.2	21	0.80	34	13	40
23...	10	69	19	5.3	24	1.2	44	14	47
JUN									
10...	--	65	18	4.9	21	1.2	41	13	42
27...	--	90	25	6.7	30	1.6	58	16	57
JUL									
18...	20	54	15	4.1	18	1.1	38	11	31
AUG									
21...	--	110	29	8.3	35	1.8	71	18	65
SEP									
05...	--	100	27	8.1	34	1.9	63	19	66
25...	--	72	20	5.3	23	1.4	48	15	43

PASSAIC RIVER BASIN

01388600 POMPTON RIVER AT PACKANACK LAKE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	FLUORIDE, 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, PENDE (MG/L) (00530)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 1995									
25...	0.1	8.6	166	150	6	4.0	0.4	--	--
NOV									
30...	<0.1	9.6	160	165	--	2.9	0.3	--	--
JAN 1996									
16...	0.1	8.7	246	254	4	2.5	0.3	--	--
FEB									
08...	<0.1	8.9	176	163	--	2.4	0.2	--	--
MAR									
26...	<0.1	6.1	150	140	--	2.3	0.5	2	5.3
APR									
25...	<0.1	5.0	148	139	--	2.6	0.8	--	--
MAY									
08...	<0.1	5.1	142	121	--	2.9	0.7	--	--
23...	<0.1	5.3	178	144	5	2.7	0.8	--	--
JUN									
10...	<0.1	6.6	130	134	--	2.9	<0.1	--	--
27...	0.1	7.9	208	183	--	3.0	0.9	--	--
JUL									
18...	0.1	7.8	116	113	5	3.9	0.6	--	--
AUG									
21...	<0.1	5.3	214	208	--	2.6	0.4	--	--
SEP									
05...	<0.1	4.2	214	198	--	--	--	--	--
25...	<0.1	7.8	154	148	--	3.8	0.6	--	--

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 TOTAL RECOV- ERABLE (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 1995								
25...	1045	11	<1	<10	40	<1	<1	3
MAY 1996								
23...	1106	12	<1	<10	40	<1	<1	3

DATE	TIME	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995								
25...		350	2	100	0.2	1	<1	10
MAY 1996								
23...		290	2	80	<0.1	<1	<1	<10

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
MAY 1996							
23...	1106	FIELD BLANK	<1	<1	<0.1	<1	<1

PASSAIC RIVER BASIN

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01388600 POMPTON RIVER AT PACKANACK LAKE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE U.S. GEOLOGICAL SURVEY
NATIONAL WATER QUALITY LABORATORY

DATE	TIME	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, DIS- SOLVED (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)
OCT 1995											
25...	1045	0.02	0.72	0.030	0.30	0.21	1.0	0.93	0.09	0.03	0.04
NOV											
30...	1100	0.02	0.88	0.040	0.30	0.19	1.2	1.1	0.06	0.04	0.02
JAN 1996											
16...	1315	0.03	1.60	0.080	0.30	0.34	1.9	1.9	0.06	0.05	0.03
FEB											
08...	1233	0.02	0.98	0.090	0.16	0.13	1.1	1.1	0.01	<0.01	0.01
MAR											
26...	1108	0.01	0.50	<0.015	0.30	0.14	0.80	0.64	<0.01	0.03	0.01
APR											
25...	0950	<0.01	0.37	<0.015	0.30	0.19	0.67	0.56	0.03	0.02	<0.01
MAY											
08...	1033	<0.01	0.39	0.030	0.30	0.22	0.69	0.61	0.05	0.04	0.01
23...	1106	0.02	0.43	0.040	0.40	0.18	0.83	0.61	0.06	0.01	0.01
JUN											
10...	1000	0.02	0.55	0.080	0.40	0.33	0.95	0.88	0.08	0.05	0.04
27...	1010	0.03	0.80	0.040	0.40	0.16	1.2	0.96	0.04	<0.01	0.02
JUL											
18...	1217	0.02	0.39	0.080	0.40	0.25	0.79	0.64	0.08	0.01	0.04
AUG											
21...	1155	0.02	0.72	0.030	0.30	0.17	1.0	0.89	0.02	0.02	0.02
SEP											
25...	1130	0.02	0.72	0.030	0.40	0.31	1.1	1.0	0.05	0.04	0.04

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 1995				
25...	1045	0.010	0.06	0.04
JAN 1996				
16...	1315	0.032	0.11	0.12
MAR				
26...	1108	0.006	<0.03	<0.03
MAY				
23...	1106	0.015	<0.03	<0.03
JUL				
18...	1217	0.014	<0.03	<0.03

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.

PERIOD OF RECORD.--December 1992 to current year.

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 PERIOD OF RECORD.--Maximum gage height recorded, 11.81 ft, Jan. 28, 1996; minimum recorded, 1.25 ft, Oct. 19, 1995.

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.58	1.38	4.27	4.03	3.05	2.98	---	---	---	---	5.66	5.24
2	1.58	1.49	4.53	4.13	3.00	2.95	---	---	---	---	5.24	4.99
3	1.72	1.50	4.51	4.25	2.96	2.90	---	---	---	---	4.99	4.68
4	1.67	1.49	4.25	3.88	2.91	2.84	---	---	---	---	4.69	4.34
5	3.14	1.56	3.88	3.67	2.85	2.79	---	---	---	---	4.34	4.15
6	4.08	3.14	3.71	3.59	2.83	2.79	---	---	---	---	5.06	4.19
7	3.66	2.83	3.98	3.51	2.82	2.78	---	---	---	---	5.49	5.06
8	2.83	2.50	4.11	3.92	2.80	2.69	---	---	---	---	5.49	5.33
9	2.50	2.19	4.07	3.84	---	---	---	---	4.38	4.28	---	---
10	2.19	1.49	3.89	3.62	---	---	---	---	4.36	4.30	---	---
11	1.49	1.26	4.58	3.35	---	---	---	---	4.33	4.26	---	---
12	1.43	1.34	7.98	4.58	---	---	---	---	---	---	---	---
13	1.54	1.28	8.41	7.98	---	---	---	---	---	---	4.68	4.62
14	2.04	1.27	8.17	7.51	---	---	---	---	---	---	4.72	4.65
15	2.21	2.04	8.14	7.64	---	---	---	---	---	---	5.00	4.72
16	2.20	1.93	8.16	7.92	---	---	---	---	---	---	5.19	5.00
17	1.93	1.51	7.92	7.22	---	---	---	---	---	---	5.19	5.00
18	1.51	1.26	7.22	6.57	---	---	---	---	---	---	5.00	4.78
19	1.55	1.25	6.57	6.09	---	---	---	---	---	---	4.86	4.59
20	1.55	1.40	6.09	5.60	---	---	---	---	---	---	5.99	4.86
21	2.88	1.45	5.60	5.18	---	---	---	---	5.39	3.54	6.09	5.99
22	3.30	2.88	5.18	4.78	---	---	---	---	6.17	5.39	6.01	5.75
23	3.30	3.04	4.78	4.43	---	---	---	---	6.54	6.17	5.75	5.51
24	3.04	2.53	4.43	4.14	---	---	8.29	7.53	7.11	6.54	5.51	5.19
25	2.53	2.12	4.14	3.87	---	---	8.84	8.29	7.24	7.10	5.19	4.88
26	2.30	1.72	3.87	3.61	---	---	8.83	8.28	7.16	6.79	4.88	4.59
27	1.72	1.27	3.61	3.39	---	---	10.15	8.14	6.79	6.37	4.61	4.33
28	5.48	1.68	3.40	3.22	---	---	11.81	10.15	6.37	6.07	4.33	4.01
29	5.48	5.04	3.22	3.13	---	---	11.74	10.92	6.07	5.66	4.13	3.98
30	5.04	4.42	3.13	3.05	---	---	10.92	9.75	---	---	4.20	4.13
31	4.44	4.27	---	---	---	---	9.75	8.77	---	---	4.25	4.20
MONTH	5.48	1.25	8.41	3.05	---	---	---	---	---	---	---	---

PASSAIC RIVER BASIN

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01388910 POMPTON RIVER AT MOUNTAIN VIEW, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.70	4.17	6.06	5.43	2.55	2.49	3.19	2.57	2.91	2.83	1.93	1.92
2	5.85	4.70	6.10	5.89	2.49	2.42	3.19	3.03	2.91	2.84	1.92	1.90
3	5.86	5.72	5.89	5.58	4.15	2.40	3.95	2.83	3.03	2.84	1.91	1.89
4	5.73	5.51	5.58	5.45	4.68	4.15	4.02	3.81	3.05	2.85	1.92	1.89
5	5.51	5.32	5.45	5.16	5.64	4.68	3.81	3.13	2.85	2.68	1.94	1.91
6	5.32	5.06	5.17	5.12	5.56	4.86	3.13	2.74	2.68	2.54	1.96	1.91
7	5.06	4.94	5.12	4.92	4.86	4.24	2.74	2.52	2.54	2.43	2.30	1.96
8	5.27	5.06	4.92	4.67	4.24	3.69	3.83	2.47	2.43	2.35	2.32	2.24
9	5.25	5.12	4.67	4.47	3.69	3.27	4.09	3.65	2.58	2.32	2.57	2.32
10	5.30	5.14	4.47	4.39	3.27	2.84	3.65	3.35	2.58	2.41	2.57	2.40
11	5.27	5.05	4.74	4.35	2.84	2.71	3.35	2.96	2.41	2.28	2.40	2.24
12	5.05	4.80	5.72	4.74	2.99	2.72	2.96	2.69	2.28	2.24	2.24	2.15
13	4.86	4.79	5.73	5.49	3.09	2.94	6.78	2.69	2.33	2.24	2.43	2.12
14	4.83	4.72	5.49	5.11	3.09	2.94	8.32	6.78	2.40	2.33	2.57	2.43
15	4.74	4.47	5.11	4.83	3.04	2.73	8.32	7.51	2.40	2.29	2.54	2.35
16	7.48	4.47	4.83	4.70	2.73	2.44	7.54	6.83	2.29	2.23	2.35	2.21
17	7.95	7.48	4.93	4.82	2.44	2.30	6.83	5.98	2.24	2.21	3.69	2.21
18	7.92	7.52	4.82	4.54	2.30	2.26	5.98	5.44	2.25	2.22	4.29	3.69
19	7.52	6.96	4.54	4.29	2.74	2.27	5.44	5.07	2.22	2.13	4.43	4.28
20	6.96	6.37	4.29	4.01	2.95	2.74	5.07	4.71	2.13	2.10	4.28	3.63
21	6.37	5.78	4.01	3.78	2.87	2.82	4.71	4.29	2.10	2.09	3.63	3.14
22	5.78	5.33	3.78	3.51	2.83	2.62	4.29	3.91	2.14	2.10	3.18	2.98
23	5.33	5.01	3.51	3.27	2.62	2.58	3.91	3.64	2.11	2.06	3.23	3.17
24	5.02	4.77	3.27	3.10	2.59	2.35	3.64	3.29	2.16	2.07	3.19	2.96
25	4.77	4.34	3.11	2.95	2.35	2.13	3.29	2.98	2.17	2.12	2.96	2.78
26	4.35	4.09	2.95	2.81	2.13	1.99	3.07	2.93	2.12	2.07	2.78	2.63
27	4.09	3.91	2.81	2.77	2.01	1.81	3.16	3.07	2.07	2.04	2.63	2.50
28	3.91	3.64	2.77	2.74	1.98	1.79	3.12	2.89	2.05	2.01	2.54	2.43
29	3.98	3.55	2.74	2.68	1.81	1.67	2.89	2.73	2.01	1.97	2.94	2.54
30	5.43	3.98	2.71	2.63	2.57	1.72	2.73	2.63	1.98	1.95	2.95	2.82
31	---	---	2.63	2.55	---	---	2.83	2.61	1.95	1.93	---	---
MONTH	7.95	3.55	6.10	2.55	5.64	1.67	8.32	2.47	3.05	1.93	4.43	1.89

PASSAIC RIVER BASIN

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 right bank, in Two Bridges and 400 ft downstream from the Pompton River.

DRAINAGE AREA.--734 mi².

PERIOD OF RECORD.--Water years 1987 to current year.

NUTRIENT AND INORGANIC CHEMICAL DATA: water years 1987 to September 1996 (discontinued).

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. Three water-quality monitors are at the site; each measures the characteristics of water pumped from a single intake. Looking downstream, the "Left Intake" is 68 ft from the left bank, the "Middle Intake" is at midstream, and the "Right Intake" is 74 ft from the right bank. The distances are approximate values for low water conditions.

REMARKS.--Interruptions in the daily record were due to instrument or pump malfunction. On Jan. 27, an ice jam broke away the middle intake; it was repaired on June 19. Beginning October 1994, BOD results from 0 to 1.9 mg/L were reported as estimates (remark code of "E").

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, but may have been higher at left intake during period of instrument malfunction, July 21-Aug. 10, 1993; minimum, 1.3 mg/L from right intake, May 29, 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: maximum, 1,650 µS/cm from right intake, Dec. 18; minimum recorded, 125 µS/cm from middle intake, Nov. 13, but may have been lower at left intake during period of instrument malfunction, Nov. 12, 13.

WATER TEMPERATURE: maximum, 26.5 °C from right intake, July 9, Aug. 8, 25; minimum, 0.0 °C from left intake, Dec. 12, 13, Jan. 8.

DISSOLVED OXYGEN: maximum, 16.2 mg/L from right intake, Aug. 31; minimum, 3.3 mg/L from right intake, July 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT 1995											
25...	1115	430	342	7.3	13.5	759	6.5	63	2.4	88	23
NOV											
30...	0825	855	357	7.4	4.5	759	11.0	85	E1.4	93	24
JAN 1996											
16...	1310	450	1040	7.0	0.0	771	11.8	80	E0.7	150	40
FEB											
08...	1342	1780	366	7.2	1.0	753	12.4	88	E0.2	77	20
MAR											
27...	1142	1800	356	7.7	8.0	772	12.3	103	E1.5	79	21
APR											
25...	1141	1860	324	7.6	14.5	755	9.4	93	2.9	78	21
MAY											
08...	1130	1980	296	7.3	13.0	763	9.4	89	2.1	71	19
24...	0839	883	364	7.4	20.5	756	6.2	70	2.5	100	27
JUN											
10...	1252	722	359	7.6	22.5	762	6.0	69	E1.9	91	24
27...	1300	244	542	8.0	23.0	763	8.9	104	2.4	140	35
JUL											
18...	1112	2820	230	7.1	23.5	760	4.7	56	2.1	57	15
AUG											
21...	1225	293	517	8.1	24.0	762	10.0	119	2.9	130	34
SEP											
05...	1335	261	597	8.2	24.5	762	9.9	119	3.2	150	38
25...	1405	674	362	7.5	16.0	758	8.2	84	E0.7	90	24

PASSAIC RIVER BASIN

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01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	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)	ALKA- LINITY 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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT 1995											
25...	7.5	26	3.5	52	32	44	0.1	14	214	188	<0.01
NOV											
30...	8.1	31	2.2	54	25	51	0.1	13	206	196	0.01
JAN 1996											
16...	13	120	4.3	71	33	240	0.1	15	542	527	0.03
FEB											
08...	6.5	36	1.7	42	17	67	<0.1	11	206	191	<0.01
MAR											
27...	6.4	35	1.7	42	18	69	<0.1	5.9	206	186	0.01
APR											
25...	6.3	28	1.6	45	16	52	<0.1	5.1	176	160	0.01
MAY											
08...	5.8	27	1.3	43	15	49	0.1	6.7	176	153	0.01
24...	8.3	34	2.1	57	20	60	0.1	8.6	246	200	0.04
JUN											
10...	7.5	30	2.3	54	20	57	<0.1	9.7	186	190	0.05
27...	12	49	4.5	81	32	83	0.1	16	324	299	0.06
JUL											
18...	4.8	19	1.7	42	12	31	0.1	8.6	146	120	0.03
AUG											
21...	11	46	3.6	80	31	78	0.1	9.0	282	274	0.02
SEP											
05...	13	57	5.1	87	42	94	0.1	9.7	342	333	0.02
25...	7.2	32	2.5	56	23	52	0.1	11	206	194	0.02
DATE	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)	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- PENDE TOTAL (MG/L AS C) (00689)
OCT 1995											
25...	1.20	<0.015	0.80	0.49	2.0	1.7	0.40	0.30	0.34	8.7	0.9
NOV											
30...	2.00	0.060	0.40	0.36	2.4	2.4	0.30	0.25	0.23	4.8	0.8
JAN 1996											
16...	3.80	0.290	0.80	0.77	4.6	4.6	0.63	0.54	0.49	4.0	0.3
FEB											
08...	1.30	0.100	0.40	0.21	1.7	1.5	0.12	0.07	0.08	3.5	0.3
MAR											
27...	0.81	0.020	0.40	0.25	1.2	1.1	0.15	0.10	0.08	3.4	0.8
APR											
25...	0.54	0.040	0.50	0.45	1.0	0.99	0.14	0.08	0.08	4.6	1.5
MAY											
08...	0.77	0.050	0.40	0.29	1.2	1.1	0.15	0.08	0.08	4.4	0.9
24...	1.20	0.120	0.70	0.44	1.9	1.6	0.28	0.14	0.16	4.1	1.3
JUN											
10...	1.50	0.170	0.70	0.45	2.2	2.0	0.31	0.20	0.18	4.1	0.7
27...	4.00	0.040	0.90	0.33	4.9	4.3	0.60	0.39	0.38	5.4	0.8
JUL											
18...	0.38	0.090	0.70	0.46	1.1	0.84	0.23	0.11	0.14	7.2	1.2
AUG											
21...	2.80	<0.015	0.60	0.24	3.4	3.0	0.47	0.34	0.39	3.5	1.4
SEP											
05...	4.50	<0.015	0.60	0.32	5.1	4.8	0.79	0.66	0.64	3.6	1.6
25...	1.70	0.050	0.50	0.43	2.2	2.1	0.31	0.24	0.25	5.1	0.6

PASSAIC RIVER BASIN

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 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	544	434	503	---	---	---	316	298	309	490	476	483
2	613	533	564	239	226	232	317	310	313	494	477	484
3	640	490	585	247	227	240	317	311	314	589	492	547
4	657	482	605	267	240	255	325	313	320	577	534	554
5	695	301	598	280	264	272	331	323	327	689	524	589
6	371	220	301	287	274	282	338	329	333	797	524	646
7	371	240	293	286	275	280	339	330	335	772	549	629
8	281	246	264	277	253	260	340	320	334	722	521	628
9	325	281	308	275	261	269	443	322	353	---	---	---
10	382	324	348	286	273	279	488	427	451	---	---	---
11	435	382	401	295	279	286	450	384	419	---	---	---
12	496	435	467	---	---	---	384	373	379	---	---	---
13	544	496	525	---	---	---	380	368	375	---	---	---
14	577	512	552	163	138	155	434	368	380	---	---	---
15	600	345	539	169	161	164	476	434	456	---	---	---
16	358	332	345	181	169	176	551	471	501	---	---	---
17	385	321	359	191	181	186	629	524	567	---	---	---
18	407	355	371	201	191	196	528	453	497	603	553	573
19	456	407	434	210	201	206	486	444	457	737	523	619
20	485	456	474	224	210	216	492	466	476	548	268	374
21	517	428	491	233	222	227	484	470	478	268	244	255
22	447	283	331	242	232	238	491	468	476	274	260	267
23	345	304	329	252	242	248	489	475	482	275	267	272
24	320	293	304	262	251	257	496	481	488	293	266	280
25	366	319	342	269	258	265	485	477	481	268	242	259
26	417	366	383	271	258	262	478	472	475	242	237	240
27	463	417	439	281	259	268	483	473	478	254	203	236
28	472	172	279	285	272	277	485	472	479	---	---	---
29	221	202	209	330	274	293	487	477	481	---	---	---
30	---	---	---	349	312	330	489	478	482	---	---	---
31	---	---	---	---	---	---	492	477	483	---	---	---
MONTH	695	172	412	349	138	245	629	298	425	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	258	247	252	375	348	364	273	232	251
2	---	---	---	350	257	295	381	321	345	232	220	224
3	---	---	---	337	280	296	327	303	314	228	219	225
4	---	---	---	289	280	285	305	288	296	228	220	224
5	---	---	---	327	289	301	290	282	287	---	---	---
6	---	---	---	363	316	337	286	281	283	---	---	---
7	---	---	---	401	298	334	295	286	291	240	232	236
8	---	---	---	366	337	351	292	281	286	248	240	245
9	403	357	384	355	327	338	288	279	284	256	246	252
10	402	364	378	369	343	350	295	286	290	264	255	260
11	386	365	373	379	360	368	306	285	297	266	261	263
12	386	382	384	389	374	383	327	306	317	261	237	243
13	408	382	393	397	389	392	332	327	329	238	223	232
14	493	392	418	397	390	393	328	312	322	230	221	226
15	507	432	469	401	379	387	312	302	307	231	223	226
16	432	416	423	425	355	382	---	---	---	240	229	236
17	455	413	428	355	340	344	---	---	---	248	234	241
18	465	445	456	340	329	334	---	---	---	258	248	253
19	445	430	435	330	324	327	---	---	---	264	253	259
20	560	430	469	331	272	293	---	---	---	272	263	267
21	564	406	507	276	261	269	---	---	---	280	271	276
22	418	370	406	266	258	261	---	---	---	291	278	283
23	370	278	317	263	255	259	---	---	---	307	290	299
24	278	240	258	270	257	263	275	264	270	324	306	315
25	240	228	232	278	269	274	295	264	281	335	324	329
26	232	227	229	288	278	285	312	295	304	340	329	334
27	236	229	232	294	287	291	321	312	317	352	336	345
28	240	233	236	315	291	303	324	313	318	361	348	354
29	247	236	240	499	314	400	330	317	326	368	359	364
30	---	---	---	467	336	381	318	273	299	376	365	370
31	---	---	---	348	332	337	---	---	---	381	369	374
MONTH	---	---	---	499	247	325	---	---	---	381	219	276

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 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	378	363	369	576	345	361	362	349	357	450	432	441
2	385	363	375	401	375	390	371	361	366	466	434	443
3	---	---	---	403	252	387	370	358	365	472	431	444
4	---	---	---	382	218	338	363	315	338	454	434	442
5	377	245	285	378	346	361	362	335	353	445	428	436
6	---	---	---	346	328	336	375	359	368	450	429	437
7	---	---	---	328	314	320	385	369	377	437	422	428
8	---	---	---	321	282	313	395	375	385	422	404	413
9	---	---	---	289	201	242	396	385	389	411	402	407
10	---	---	---	315	289	303	388	379	385	440	408	420
11	304	290	297	323	314	319	400	379	389	452	438	445
12	317	298	310	333	319	327	403	390	397	447	438	443
13	331	315	320	330	192	266	401	392	396	443	423	433
14	333	322	327	---	---	---	398	387	393	426	403	413
15	345	318	333	---	---	---	407	389	396	428	392	408
16	361	341	350	---	---	---	410	398	403	442	428	435
17	363	348	356	---	---	---	414	402	406	442	335	386
18	367	355	362	---	---	---	418	403	409	425	315	361
19	366	349	359	244	233	239	429	412	419	427	348	401
20	357	341	349	249	241	246	436	420	426	348	297	318
21	368	342	355	260	245	254	436	420	428	297	278	287
22	378	367	373	270	259	263	445	420	431	280	269	277
23	394	372	385	282	265	275	447	426	435	269	255	261
24	401	388	394	305	275	289	445	428	435	286	267	279
25	468	387	401	328	304	316	436	423	429	300	286	293
26	511	415	455	351	328	339	439	430	435	310	296	304
27	554	511	540	348	338	342	446	429	438	323	305	314
28	583	535	565	356	348	352	447	432	441	332	317	325
29	617	566	596	365	352	360	445	435	440	325	307	315
30	604	564	593	373	363	368	447	433	440	328	308	318
31	---	---	---	369	351	363	454	439	444	---	---	---
MONTH	---	---	---	576	192	318	454	315	404	472	255	378

SPECIFIC CONDUCTANCE, (US/CM AT 25 DEG. C), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	251	219	235	519	437	479	687	663	675
2	---	---	---	283	251	265	491	464	477	693	656	672
3	---	---	---	285	264	275	482	455	467	677	654	665
4	---	---	---	264	262	263	480	447	461	902	677	756
5	---	---	---	272	263	268	458	433	447	---	---	---
6	660	268	457	280	268	274	457	432	446	---	---	---
7	269	242	252	289	276	283	476	446	464	---	---	---
8	283	248	266	306	282	293	470	457	464	1040	700	887
9	327	283	311	297	287	292	488	459	473	1040	910	1020
10	384	326	350	294	288	291	493	469	484	910	756	786
11	437	384	403	305	288	298	736	490	614	787	760	773
12	497	437	469	288	143	197	745	646	691	760	702	724
13	546	497	528	143	125	133	683	646	663	716	701	708
14	578	524	555	175	142	164	673	619	649	794	690	711
15	603	350	542	176	168	172	648	602	626	1070	794	964
16	360	334	347	186	175	181	857	609	670	1110	1010	1050
17	387	323	361	192	186	189	---	---	---	1110	1070	1100
18	407	357	372	198	192	194	---	---	---	1070	991	1020
19	458	407	435	208	198	202	---	---	---	1070	561	887
20	487	458	476	220	208	213	1120	827	961	---	---	---
21	520	483	507	232	220	225	---	---	---	---	---	---
22	519	274	346	247	232	239	902	840	861	---	---	---
23	299	268	282	264	247	257	902	819	856	---	---	---
24	322	292	305	278	264	272	857	814	838	418	351	403
25	368	321	344	296	276	286	852	803	822	351	303	323
26	418	368	385	311	290	299	804	782	790	358	296	326
27	463	418	441	335	303	315	785	732	755	---	---	---
28	468	249	404	347	330	336	734	700	713	---	---	---
29	249	193	206	366	338	347	719	702	711	---	---	---
30	202	193	198	437	362	381	709	684	696	---	---	---
31	219	202	211	---	---	---	691	664	679	---	---	---
MONTH	660	193	375	437	125	255	1120	432	639	---	---	---

PASSAIC RIVER BASIN

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 1995 TO SEPTEMBER 1996

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	578	403	488	483	384	443	629	559	587
2	---	---	---	403	352	366	469	400	426	626	557	589
3	---	---	---	414	245	384	413	371	383	614	559	584
4	---	---	---	390	221	346	376	322	348	614	568	590
5	---	---	---	386	355	369	374	347	366	622	572	602
6	---	---	---	355	340	345	397	373	386	637	585	606
7	---	---	---	341	324	331	424	382	409	728	577	676
8	---	---	---	329	283	321	441	409	426	719	482	618
9	---	---	---	295	200	246	448	398	429	607	500	575
10	---	---	---	341	295	316	429	395	408	541	431	491
11	---	---	---	347	335	342	444	403	423	449	403	431
12	---	---	---	347	336	343	469	422	441	473	449	464
13	---	---	---	346	197	274	470	426	444	489	441	462
14	---	---	---	240	142	182	474	448	462	598	443	538
15	---	---	---	179	142	161	509	462	493	583	466	498
16	---	---	---	214	175	195	513	450	491	481	460	474
17	---	---	---	233	212	226	467	434	451	484	394	440
18	---	---	---	240	233	236	450	422	432	425	357	382
19	---	---	---	254	240	247	491	433	457	429	346	401
20	537	424	494	276	254	265	513	458	486	346	320	326
21	474	419	444	291	276	284	529	479	499	343	323	333
22	425	405	415	306	291	300	584	514	560	342	297	323
23	466	425	442	323	305	315	600	562	580	398	322	364
24	466	430	445	352	323	338	575	499	543	363	336	346
25	473	430	443	368	350	357	630	567	601	370	357	363
26	522	473	495	379	359	369	623	532	577	371	348	360
27	561	522	547	419	377	400	581	513	542	378	358	367
28	589	540	571	392	372	381	541	500	526	404	360	389
29	623	571	602	395	383	389	579	538	554	433	341	374
30	611	570	598	395	384	390	611	539	569	432	354	378
31	---	---	---	395	376	385	621	532	579	---	---	---
MONTH	---	---	---	578	142	319	630	322	475	728	297	464

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 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	547	436	505	242	219	232	542	458	502	696	676	686
2	618	536	567	276	242	256	511	488	501	701	665	681
3	654	608	624	276	256	264	508	481	492	681	657	669
4	671	632	651	258	255	257	501	468	486	901	679	757
5	700	625	672	266	257	262	478	453	467	---	---	---
6	660	268	457	275	263	269	468	453	461	---	---	---
7	269	242	252	285	272	279	487	454	475	1140	1130	1130
8	283	248	266	302	279	290	489	473	482	1140	1020	1070
9	327	283	311	295	285	291	501	471	485	1020	902	1000
10	384	326	350	294	287	291	494	468	485	902	744	775
11	437	384	403	307	287	299	817	494	645	774	746	761
12	497	437	469	287	180	231	819	728	757	746	691	712
13	546	497	528	196	153	169	738	716	731	705	690	697
14	578	524	555	200	186	194	738	680	707	780	678	699
15	603	350	542	188	180	182	687	634	664	1050	780	947
16	360	334	347	187	183	185	894	632	699	1090	995	1030
17	387	323	361	192	187	189	1330	894	1150	1090	1060	1080
18	407	357	372	198	192	194	1650	1330	1500	1060	974	1000
19	458	407	435	208	198	202	1380	1130	1250	1050	577	932
20	487	458	476	219	208	213	1130	898	997	598	299	416
21	520	483	507	232	219	225	---	---	---	420	313	361
22	519	274	346	247	232	239	---	---	---	426	372	408
23	299	268	282	264	247	257	913	826	864	410	402	406
24	322	292	305	278	264	272	862	822	846	408	387	400
25	368	321	344	296	276	286	858	812	829	389	383	385
26	418	368	385	311	291	299	812	791	800	389	369	381
27	463	418	441	339	304	317	791	749	763	369	298	348
28	468	249	404	354	334	341	749	715	726	302	218	251
29	249	193	206	368	346	353	730	713	721	321	259	302
30	202	193	198	458	365	387	719	697	706	307	266	283
31	219	202	211	---	---	---	704	675	691	266	263	264
MONTH	700	193	412	458	153	257	1650	453	720	1140	218	649

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	278	266	273	393	384	389	564	485	528	363	302	328
2	---	---	---	406	393	399	485	390	446	309	299	304
3	---	---	---	489	405	428	398	366	384	313	303	310
4	---	---	---	500	462	479	366	358	360	324	313	319
5	---	---	---	501	483	496	368	358	363	334	323	329
6	---	---	---	562	496	514	380	368	374	341	333	336
7	---	---	---	587	489	542	385	380	383	341	338	340
8	---	---	---	501	450	478	384	378	380	351	337	345
9	488	409	438	539	496	513	389	378	383	360	351	357
10	685	488	605	579	539	564	394	381	387	369	360	364
11	675	634	656	586	573	579	410	389	395	383	367	375
12	634	562	597	582	574	577	421	399	415	378	315	361
13	562	507	533	595	581	588	420	412	416	319	305	313
14	526	500	513	597	577	588	417	412	415	311	307	308
15	583	500	526	577	546	566	421	414	417	323	311	316
16	639	574	624	546	523	533	420	280	342	340	323	333
17	628	598	613	540	526	531	288	246	261	359	340	350
18	672	585	611	526	507	517	279	260	274	351	347	349
19	690	668	677	507	492	499	275	269	271	365	347	358
20	671	598	626	493	439	469	287	275	280	378	362	370
21	912	603	746	439	384	410	314	287	300	401	376	387
22	780	493	630	386	375	379	320	314	318	419	400	408
23	499	420	454	383	375	378	330	318	325	441	416	427
24	434	368	403	391	383	387	345	330	339	455	430	439
25	397	365	386	395	391	393	368	345	359	464	445	455
26	398	386	394	404	395	400	381	368	376	479	459	468
27	400	397	399	417	404	411	401	381	393	494	478	485
28	398	391	394	430	417	425	418	396	407	499	476	485
29	391	386	388	441	427	432	421	411	416	507	483	492
30	---	---	---	663	440	541	426	363	410	515	493	501
31	---	---	---	617	564	590	---	---	---	517	494	501
MONTH	---	---	---	663	375	484	564	246	371	517	299	381

PASSAIC RIVER BASIN

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 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	535	514	520	613	399	508	514	470	497	726	705	718
2	535	518	526	399	348	362	481	400	428	741	713	729
3	545	368	501	423	370	393	415	365	386	733	714	726
4	504	331	425	452	345	422	442	400	412	747	722	734
5	358	299	325	436	337	381	476	442	461	747	715	731
6	327	307	320	494	436	464	505	476	494	748	719	734
7	349	306	326	521	494	513	540	505	527	743	712	731
8	390	349	370	556	285	504	570	520	545	729	556	654
9	429	390	406	587	223	440	563	531	544	607	531	584
10	462	429	444	593	446	514	592	548	574	546	425	492
11	495	462	482	446	397	409	610	572	596	440	391	421
12	517	477	497	439	390	406	610	585	600	491	440	470
13	477	362	402	444	240	330	626	582	606	565	485	516
14	375	356	366	302	152	198	625	586	605	621	560	591
15	420	374	399	235	162	200	636	609	629	601	485	519
16	453	419	433	232	222	227	633	611	627	503	460	491
17	486	448	460	232	228	230	629	603	618	552	459	508
18	517	486	493	240	232	235	645	603	626	541	279	365
19	541	517	527	254	240	247	657	614	639	286	274	281
20	541	468	519	276	254	265	660	616	642	329	285	312
21	468	416	440	291	276	283	669	640	657	365	328	344
22	422	401	411	306	291	300	688	647	669	415	365	380
23	462	422	438	328	305	316	709	674	695	462	392	435
24	462	425	441	375	328	352	699	651	668	419	365	384
25	469	425	438	417	374	390	721	663	694	449	418	429
26	516	469	490	455	417	430	709	672	691	467	445	453
27	557	516	542	472	400	453	707	624	675	494	467	475
28	583	535	565	409	375	390	657	624	642	529	494	517
29	616	565	595	426	401	411	682	652	665	556	515	534
30	602	563	590	447	425	429	698	669	686	560	418	474
31	---	---	---	471	447	464	712	681	697	---	---	---
MONTH	616	299	456	613	152	370	721	365	597	748	274	524

WATER TEMPERATURE (DEG. C), AT LEFT INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT LEFT INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

WATER TEMPERATURE (DEG. C), AT RIGHT INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER TEMPERATURE (DEG. C), AT RIGHT INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT LEFT INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.8	9.9	8.7	---	---	---	12.4	12.0	12.2	15.0	13.4	14.0
2	9.3	9.7	8.7	9.8	9.3	9.5	12.7	11.6	12.0	14.2	12.4	13.3
3	9.5	7.6	8.6	9.5	9.2	9.4	13.0	12.5	12.8	13.3	12.4	13.0
4	9.6	7.4	8.2	9.4	9.2	9.3	13.0	12.5	12.6	14.2	13.2	13.9
5	8.3	7.2	7.7	9.2	8.8	9.0	13.0	12.4	12.7	15.3	14.0	14.4
6	8.9	7.9	8.5	9.9	8.8	9.3	13.0	12.5	12.7	15.9	14.2	14.7
7	8.6	5.4	6.7	10.0	9.3	9.7	13.1	12.5	12.8	15.4	12.5	14.2
8	5.5	5.4	5.4	10.4	9.9	10.0	13.5	12.6	13.0	---	---	---
9	5.7	5.4	5.6	10.8	10.4	10.6	13.6	13.1	13.3	---	---	---
10	6.3	5.6	6.1	11.0	10.8	10.9	13.9	12.9	13.4	---	---	---
11	7.4	6.3	6.9	11.0	10.2	10.6	14.2	13.5	13.9	---	---	---
12	7.8	7.0	7.4	---	---	---	14.3	13.9	14.1	---	---	---
13	8.0	7.1	7.4	---	---	---	14.3	13.8	14.2	---	---	---
14	7.9	7.1	7.3	11.4	11.2	11.3	14.3	13.1	13.7	---	---	---
15	7.9	6.8	7.3	11.3	11.1	11.2	13.6	13.1	13.2	---	---	---
16	7.0	6.5	6.7	11.7	11.3	11.5	13.9	13.3	13.5	---	---	---
17	7.7	6.9	7.3	11.7	11.5	11.5	13.7	13.2	13.5	---	---	---
18	8.5	7.5	8.0	11.6	11.4	11.5	14.0	13.6	13.7	14.8	13.4	14.0
19	9.1	8.1	8.5	11.5	11.4	11.4	14.0	12.9	13.4	14.8	13.1	13.9
20	9.3	8.2	8.5	11.5	11.3	11.4	13.4	13.0	13.2	14.4	13.9	14.2
21	8.3	7.6	8.0	11.3	11.1	11.2	13.9	13.3	13.6	14.4	14.0	14.2
22	9.4	7.4	8.3	11.3	10.9	11.1	14.0	13.4	13.6	14.3	13.9	14.1
23	9.4	7.4	8.8	11.4	11.2	11.3	14.1	13.5	13.7	14.2	13.5	13.9
24	7.4	6.5	6.9	11.5	11.3	11.4	14.1	13.4	13.7	13.8	13.0	13.3
25	6.9	6.5	6.7	---	---	---	14.3	13.5	13.8	14.4	13.1	13.9
26	7.4	6.8	7.1	---	---	---	14.3	13.4	13.8	14.5	14.2	14.4
27	8.3	7.2	7.7	---	---	---	14.5	13.4	13.9	14.2	12.7	13.5
28	8.9	7.8	8.4	---	---	---	14.6	13.6	14.0	---	---	---
29	---	---	---	---	---	---	14.7	13.6	14.1	---	---	---
30	---	---	---	---	---	---	15.0	13.6	14.2	---	---	---
31	---	---	---	---	---	---	14.9	13.5	14.0	---	---	---
MONTH	9.6	5.4	7.5	---	---	---	15.0	11.6	13.4	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	13.5	12.6	13.1	12.9	10.9	11.9	10.5	9.3	9.9
2	---	---	---	13.4	12.4	12.8	12.2	10.6	11.4	10.1	9.1	9.5
3	---	---	---	13.4	12.3	12.9	12.5	11.3	11.8	9.5	8.8	9.1
4	---	---	---	14.5	12.9	13.7	12.8	11.0	11.8	9.5	8.6	9.0
5	---	---	---	14.1	12.8	13.5	12.5	10.9	11.6	---	---	---
6	---	---	---	13.4	11.9	12.3	13.6	11.4	12.5	---	---	---
7	---	---	---	12.8	12.1	12.5	12.5	11.2	11.9	11.7	10.4	11.0
8	---	---	---	13.8	12.7	13.2	13.4	11.4	12.3	11.4	9.9	10.6
9	13.4	12.9	13.1	15.0	13.2	14.1	13.4	11.3	12.4	10.8	9.4	10.0
10	13.9	13.3	13.6	15.3	13.7	14.5	13.7	11.7	12.6	10.9	9.5	10.2
11	13.8	13.2	13.4	15.2	13.2	14.2	13.5	11.2	12.3	10.5	9.0	9.7
12	13.6	13.0	13.3	14.7	12.6	13.7	13.0	10.8	11.8	9.8	8.1	9.1
13	13.8	13.5	13.7	14.6	12.1	13.4	12.4	10.1	11.3	10.0	9.2	9.6
14	13.7	13.3	13.4	14.6	11.7	13.1	12.4	10.2	11.3	10.4	8.7	9.5
15	13.5	13.0	13.2	13.7	11.3	12.5	13.1	10.6	11.8	10.7	8.7	9.6
16	13.4	13.0	13.1	14.0	11.2	12.5	---	---	---	10.0	9.3	9.7
17	13.2	12.9	13.1	14.1	11.7	12.8	---	---	---	10.6	9.4	10.0
18	13.3	12.7	13.0	14.2	11.7	12.8	---	---	---	9.7	9.1	9.4
19	13.6	13.1	13.4	12.8	11.3	12.1	---	---	---	9.9	9.0	9.4
20	13.5	13.0	13.2	11.9	11.1	11.5	---	---	---	9.5	8.3	8.9
21	13.3	12.8	13.0	12.3	11.6	11.9	---	---	---	9.1	7.5	8.4
22	13.2	12.8	13.1	12.7	11.6	12.1	---	---	---	8.9	7.1	8.0
23	12.9	12.6	12.8	13.2	11.6	12.4	---	---	---	9.0	7.2	8.1
24	12.6	12.0	12.3	13.8	11.9	12.8	12.8	8.6	10.6	9.3	7.1	8.3
25	12.3	11.7	12.0	13.7	11.7	12.7	12.5	9.4	10.9	9.5	7.4	8.5
26	12.2	11.5	11.8	13.5	11.0	12.3	11.2	9.0	10.2	9.5	7.8	8.8
27	13.0	11.4	12.2	14.3	11.0	12.7	12.0	8.5	10.2	9.3	8.0	8.7
28	12.5	12.0	12.2	14.2	11.6	13.0	12.0	9.1	10.6	9.1	8.3	8.7
29	13.2	11.9	12.6	13.6	11.3	12.5	11.4	8.8	9.3	9.5	8.3	8.8
30	---	---	---	14.5	11.7	13.1	10.1	9.0	9.6	9.8	8.5	9.1
31	---	---	---	14.3	11.2	12.7	---	---	---	9.6	8.2	8.8
MONTH	---	---	---	15.3	11.0	12.9	---	---	---	11.7	7.1	9.3

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT LEFT INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	7.6	6.5	7.2	7.9	7.3	7.6	10.1	8.0	9.2
2	---	---	---	7.5	6.9	7.2	8.3	7.5	7.9	10.4	8.0	9.2
3	---	---	---	7.3	6.5	6.8	8.9	6.8	7.7	9.8	8.2	9.1
4	---	---	---	8.1	6.5	7.4	8.6	6.7	7.7	9.2	7.5	8.2
5	8.7	7.7	8.3	8.5	7.5	7.9	9.1	7.3	8.3	8.4	6.9	7.7
6	---	---	---	7.9	7.1	7.5	9.3	7.5	8.5	8.0	6.8	7.5
7	---	---	---	7.7	6.8	7.2	9.6	7.7	8.7	7.7	5.9	6.7
8	---	---	---	8.0	6.9	7.4	10.5	8.7	9.6	6.8	5.1	6.0
9	---	---	---	8.8	6.4	7.3	10.3	7.9	9.3	7.0	5.3	6.2
10	---	---	---	12.0	6.8	9.1	8.5	6.7	7.5	7.6	6.5	7.1
11	8.0	7.4	7.7	13.6	7.5	10.5	8.5	7.6	8.0	7.2	6.3	6.8
12	7.8	7.1	7.5	12.4	8.2	10.6	9.3	6.9	8.1	6.8	5.9	6.3
13	7.5	6.7	7.2	---	---	---	8.3	6.9	7.6	6.6	5.5	6.0
14	8.0	6.8	7.3	---	---	---	8.8	7.2	8.2	7.4	5.9	6.7
15	8.9	6.6	7.8	---	---	---	9.6	8.1	8.9	8.0	7.2	7.6
16	9.4	7.0	8.4	---	---	---	9.7	7.6	8.7	8.3	7.4	7.8
17	8.6	7.3	7.9	---	---	---	10.6	7.5	9.0	7.6	7.3	7.4
18	8.1	6.8	7.3	---	---	---	10.6	8.5	9.4	8.5	7.6	8.1
19	7.3	6.5	6.8	8.2	7.5	7.8	10.5	8.4	9.4	9.3	8.4	8.8
20	7.0	6.5	6.7	9.6	7.6	8.5	11.5	7.9	9.4	9.3	8.7	8.9
21	7.4	6.9	7.1	9.6	8.0	8.8	10.2	7.7	8.8	9.1	8.4	8.7
22	7.4	6.8	7.1	9.6	8.0	8.7	10.3	6.6	8.3	8.7	8.0	8.3
23	8.1	6.8	7.5	9.3	7.9	8.4	10.9	7.3	8.9	8.5	7.9	8.2
24	8.4	7.2	7.7	11.0	8.0	9.3	10.3	7.0	8.3	9.0	8.4	8.7
25	11.1	6.0	8.6	10.6	7.9	9.0	10.1	6.3	8.0	9.0	8.5	8.8
26	10.3	5.7	7.5	9.2	7.6	8.4	10.7	6.9	8.5	9.5	8.7	9.1
27	9.7	6.6	8.0	9.6	7.3	8.5	10.0	6.9	8.4	9.4	8.8	9.1
28	9.7	6.8	8.1	10.1	7.8	9.0	10.6	6.8	8.6	9.2	8.6	9.0
29	9.3	7.3	8.2	9.8	8.0	8.6	11.3	7.5	9.2	8.6	8.1	8.3
30	7.3	6.5	6.8	8.3	7.3	7.9	10.8	7.8	9.4	9.4	8.3	8.8
31	---	---	---	8.5	7.4	7.8	10.9	7.8	9.3	---	---	---
MONTH	---	---	---	13.6	6.4	8.3	11.5	6.3	8.6	10.4	5.1	7.9

OXYGEN DISSOLVED (MG/L), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.4	9.5	8.7	5.6	5.1	5.4	10.9	10.8	10.8	13.4	12.6	12.8
2	8.9	9.1	8.5	6.3	5.6	5.8	11.0	10.7	10.9	12.8	12.2	12.5
3	9.0	7.2	8.1	6.2	5.8	6.0	11.1	10.9	11.0	12.6	11.9	12.1
4	8.6	7.0	7.6	5.8	5.6	5.7	11.1	10.9	11.0	12.8	12.1	12.4
5	7.7	6.7	7.1	6.4	5.7	6.1	11.1	10.7	10.8	---	---	---
6	7.5	6.5	7.1	6.9	6.4	6.7	11.1	10.8	10.9	---	---	---
7	6.5	4.9	5.5	7.1	6.9	7.0	11.0	10.7	10.8	14.6	13.1	14.1
8	5.0	4.9	5.0	7.8	7.1	7.5	11.3	10.9	11.1	13.4	12.4	12.9
9	5.3	5.0	5.2	8.6	7.8	8.3	11.4	11.2	11.3	12.5	10.9	11.9
10	6.0	5.3	5.7	8.8	8.6	8.7	11.6	11.3	11.5	11.7	11.0	11.4
11	7.0	6.0	6.6	8.9	8.1	8.4	12.2	11.6	11.9	11.6	11.0	11.2
12	7.4	6.9	7.1	10.8	8.9	10.3	12.4	12.2	12.3	11.2	10.7	10.9
13	7.6	7.1	7.2	11.7	10.8	11.3	12.6	12.2	12.5	10.9	10.2	10.6
14	7.5	6.9	7.1	11.5	9.9	10.6	12.5	12.0	12.2	11.2	10.1	10.7
15	7.5	6.5	7.0	10.8	9.6	10.3	12.1	11.8	11.9	11.4	10.6	10.9
16	6.7	6.2	6.5	10.7	9.4	10.2	11.8	11.3	11.6	11.6	10.7	11.2
17	7.4	6.6	7.0	9.9	8.7	9.1	11.5	11.2	11.4	12.5	11.1	11.9
18	8.1	7.3	7.7	8.8	8.6	8.6	11.8	11.4	11.5	12.7	11.8	12.2
19	8.6	7.9	8.2	8.6	8.3	8.5	11.8	11.5	11.6	12.7	11.8	12.1
20	8.8	8.1	8.4	8.3	8.2	8.3	11.9	11.6	11.7	---	---	---
21	8.2	7.3	7.9	8.3	8.0	8.1	---	---	---	---	---	---
22	7.3	6.4	6.8	8.4	8.0	8.1	11.9	11.5	11.7	---	---	---
23	6.7	6.6	6.6	8.7	8.4	8.5	11.9	11.6	11.7	---	---	---
24	6.7	6.4	6.6	8.9	8.7	8.8	11.9	11.6	11.8	11.4	10.2	10.5
25	6.6	6.4	6.5	9.1	8.9	9.0	12.0	11.6	11.7	13.1	11.4	12.3
26	7.1	6.6	6.9	9.3	9.0	9.2	12.3	11.7	11.9	13.0	10.7	11.9
27	8.0	7.1	7.5	9.7	9.3	9.5	12.4	11.8	12.1	---	---	---
28	8.9	7.7	8.4	10.2	9.7	9.9	12.8	12.1	12.3	---	---	---
29	8.8	6.3	8.1	10.4	10.1	10.3	13.0	12.2	12.5	---	---	---
30	6.4	4.6	4.9	11.0	10.3	10.6	13.1	12.3	12.6	---	---	---
31	5.1	4.8	5.0	---	---	---	13.3	12.5	12.8	---	---	---
MONTH	9.0	4.6	7.0	11.7	5.1	8.5	13.3	10.7	11.7	---	---	---

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT MIDDLE INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	7.7	6.9	7.3	7.7	7.0	7.2	12.5	9.8	11.2
2	---	---	---	7.2	6.6	6.7	7.2	6.6	6.9	11.7	9.3	10.6
3	---	---	---	7.8	6.2	6.7	8.6	7.0	7.4	11.6	9.7	10.5
4	---	---	---	8.5	7.1	7.9	9.2	7.3	8.2	10.6	9.1	9.9
5	---	---	---	8.7	7.7	8.2	9.8	7.9	8.7	10.5	8.6	9.5
6	---	---	---	8.3	7.5	7.9	9.9	8.1	9.0	10.2	8.4	9.2
7	---	---	---	8.1	7.3	7.8	10.1	8.4	9.1	9.8	7.6	8.6
8	---	---	---	8.5	7.5	8.0	10.7	9.1	9.8	7.6	6.1	6.8
9	---	---	---	9.3	7.0	7.9	10.5	8.4	9.4	7.2	5.7	6.4
10	---	---	---	11.8	7.2	9.3	9.1	7.2	8.0	7.5	6.3	6.8
11	---	---	---	12.8	7.6	10.2	9.1	8.2	8.6	6.9	6.1	6.5
12	---	---	---	12.4	8.4	10.7	9.9	7.6	8.8	6.8	6.1	6.4
13	---	---	---	11.7	7.7	8.7	8.8	7.6	8.2	7.1	5.8	6.3
14	---	---	---	8.8	8.3	8.6	9.0	7.6	8.4	7.9	6.3	7.1
15	---	---	---	8.6	8.1	8.4	9.2	8.1	8.7	8.1	7.1	7.6
16	---	---	---	8.2	7.1	7.8	9.2	7.8	8.5	8.8	7.6	8.0
17	---	---	---	7.1	4.7	5.6	10.4	7.7	9.1	8.0	7.6	7.8
18	---	---	---	4.7	4.0	4.3	10.7	8.8	9.7	8.8	7.9	8.3
19	---	---	---	4.3	3.8	4.1	11.2	9.0	9.9	9.5	8.7	9.1
20	6.5	5.9	6.1	4.7	3.8	4.2	12.3	8.7	10.3	9.1	7.7	8.3
21	6.5	6.0	6.3	5.0	4.3	4.6	10.7	8.5	9.5	8.0	7.5	7.7
22	6.5	6.2	6.3	5.0	4.7	4.9	10.8	7.7	9.1	8.5	7.7	8.0
23	6.5	5.9	6.2	5.5	4.8	5.1	11.6	7.9	9.6	8.1	7.6	7.9
24	6.5	5.9	6.2	7.8	5.2	6.3	11.4	8.2	9.6	8.4	7.8	8.2
25	7.3	6.0	6.6	8.1	6.6	7.3	11.4	8.0	9.3	8.9	8.2	8.6
26	8.2	6.4	7.1	8.2	7.3	7.8	11.2	7.6	9.2	9.5	8.7	9.0
27	10.2	7.2	8.4	8.2	6.6	7.4	10.1	7.7	8.8	9.3	8.9	9.1
28	10.4	7.4	8.7	8.4	6.4	7.4	10.6	7.3	8.8	9.4	8.8	9.0
29	9.5	7.8	8.5	8.2	7.3	7.8	11.1	7.9	9.4	9.0	8.4	8.7
30	7.9	7.0	7.2	8.3	7.3	7.9	12.6	8.6	10.5	9.4	8.2	8.8
31	---	---	---	8.5	7.6	8.0	12.8	10.2	11.4	---	---	---
MONTH	---	---	---	12.8	3.8	7.3	12.8	6.6	9.0	12.5	5.7	8.3

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT RIGHT INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.7	7.7	6.9	5.3	5.1	5.2	10.7	10.5	10.6	13.2	12.6	12.8
2	9.2	7.7	7.5	5.7	5.3	5.5	10.7	10.6	10.6	12.8	12.2	12.5
3	9.3	7.8	8.6	5.8	5.6	5.7	10.9	10.6	10.7	12.6	11.9	12.1
4	8.9	7.6	8.0	5.7	5.6	5.6	10.9	10.7	10.8	12.8	12.1	12.5
5	8.4	7.3	7.7	6.4	5.6	6.0	10.7	10.4	10.5	---	---	---
6	7.9	7.1	7.6	6.8	6.4	6.6	10.8	10.5	10.6	---	---	---
7	7.1	5.2	5.9	7.1	6.8	6.9	10.8	10.5	10.6	15.5	13.6	14.3
8	5.3	5.2	5.3	7.8	7.1	7.4	10.9	10.6	10.7	13.7	12.7	13.3
9	5.6	5.3	5.4	8.6	7.8	8.3	11.2	10.9	11.0	12.8	11.1	12.1
10	6.2	5.6	5.9	8.8	8.6	8.7	11.5	11.2	11.3	11.9	11.2	11.6
11	7.0	6.2	6.7	8.7	8.3	8.5	11.8	11.5	11.7	11.8	11.1	11.3
12	7.3	6.9	7.1	10.3	8.4	9.4	12.1	11.8	11.9	11.4	10.8	11.0
13	7.4	7.0	7.2	10.4	7.4	9.5	12.4	11.8	12.1	11.1	10.3	10.7
14	7.3	6.8	7.0	8.2	6.5	7.1	12.2	11.8	12.0	11.2	10.1	10.7
15	7.3	6.4	6.9	7.7	7.4	7.5	12.0	11.6	11.8	11.5	10.7	11.1
16	6.6	6.1	6.3	7.9	7.4	7.6	11.7	11.4	11.6	11.9	10.9	11.4
17	7.2	6.5	6.9	8.4	7.9	8.2	11.6	11.4	11.5	12.7	11.3	12.0
18	8.0	7.2	7.6	8.5	8.4	8.4	11.9	11.5	11.7	12.8	11.8	12.3
19	8.4	7.8	8.1	8.5	8.3	8.4	12.0	11.7	11.8	13.2	11.9	12.2
20	8.6	8.0	8.2	8.4	8.2	8.3	---	---	---	13.9	13.2	13.6
21	8.1	7.1	7.7	8.3	8.1	8.2	---	---	---	13.8	10.8	12.7
22	7.1	6.3	6.6	8.3	8.0	8.1	---	---	---	11.8	10.0	10.4
23	6.5	6.4	6.4	8.6	8.3	8.5	12.0	11.8	11.9	10.4	10.0	10.2
24	6.6	6.3	6.5	8.8	8.6	8.7	12.0	11.8	11.9	10.0	9.6	9.7
25	6.5	6.3	6.4	9.0	8.7	8.9	12.0	11.7	11.9	9.6	9.3	9.5
26	7.0	6.5	6.7	9.3	8.9	9.1	12.2	11.8	12.0	9.6	9.3	9.4
27	7.8	7.0	7.4	9.6	9.3	9.4	12.5	12.0	12.2	10.9	9.6	10.0
28	8.0	6.4	7.4	9.9	9.5	9.8	12.7	12.1	12.4	12.4	10.8	11.7
29	6.4	4.6	5.4	10.1	9.8	10.0	12.8	12.3	12.5	11.5	10.3	10.7
30	4.7	4.5	4.6	10.6	10.0	10.3	12.9	12.4	12.6	11.3	10.7	11.1
31	5.1	4.7	4.9	---	---	---	13.1	12.4	12.7	11.3	11.2	11.2
MONTH	9.3	4.5	6.8	10.6	5.1	8.0	13.1	10.4	11.6	15.5	9.3	11.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	11.2	10.6	11.0	12.4	11.6	11.9	12.0	10.7	11.6	9.0	7.9	8.4
2	---	---	---	12.3	11.8	12.0	11.2	10.5	10.8	8.5	7.6	8.1
3	---	---	---	13.0	12.1	12.4	10.5	9.8	10.2	7.7	6.6	7.2
4	---	---	---	13.6	13.0	13.4	10.1	9.0	9.6	6.8	6.4	6.5
5	---	---	---	13.7	13.1	13.4	9.8	8.6	9.0	7.8	6.6	7.1
6	---	---	---	13.2	11.5	12.6	11.1	9.0	9.8	7.7	7.0	7.3
7	---	---	---	11.5	11.3	11.4	10.8	9.9	10.2	8.1	7.0	7.4
8	---	---	---	12.4	11.5	12.0	11.7	10.0	10.5	8.5	8.1	8.3
9	---	---	---	12.7	12.4	12.6	11.7	11.5	11.6	8.2	7.6	8.0
10	---	---	---	12.9	12.7	12.8	12.4	11.5	11.8	8.1	7.6	7.8
11	---	---	---	13.0	12.5	12.7	12.8	11.9	12.5	7.8	7.2	7.6
12	---	---	---	13.3	12.5	12.8	12.7	11.6	12.0	7.6	6.6	7.0
13	---	---	---	13.1	12.6	12.8	11.7	10.8	11.1	7.7	6.5	7.3
14	---	---	---	13.1	12.5	12.7	10.8	10.2	10.4	7.7	7.4	7.6
15	---	---	---	12.6	11.6	12.1	11.0	10.2	10.6	7.9	7.6	7.7
16	---	---	---	12.0	11.7	11.8	10.4	9.9	10.2	7.8	7.0	7.5
17	---	---	---	12.7	11.9	12.2	10.6	9.3	10.0	7.5	6.9	7.2
18	---	---	---	12.8	12.3	12.5	9.8	8.7	9.2	7.5	6.7	7.3
19	---	---	---	12.4	10.8	11.9	9.9	8.9	9.3	6.7	6.3	6.6
20	---	---	---	10.9	10.3	10.7	9.6	8.4	9.0	6.6	5.7	6.2
21	11.6	10.3	10.8	11.1	10.3	10.6	10.3	7.6	8.8	5.7	4.8	5.3
22	11.8	11.3	11.5	11.6	10.3	10.9	10.8	7.8	9.2	5.2	4.6	4.9
23	11.8	11.1	11.4	12.0	10.5	11.1	10.3	8.0	9.0	5.5	4.8	5.2
24	11.4	10.9	11.1	12.9	11.5	12.1	9.2	7.8	8.4	5.8	5.1	5.5
25	11.2	10.6	10.9	12.9	11.7	12.2	8.8	8.3	8.5	5.8	5.4	5.6
26	10.7	10.3	10.4	12.5	11.4	11.8	8.6	7.8	8.3	5.9	5.7	5.8
27	10.6	10.0	10.3	12.4	11.8	12.1	8.7	7.5	8.1	6.2	5.9	6.0
28	10.3	9.4	9.8	12.6	11.7	12.2	9.3	7.7	8.5	6.4	6.2	6.3
29	11.9	10.0	10.9	12.6	11.5	12.0	8.5	7.7	8.1	6.6	6.4	6.5
30	---	---	---	13.2	11.3	12.2	7.9	7.2	7.6	7.1	6.6	6.9
31	---	---	---	12.9	11.6	12.2	---	---	---	7.1	6.9	7.0
MONTH	---	---	---	13.7	10.3	12.1	12.8	7.2	9.8	9.0	4.6	6.9

PASSAIC RIVER BASIN

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01389005 PASSAIC RIVER BELOW POMPTON RIVER AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), AT RIGHT INTAKE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.2	6.7	7.0	6.5	5.8	6.1	6.2	5.5	5.8	14.6	10.7	12.4
2	6.9	6.3	6.6	5.9	5.4	5.6	6.3	5.7	6.0	14.0	9.5	11.4
3	8.0	6.2	6.5	6.5	5.0	5.4	6.3	5.5	5.7	13.7	10.0	11.5
4	6.6	5.6	6.2	5.7	5.2	5.4	5.8	5.4	5.6	12.5	9.6	10.9
5	7.3	5.6	6.5	6.1	4.9	5.4	6.5	5.5	6.0	12.3	9.0	10.5
6	6.8	5.8	6.3	7.5	5.9	6.6	7.5	6.0	6.7	10.3	8.7	9.6
7	6.5	5.7	6.3	8.5	6.4	7.2	8.2	6.8	7.3	9.5	7.1	8.6
8	5.7	5.2	5.5	9.1	6.5	7.3	9.5	6.6	7.8	7.3	5.4	6.2
9	5.2	4.7	4.9	10.7	6.2	8.3	8.5	7.2	7.9	6.8	5.3	6.0
10	5.1	4.4	4.8	8.3	5.2	6.0	8.5	6.4	7.4	7.0	5.7	6.3
11	5.4	4.9	5.0	6.6	5.0	5.8	10.8	6.7	8.5	6.2	5.5	5.8
12	5.3	4.9	5.0	6.1	5.4	5.8	9.6	8.1	8.9	5.8	5.1	5.5
13	5.0	4.6	4.8	7.3	5.9	6.7	8.1	6.9	7.7	6.1	5.1	5.5
14	4.8	4.6	4.7	8.0	7.1	7.7	7.9	6.8	7.2	7.6	5.6	6.7
15	4.9	4.5	4.7	7.6	4.6	6.3	7.8	6.8	7.2	7.6	6.7	7.1
16	5.0	4.3	4.6	5.3	3.8	4.1	7.4	6.5	6.9	8.4	7.1	7.5
17	4.5	4.1	4.3	4.1	3.6	3.8	7.9	6.5	7.1	7.6	7.1	7.4
18	4.7	4.2	4.4	---	---	---	9.0	6.4	7.5	7.8	7.3	7.6
19	4.8	4.5	4.6	3.8	3.4	3.6	14.5	7.5	10.2	7.5	7.0	7.4
20	5.5	4.8	5.1	4.1	3.3	3.6	13.9	9.0	11.2	7.0	6.7	6.8
21	5.5	5.2	5.4	4.4	3.9	4.1	10.9	8.9	9.8	6.8	6.6	6.7
22	5.5	5.3	5.4	4.4	4.3	4.3	11.1	7.8	9.3	6.8	6.5	6.6
23	5.6	5.2	5.4	4.4	4.2	4.3	12.7	7.8	9.9	7.1	6.7	6.9
24	5.5	5.2	5.3	4.8	4.2	4.5	12.8	9.2	10.5	7.2	7.0	7.1
25	6.5	5.2	5.8	5.1	4.6	4.8	11.8	8.2	9.6	7.7	7.2	7.5
26	7.4	5.7	6.4	5.4	4.9	5.1	12.2	7.3	9.4	7.8	7.5	7.7
27	9.3	6.2	7.3	6.0	5.1	5.4	9.7	7.6	8.6	7.7	7.5	7.6
28	9.5	6.2	7.5	6.2	5.0	5.6	9.8	7.1	8.4	7.7	7.5	7.6
29	8.4	6.6	7.3	6.0	5.4	5.8	11.6	7.6	9.2	7.7	7.2	7.5
30	6.6	5.8	6.0	6.0	5.5	5.7	15.1	8.4	11.5	7.2	6.8	6.9
31	---	---	---	5.8	5.4	5.5	16.2	11.4	13.3	---	---	---
MONTH	9.5	4.1	5.7	10.7	3.3	5.5	16.2	5.4	8.3	14.6	5.1	7.8

PASSAIC RIVER BASIN

01389130 DEEPAVAL 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 mi².

PERIOD OF RECORD.--December 1992 to current year.

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, 7.79 ft, Jan. 15; minimum recorded, 3.55 ft, Sept. 1-5.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 7.79 ft, Jan. 15, 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.

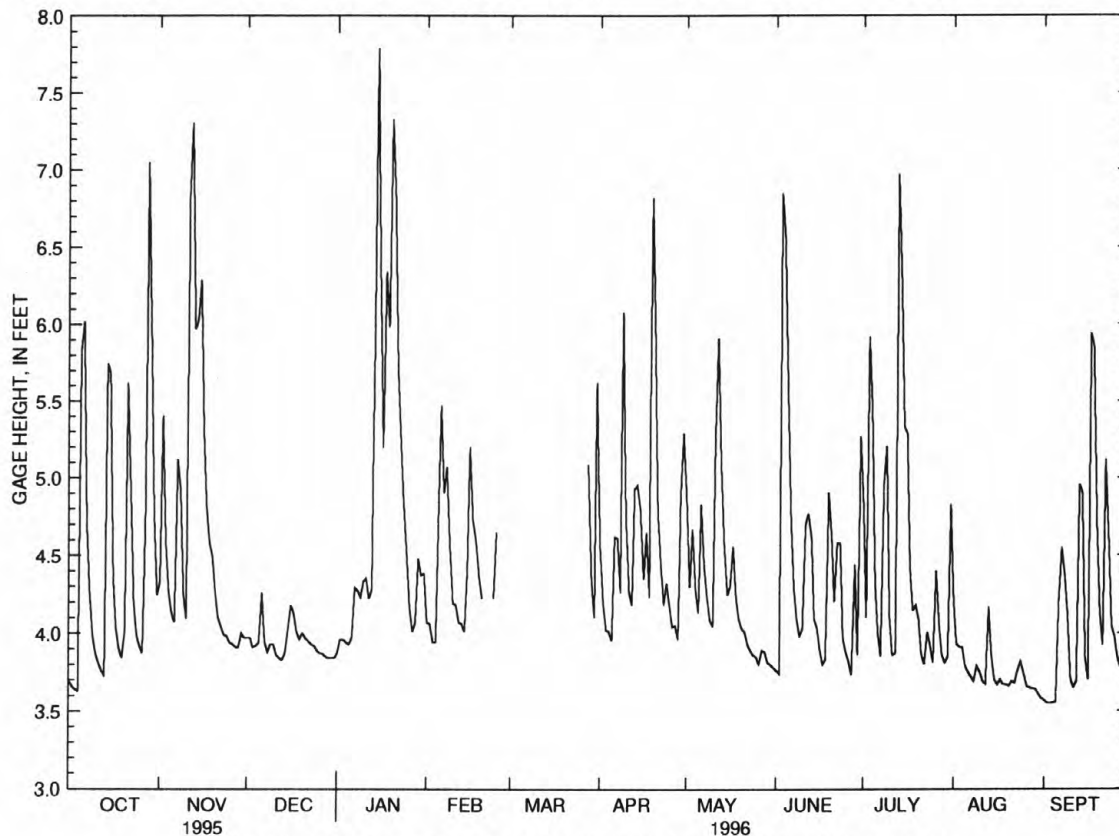
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3.69	3.66	4.33	4.09	3.97	3.90	3.87	3.83	4.07	3.94	---	---
2	3.66	3.64	5.41	4.33	3.97	3.89	3.96	3.86	4.06	3.90	---	---
3	3.64	3.62	4.58	4.26	3.91	3.88	3.96	3.93	3.94	3.89	---	---
4	3.63	3.63	4.26	4.13	3.92	3.88	3.94	3.91	3.94	3.85	---	---
5	5.84	3.63	4.13	4.07	3.94	3.86	3.93	3.90	4.72	3.84	---	---
6	6.02	4.69	4.07	4.03	4.26	3.94	3.97	3.91	5.47	4.72	---	---
7	4.69	4.24	5.12	4.02	3.94	3.88	4.29	3.97	4.90	4.43	---	---
8	4.26	3.98	4.93	4.25	3.88	3.85	4.27	4.22	5.07	4.35	---	---
9	3.98	3.87	4.25	4.09	3.93	3.84	4.23	4.15	4.55	4.19	---	---
10	3.87	3.81	4.09	4.03	3.93	3.86	4.33	4.14	4.19	4.07	---	---
11	3.81	3.76	6.84	4.02	3.86	3.83	4.35	4.19	4.18	4.05	---	---
12	3.76	3.73	7.31	5.97	3.84	3.82	4.22	4.09	4.07	3.95	---	---
13	3.73	3.71	5.97	4.90	3.83	3.81	4.28	4.08	4.06	3.94	---	---
14	5.75	3.70	6.03	4.64	3.87	3.82	5.80	4.19	4.01	3.90	---	---
15	5.68	4.35	6.29	5.32	4.02	3.87	7.79	5.80	4.41	3.91	---	---
16	4.35	4.03	5.32	4.81	4.18	3.99	6.27	5.12	5.20	4.30	---	---
17	4.03	3.90	4.81	4.58	4.13	4.01	5.19	4.92	4.72	4.58	---	---
18	3.90	3.84	4.58	4.40	4.01	3.92	6.34	4.81	4.59	4.36	---	---
19	3.84	3.79	4.49	4.26	3.96	3.90	5.98	4.95	4.36	4.17	---	---
20	4.01	3.77	4.26	4.10	4.00	3.96	7.33	4.87	4.22	4.05	---	---
21	5.62	4.01	4.10	4.04	3.97	3.95	6.85	5.71	---	---	---	---
22	4.94	4.20	4.04	3.99	3.95	3.92	5.71	5.27	---	---	---	---
23	4.20	3.99	3.99	3.97	3.93	3.91	5.27	4.84	---	---	---	---
24	3.99	3.92	3.98	3.94	3.92	3.89	4.84	4.48	4.22	4.02	---	---
25	3.92	3.87	3.94	3.93	3.89	3.87	4.51	4.16	4.65	4.12	---	---
26	3.87	3.85	3.93	3.91	3.87	3.85	4.16	4.01	---	---	---	---
27	4.78	3.82	3.91	3.90	3.87	3.85	4.01	3.96	---	---	---	---
28	7.05	4.78	3.91	3.89	3.85	3.84	4.07	3.96	---	---	5.09	4.32
29	5.89	4.75	4.00	3.89	3.84	3.82	4.48	4.04	---	---	4.34	4.10
30	4.75	4.24	3.97	3.91	3.84	3.82	4.37	4.20	---	---	4.10	4.03
31	4.24	4.10	---	---	3.84	3.82	4.38	4.03	---	---	5.62	4.04
MONTH	7.05	3.62	7.31	3.89	4.26	3.81	7.79	3.83	---	---	---	---

01389130 DEEPAVAL BROOK NEAR FAIRFIELD, NJ--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.54	4.15	4.90	4.29	3.76	3.74	4.83	4.10	4.20	3.93	3.57	3.55
2	4.19	4.02	4.29	4.09	3.74	3.71	4.10	3.93	3.93	3.85	3.55	3.55
3	4.02	3.97	4.67	4.08	6.85	3.71	5.92	3.89	3.91	3.82	3.55	3.55
4	4.01	3.95	4.28	4.11	6.57	5.30	5.44	4.34	3.91	3.79	3.55	3.55
5	3.95	3.91	4.13	4.04	5.56	4.74	4.34	4.00	3.79	3.74	3.56	3.55
6	4.62	3.92	4.83	4.13	4.74	4.28	4.00	3.85	3.75	3.72	4.21	3.56
7	4.61	4.23	4.43	4.17	4.28	4.09	3.85	3.77	3.72	3.69	4.55	3.77
8	4.26	4.04	4.23	4.08	4.09	3.98	4.96	3.76	3.69	3.68	4.38	3.67
9	6.08	4.07	4.08	4.03	3.98	3.93	5.21	4.10	3.79	3.67	4.10	3.70
10	4.73	4.14	4.05	4.02	4.03	3.92	4.11	3.86	3.75	3.69	3.70	3.62
11	4.26	4.04	5.27	4.00	4.70	3.99	3.86	3.77	3.69	3.66	3.65	3.61
12	4.18	4.05	5.91	5.09	4.77	4.12	3.87	3.75	3.67	3.65	3.69	3.65
13	4.93	4.18	5.09	4.57	4.62	4.09	6.97	3.87	4.17	3.67	4.96	3.69
14	4.95	4.33	4.57	4.24	4.09	4.01	6.31	5.33	3.86	3.70	4.90	3.84
15	4.80	4.34	4.24	4.10	4.04	3.90	5.33	4.74	3.70	3.66	3.84	3.70
16	4.34	4.21	4.30	4.05	3.90	3.78	5.29	4.42	3.67	3.65	3.70	3.66
17	4.65	4.19	4.56	4.23	3.80	3.78	4.42	4.14	3.70	3.67	5.94	3.68
18	4.23	4.10	4.23	4.08	3.83	3.79	4.14	4.03	3.67	3.66	5.85	4.71
19	6.82	4.11	4.09	4.03	4.91	3.82	4.18	4.02	3.67	3.66	4.71	4.14
20	6.02	4.78	4.03	3.99	4.64	4.19	4.09	3.86	3.66	3.65	4.14	3.92
21	4.78	4.43	4.01	3.93	4.20	3.97	3.86	3.80	3.69	3.65	3.92	3.81
22	4.43	4.18	3.93	3.89	4.58	3.89	3.80	3.78	3.68	3.66	5.12	3.79
23	4.18	4.08	3.89	3.86	4.58	3.97	4.01	3.78	3.76	3.65	4.60	4.04
24	4.32	4.07	3.86	3.84	3.97	3.88	3.92	3.81	3.82	3.70	4.04	3.92
25	4.18	4.02	3.85	3.80	3.88	3.82	3.81	3.79	3.74	3.66	3.98	3.85
26	4.04	4.00	3.80	3.78	3.82	3.73	4.40	3.78	3.66	3.64	3.85	3.78
27	4.05	3.96	3.89	3.78	3.73	3.70	4.06	3.86	3.65	3.63	3.78	3.75
28	3.96	3.93	3.88	3.81	4.44	3.70	3.86	3.80	3.64	3.63	4.52	3.73
29	4.87	3.94	3.81	3.79	3.86	3.74	3.81	3.79	3.64	3.61	5.07	4.11
30	5.29	4.28	3.80	3.78	5.27	3.75	3.85	3.80	3.61	3.58	4.11	3.90
31	---	---	3.78	3.75	---	---	4.83	3.84	3.58	3.57	---	---
MONTH	6.82	3.91	5.91	3.75	6.85	3.70	6.97	3.75	4.20	3.57	5.94	3.55



01389130 DEEPAVAL BROOK NEAR FAIRFIELD, MAXIMUM DAILY GAGE HEIGHT

PASSAIC RIVER BASIN

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 Beattie's Dam in Little Falls, and 1.0 mi upstream from Peckman River.

DRAINAGE AREA.--762 mi². Area at site used prior to Oct. 1, 1955, 799 mi².

WATER-DISCHARGE RECORDS

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 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 16	1230	4,900	6.23	Jan. 29	0815	*9,440	*8.82

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	55	1580	728	373	5510	2430	1530	2450	423	743	636	136
2	56	1740	707	395	4600	2150	2340	2670	386	816	645	131
3	57	1710	677	452	3720	1950	2590	2540	751	806	617	123
4	45	1530	653	454	3140	1680	2540	2420	1530	1210	627	124
5	225	1360	618	346	2620	1460	2450	2290	2100	918	523	129
6	1260	1270	622	300	2210	1660	2290	2170	2090	616	446	126
7	931	1290	618	267	1910	2170	2140	2060	1670	450	383	241
8	647	1460	595	162	1690	2300	2250	1890	1280	449	329	303
9	488	1390	550	337	1600	2220	2200	1730	932	1090	325	401
10	235	1250	558	418	1580	2110	2250	1610	675	957	392	432
11	58	1200	517	404	1560	2010	2180	1610	510	774	316	327
12	45	3410	457	352	1570	1910	2000	2170	563	565	281	259
13	43	4330	421	362	1420	1840	1940	2370	699	1860	304	269
14	70	4340	408	374	1260	1840	1910	2180	689	3700	348	438
15	337	4670	438	372	1150	1930	1830	1980	610	4150	330	392
16	304	4860	488	367	1050	2100	3030	1850	419	3890	284	296
17	178	4500	548	406	943	2100	4040	1910	321	3310	269	679
18	60	3870	554	388	867	1960	4350	1770	261	2770	266	1280
19	48	3360	538	1670	829	1830	4080	1600	348	2400	240	1520
20	57	2920	491	4700	886	2390	3600	1430	616	2100	213	1300
21	343	2540	463	5900	1630	2690	3040	1230	593	1770	207	951
22	787	2210	500	5860	2500	2680	2570	1070	517	1460	221	762
23	870	1900	494	5210	2970	2550	2240	911	462	1220	204	826
24	652	1650	484	4920	3360	2370	2040	794	395	1000	211	751
25	370	1420	466	5560	3690	2130	1780	702	276	759	232	627
26	248	1210	458	5600	3630	1910	1530	611	173	678	210	524
27	62	1030	408	5920	3340	1700	1370	556	106	757	190	440
28	1740	904	401	8180	3050	1470	1230	539	107	704	179	388
29	2240	822	386	9270	2770	1390	1140	520	56	576	170	589
30	1860	770	376	8160	---	1440	1670	528	164	499	156	630
31	1720	---	365	6730	---	1480	---	461	---	532	146	---
TOTAL	16091	66496	15987	84209	67055	61850	70150	48622	19722	43529	9900	15394
MEAN	519	2217	516	2716	2312	1995	2338	1568	657	1404	319	513
MAX	2240	4860	728	9270	5510	2690	4350	2670	2100	4150	645	1520
MIN	43	770	365	162	829	1390	1140	461	56	449	146	123

PASSAIC RIVER BASIN

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01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 1996, BY WATER YEAR (WY)

MEAN	612	947	1249	1346	1435	2376	2086	1311	768	538	544	526
MAX	5613	4757	4497	4039	3787	6755	5760	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

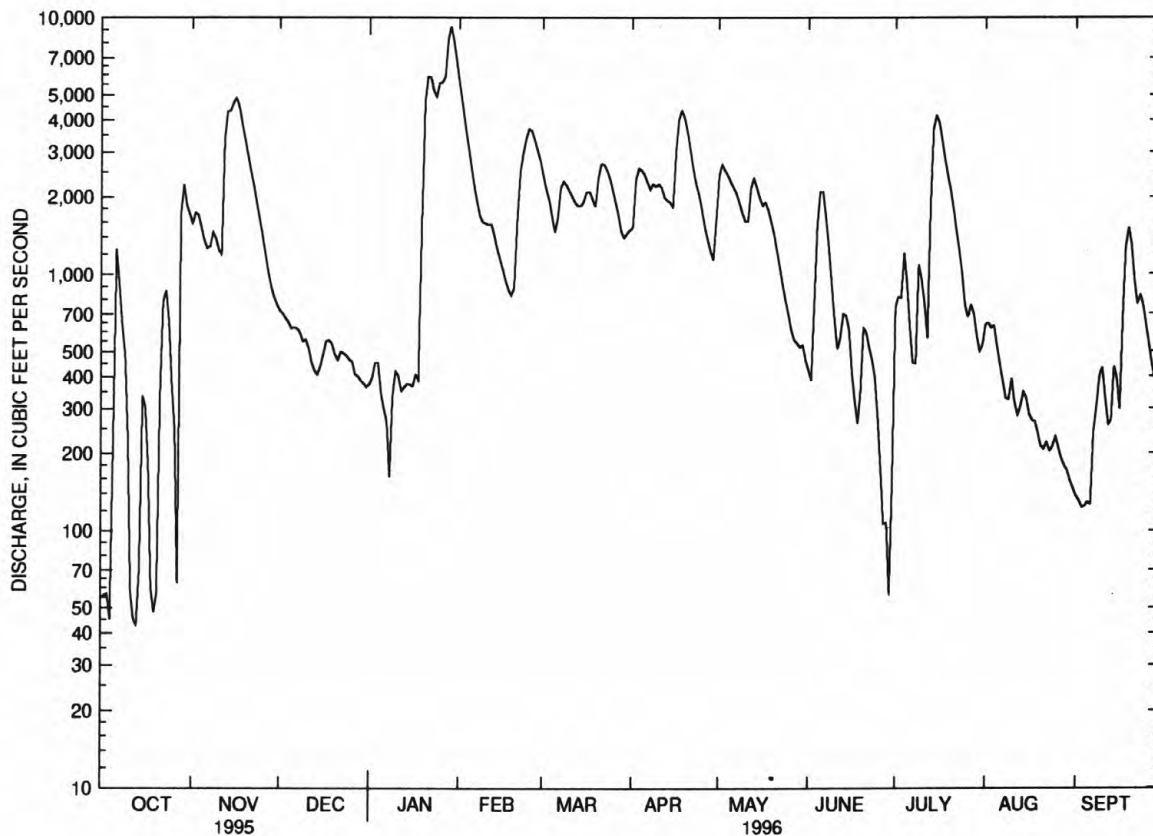
FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1898 - 1996

ANNUAL TOTAL	239650		519005									
ANNUAL MEAN	657		1418					1143				
HIGHEST ANNUAL MEAN								2394			1903	
LOWEST ANNUAL MEAN								269			1965	
HIGHEST DAILY MEAN	4860	Nov 16	9270	Jan 29	28000	Oct 10	1903					
LOWEST DAILY MEAN	42	Jun 18	43	Oct 13	.00	Jul 3	1904					
ANNUAL SEVEN-DAY MINIMUM	51	Sep 3	131	Aug 31	13	Sep 19	1932					
INSTANTANEOUS PEAK FLOW			9440	Jan 29	31700a	Oct 10	1903					
INSTANTANEOUS PEAK STAGE			8.82	Jan 29	---	Oct 10	1903					
INSTANTANEOUS LOW FLOW			36	Oct 14	.00	Jul 3	1904					
10 PERCENT EXCEEDS	1530		3080		2770							
50 PERCENT EXCEEDS	419		895		629							
90 PERCENT EXCEEDS	61		224		125							

a Present site.



01389500 PASSAIC RIVER AT LITTLE FALLS, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to September 1996 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1980 to November 1986.

WATER TEMPERATURE: Water years 1963 to 1980 (once daily), September 1980 to November 1986.

DISSOLVED OXYGEN: October 1970 to September 1980 (once daily).

SUSPENDED-SEDIMENT DISCHARGE: August 1963 to July 1965.

REMARKS.--Beginning October 1994, BOD results from 0 to 1.9 mg/L were reported as estimates (remark code of "E").

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT 1995											
25...	0905	398	333	7.2	13.5	759	9.8	94	2.1	88	23
NOV											
30...	1240	766	388	7.7	5.0	760	12.4	97	E1.5	97	25
JAN 1996											
16...	1050	351	993	7.3	0.0	774	14.4	97	E1.1	150	40
FEB											
08...	1050	1690	381	7.4	0.5	756	14.1	99	E0.9	80	21
MAR											
27...	0925	1720	372	7.6	8.0	771	11.8	99	E1.6	79	21
APR											
25...	0920	1820	330	7.6	15.0	755	9.7	97	2.5	79	21
MAY											
08...	0930	1910	306	7.3	13.0	765	10.7	101	2.1	72	19
24...	1135	797	375	7.9	21.0	757	8.6	97	2.1	100	27
JUN											
10...	1100	722	354	7.8	22.5	762	8.4	97	E1.8	90	24
27...	0935	94	490	8.2	22.5	763	9.0	104	2.6	130	33
JUL											
18...	0915	2820	232	7.7	23.5	761	8.1	96	E1.9	57	15
AUG											
21...	0935	207	530	8.5	24.0	762	8.4	100	3.0	140	36
SEP											
05...	1045	129	604	8.1	23.5	762	8.6	101	3.1	150	38
25...	1145	629	375	7.7	16.0	758	9.7	99	--	98	26

DATE	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)	ALKA- LINITY 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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT 1995											
25...	7.3	24	3.3	53	28	43	0.1	13	204	182	0.02
NOV											
30...	8.3	34	2.2	56	20	61	0.1	12	206	206	0.01
JAN 1996											
16...	13	110	4.1	73	32	220	0.1	14	506	494	0.03
FEB											
08...	6.8	37	1.9	41	18	70	<0.1	11	210	197	0.02
MAR											
27...	6.5	36	1.7	43	18	67	0.1	6.0	216	186	0.01
APR											
25...	6.5	29	1.7	46	17	53	<0.1	5.0	176	164	0.01
MAY											
08...	5.9	27	1.4	44	15	49	<0.1	6.9	178	155	0.01
24...	8.4	33	2.2	58	--	--	--	--	--	--	0.03
JUN											
10...	7.2	30	2.3	53	19	56	0.1	9.4	188	187	0.03
27...	11	44	3.9	76	28	74	0.1	15	292	271	0.05
JUL											
18...	4.8	19	1.8	40	12	31	0.1	8.5	130	119	0.02
AUG											
21...	12	48	3.9	81	32	81	0.1	9.0	300	286	0.02
SEP											
05...	13	56	5.1	87	41	94	0.1	9.3	344	330	<0.01
25...	8.1	34	2.7	57	24	55	<0.1	11	224	205	0.02

PASSAIC RIVER BASIN

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01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	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)	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)
OCT 1995											
25...	1.70	0.020	0.70	0.56	2.4	2.3	0.41	0.32	0.34	8.6	0.9
NOV											
30...	2.00	0.070	0.40	0.33	2.4	2.3	0.29	0.24	0.22	4.6	0.5
JAN 1996											
16...	3.60	0.250	0.90	0.71	4.5	4.3	0.59	0.43	0.39	3.8	0.3
FEB											
08...	1.50	0.100	0.30	0.22	1.8	1.7	0.12	0.09	0.09	3.6	0.3
MAR											
27...	0.91	<0.015	0.30	0.23	1.2	1.1	0.12	0.10	0.08	3.7	0.8
APR											
25...	0.65	0.040	0.60	0.28	1.2	0.93	0.16	0.08	0.09	4.9	1.3
MAY											
08...	0.90	0.060	0.50	0.29	1.4	1.2	0.16	0.09	0.09	6.1	0.9
24...	1.40	0.110	0.70	0.42	2.1	1.8	0.30	0.16	0.19	4.2	1.2
JUN											
10...	1.50	0.140	0.60	0.47	2.1	2.0	0.29	0.20	0.16	3.9	0.9
27...	3.50	0.030	0.80	0.36	4.3	3.9	0.50	0.32	0.32	4.9	1.4
JUL											
18...	0.43	0.080	0.70	0.48	1.1	0.91	0.20	0.11	0.13	6.6	0.9
AUG											
21...	3.20	<0.015	0.70	0.26	3.9	3.5	0.55	0.41	0.44	3.4	2.1
SEP											
05...	4.30	<0.015	0.70	0.40	5.0	4.7	0.70	0.57	0.60	3.9	1.6
25...	2.10	0.050	0.60	0.46	2.7	2.6	0.34	0.27	0.28	5.2	1.0

PASSAIC RIVER BASIN

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 mi².

PERIOD OF RECORD.--Water years 1974-81, 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 1995 TO SEPTEMBER 1996

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 1995 24...	1045	E720	307	7.6	14.0	766	8.0	77	2.4	2300	200	78	
JAN 1996 22...	1236	E5950	356	7.4	0.5	769	15.8	109	2.1	2200	800	60	
MAR 28...	1031	E1560	384	7.5	12.0	773	7.5	69	2.3	350	500	86	
MAY 22...	1201	E1120	362	7.6	21.5	759	7.6	87	E1.4	940	10	90	
JUL 15...	1152	E4270	174	7.6	22.0	758	8.9	102	<1.0	3300	1100	44	
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)	ALKA- LINITY LAB 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- PENDE D (MG/L) (00530)
OCT 1995 24...	21	6.3	25		3.1	49	22	41	0.1	9.7	174	162	12
JAN 1996 22...	16	4.9	41		1.6	26	12	79	0.1	7.3	190	182	28
MAR 28...	23	7.0	38		1.8	46	19	72	<0.1	5.7	214	199	8
MAY 22...	24	7.2	31		2.1	56	18	60	0.1	7.5	216	188	11
JUL 15...	12	3.4	15		1.3	28	10	23	<0.1	6.2	108	90	54
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- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (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- PENDE D TOTAL (MG/L AS C) (00689)
OCT 1995 24...	0.014	0.90	0.06	0.07	0.60	0.45	1.5	1.3	0.31	0.23	7.0	1.2	
JAN 1996 22...	0.012	0.91	0.12	0.13	0.50	0.25	1.4	1.2	0.19	0.05	4.1	0.2	
MAR 28...	0.010	1.00	<0.03	<0.03	0.40	0.23	1.4	1.2	0.14	0.10	3.7	0.6	
MAY 22...	0.023	1.10	0.07	<0.03	0.60	0.35	1.7	1.4	0.20	0.13	4.2	0.2	
JUL 15...	0.011	0.41	<0.03	<0.03	0.80	0.28	1.2	0.69	0.24	0.05	4.7	2.4	

PASSAIC RIVER BASIN

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01389880 PASSAIC RIVER AT ROUTE 46 AT ELMWOOD PARK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 24...	1045	24	1	<10	90	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 24...	880	9	90	<0.1	3	<1	20

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 mi².

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 ft³/s, at site 1.6 mi upstream, drainage area, 19.1 mi², by slope-area measurement.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	0415	520	4.28	Apr. 2	0245	421	3.94
Oct. 21	1700	429	3.97	Apr. 16	0915	786	5.09
Oct. 28	1030	928	5.47	June 3	2200	590	4.50
Nov. 12	0530	936	5.49	July 3	2100	421	3.94
Jan. 19	2000	*1,160	*6.05	July 13	1200	676	4.77
Jan. 27	1615	871	5.32				

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	e1.5	19	19	12	52	38	49	75	18	39	24	6.5
2	e1.5	66	19	13	49	40	172	46	16	18	19	6.3
3	e2.0	36	18	15	48	39	60	45	169	82	51	5.9
4	e1.5	26	18	14	44	35	51	46	124	46	23	5.6
5	59	21	17	26	44	38	47	40	64	22	19	5.5
6	215	20	22	14	46	102	44	48	31	17	17	6.3
7	41	36	18	16	e43	91	54	41	26	15	14	9.3
8	23	55	17	30	36	62	77	38	22	70	14	10
9	14	25	18	36	47	52	53	36	20	78	16	8.1
10	11	20	18	23	47	44	84	49	20	25	16	7.4
11	8.4	57	17	17	50	45	57	58	24	19	13	7.5
12	6.6	364	25	22	43	50	50	111	26	17	12	7.6
13	6.1	57	18	35	34	58	63	47	23	362	16	12
14	14	78	15	29	33	59	49	39	27	74	14	18
15	97	116	15	24	31	60	46	36	19	54	12	8.2
16	25	46	17	18	30	62	392	76	17	63	11	6.8
17	18	37	17	15	30	47	109	68	16	32	13	73
18	16	33	16	15	28	44	73	45	17	27	10	86
19	15	35	15	450	26	49	62	41	22	28	9.4	20
20	14	30	17	162	46	128	58	37	28	25	9.4	13
21	134	28	17	64	175	57	55	34	21	21	9.2	10
22	64	25	15	49	85	48	51	33	17	20	8.7	24
23	27	23	14	43	63	42	50	30	19	24	12	20
24	20	22	14	152	99	39	52	28	15	22	16	11
25	18	21	14	104	59	38	45	26	16	20	13	11
26	17	21	14	53	50	37	45	25	13	26	9.2	9.2
27	17	20	14	362	45	34	42	27	12	19	8.6	8.2
28	317	20	13	144	49	34	38	25	15	17	8.3	8.3
29	49	20	12	77	41	43	70	24	12	16	7.8	41
30	27	19	12	68	---	43	71	21	42	17	7.4	12
31	20	---	12	61	---	42	---	19	---	35	6.8	---
TOTAL	1299.6	1396	507	2163	1473	1600	2169	1314	911	1350	439.8	477.7
MEAN	41.9	46.5	16.4	69.8	50.8	51.6	72.3	42.4	30.4	43.5	14.2	15.9
MAX	317	364	25	450	175	128	392	111	169	362	51	86
MIN	1.5	19	12	12	26	34	38	19	12	15	6.8	5.5
CFSM	1.94	2.15	.76	3.23	2.35	2.39	3.35	1.96	1.41	2.02	.66	.74
IN.	2.24	2.40	.87	3.73	2.54	2.76	3.74	2.26	1.57	2.32	.76	.82

PASSAIC RIVER BASIN

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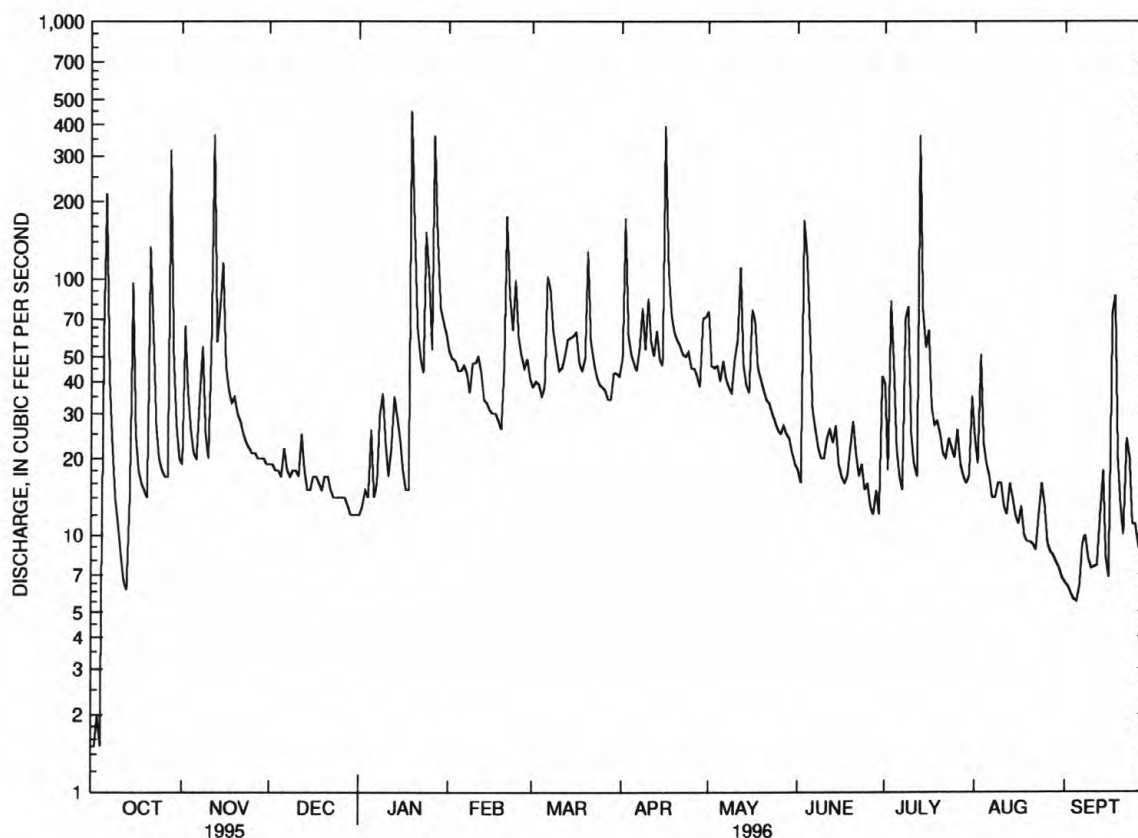
01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1996, BY WATER YEAR (WY)

MEAN	22.1	34.6	35.8	36.6	40.6	55.2	59.1	42.8	27.5	20.8	19.6	18.0
MAX	104	109	109	115	86.9	104	152	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 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1955 - 1996
ANNUAL TOTAL	7022.27	15100.1	
ANNUAL MEAN	19.2	41.3	34.3
HIGHEST ANNUAL MEAN			58.7
LOWEST ANNUAL MEAN			14.7
HIGHEST DAILY MEAN	364 Nov 12	450 Jan 19	1250 Nov 8 1977
LOWEST DAILY MEAN	.50 Sep 15	1.5 Oct 1	.20 Sep 17 1966
ANNUAL SEVEN-DAY MINIMUM	.75 Sep 10	6.1 Aug 31	.75 Sep 10 1995
INSTANTANEOUS PEAK FLOW		1160 Jan 19	4650 Nov 8 1977
INSTANTANEOUS PEAK STAGE		6.05 Jan 19	12.25 Nov 8 1977
INSTANTANEOUS LOW FLOW		---	vb ---
ANNUAL RUNOFF (CFSM)	.89	1.91	1.59
ANNUAL RUNOFF (INCHES)	12.09	26.01	21.60
10 PERCENT EXCEEDS	31	73	68
50 PERCENT EXCEEDS	14	26	22
90 PERCENT EXCEEDS	1.8	11	6.8

e Estimated.



01390500 SADDLE RIVER AT RIDGEWOOD, NJ, DAILY MEAN DISCHARGE

PASSAIC RIVER BASIN

01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1996 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
MAY 1996										
01...	1150	64	464	8.4	17.5	13.0	757	12.6	120	120
16...	1050	38	506	8.0	12.0	12.0	765	9.3	86	160
30...	1130	20	564	8.3	14.0	13.0	758	10.1	97	180
JUN										
10...	1120	18	532	7.9	26.0	18.5	761	8.6	92	180
27...	1040	12	551	7.9	22.0	17.5	762	9.1	95	180
AUG										
01...	1130	23	485	7.9	22.0	18.0	757	8.7	92	150
22...	1050	9.1	548	8.0	26.0	19.5	763	8.9	97	180
SEP										
18...	1100	82	300	7.5	18.5	15.5	751	--	--	87
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)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY 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)
MAY 1996										
01...	36	8.2	39	1.4	102	84	88	15	75	<0.1
16...	47	11	38	1.5	129	106	109	18	87	<0.1
30...	52	13	39	1.5	137	112	119	18	90	<0.1
JUN										
10...	52	11	37	1.6	134	110	115	18	83	<0.1
27...	52	13	36	1.6	138	113	120	18	86	<0.1
AUG										
01...	44	10	32	1.6	126	103	108	16	74	<0.1
22...	51	13	33	1.5	140	115	122	18	80	<0.1
SEP										
18...	25	6.0	21	1.7	--	--	63	12	42	<0.1
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	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)
MAY 1996										
01...	6.5	264	237	0.010	1.20	0.030	0.30	<0.20	1.5	--
16...	6.0	300	276	0.010	0.99	0.040	0.30	0.20	1.3	1.2
30...	8.4	310	297	0.020	1.60	0.020	0.20	0.20	1.8	1.8
JUN										
10...	9.5	312	284	0.020	1.40	0.070	0.30	<0.20	1.7	--
27...	10	332	292	0.020	1.60	<0.015	<0.20	0.20	--	1.8
AUG										
01...	9.4	288	255	0.010	1.30	0.030	0.20	<0.20	1.5	--
22...	8.9	317	282	0.010	1.70	0.020	<0.20	<0.20	--	--
SEP										
18...	6.1	162	157	0.020	1.10	0.030	0.60	0.30	1.7	1.4

PASSAIC RIVER BASIN

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01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)
MAY 1996										
01...	0.03	0.01	0.02	30	69	38	3.9	0.6	7	1.1
16...	0.01	<0.01	<0.01	30	19	44	2.5	0.4	4	0.38
30...	0.04	<0.01	0.02	40	21	23	1.9	0.3	3	0.15
JUN										
10...	0.04	0.02	0.03	50	42	25	2.1	0.2	1	0.07
27...	0.02	0.02	0.03	40	29	11	1.7	0.2	1	0.03
AUG										
01...	0.04	0.04	0.03	40	43	12	2.5	0.3	1	0.09
22...	0.02	0.03	0.03	40	17	8	1.4	0.3	2	0.05
SEP										
18...	0.08	0.04	0.05	40	61	11	4.5	0.8	17	3.8

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels on p. 18). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels on p. 18). 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 GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD GF, REC (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
MAY 1996												
01...	1150	<0.002	E0.003	0.034	E0.004	0.005	E0.029	<0.003	0.008	0.010	E0.002	0.048
16...	1050	<0.002	<0.002	0.007	E0.002	0.005	E0.130	<0.003	E0.004	<0.004	0.005	<0.002
30...	1130	<0.002	<0.002	0.005	E0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
JUN												
10...	1120	<0.002	<0.002	0.007	E0.002	E0.003	<0.010	<0.003	0.064	<0.004	<0.002	0.015
27...	1040	<0.002	<0.002	0.006	E0.003	<0.002	<0.003	<0.003	0.005	<0.004	<0.002	E0.004
AUG												
01...	1130	<0.002	<0.002	0.015	<0.002	<0.002	E0.032	<0.003	0.007	<0.004	<0.002	0.031
22...	1050	<0.002	<0.002	0.005	E0.004	<0.002	<0.003	<0.003	0.004	<0.004	<0.002	E0.003
SEP												
18...	1100	<0.002	<0.002	<0.001	<0.002	<0.002	E0.088	<0.003	0.017	<0.004	0.005	0.049

DATE	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LIN- URON WATER FLTRD GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
MAY 1996											
01...	<0.001	<0.003	<0.002	<0.005	0.008	<0.004	<0.004	<0.003	<0.004	0.035	E0.015
16...	<0.001	<0.003	<0.002	0.023	E0.003	<0.004	<0.004	<0.003	<0.004	0.017	E0.012
30...	0.005	<0.003	<0.002	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	E0.010
JUN											
10...	<0.001	<0.003	<0.002	<0.005	E0.004	<0.004	<0.004	<0.003	<0.004	0.008	E0.013
27...	0.005	<0.003	<0.002	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	0.006	E0.010
AUG											
01...	<0.001	<0.003	<0.002	<0.005	0.004	<0.004	<0.004	<0.003	<0.004	<0.004	E0.018
22...	E0.004	<0.003	<0.002	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	E0.012
SEP											
18...	<0.001	<0.003	<0.002	<0.005	0.015	<0.004	<0.004	<0.003	<0.004	0.012	0.022

PASSAIC RIVER BASIN

01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CHLORO- THALO- NIL, WAT, FLT 0.7U GF, 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)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
MAY 1996											
01...	0.019	<0.010	<0.013	<0.001	0.015	<0.008	<0.035	0.160	<0.020	<0.035	<0.018
16...	0.018	<0.010	<0.013	<0.001	0.005	0.040	<0.035	0.320	<0.020	<0.035	<0.018
30...	0.021	<0.010	<0.013	<0.001	E0.003	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
JUN											
10...	0.017	<0.010	<0.013	<0.001	E0.004	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
27...	0.021	<0.010	<0.013	<0.001	E0.003	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
AUG											
01...	0.018	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
22...	0.024	<0.010	<0.013	<0.001	0.005	--	--	--	--	--	--
SEP											
18...	0.011	<0.010	<0.013	<0.001	0.007	--	--	--	--	--	--

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for volatile organic compounds (VOCs) on custom method schedule 9090 (listed with minimum reporting levels on p. 19). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	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)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
MAY 1996							
01...	1150	E0.030	<0.050	<0.050	<0.050	<0.100	<0.100
16...	1049	0.120	<0.050	<0.050	<0.050	<0.100	<0.100
30...	1129	0.100	<0.100	<0.100	<0.100	<0.200	<0.200
JUN							
10...	1119	0.120	<0.050	<0.050	<0.050	<0.100	<0.100
27...	1039	E0.080	<0.050	<0.050	<0.050	<0.100	<0.100
AUG							
01...	1129	E0.090	<0.050	<0.050	<0.050	<0.100	<0.100
22...	1049	0.150	<0.050	<0.050	<0.050	<0.100	<0.100
SEP							
18...	1059	E0.030	<0.050	<0.050	<0.050	<0.100	<0.100

DATE	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- FORM TOTAL (UG/L) (32106)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)
MAY 1996										
01...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
16...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
30...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
JUN										
10...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
27...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.020	<0.100	<0.100	<0.050
AUG										
01...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.020	<0.100	<0.100	<0.050
22...	<0.100	<0.100	<0.200	<0.100	E0.01	<0.200	E0.020	E0.030	<0.100	<0.050
SEP										
18...	<0.100	<0.100	E0.030	<0.100	<0.05	<0.200	E0.010	E0.008	<0.100	<0.050

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	BENZENE O - DI - CHLORO - WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4 - DI - CHLORO - WATER UNFLTRD REC (UG/L) (34571)	CHLORO - BENZENE TOTAL (UG/L) (34301)	METHYL - ETHYL - KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL - WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT - BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA - WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT - PENTYL METHYL - UNFLTRD RECOVER (UG/L) (50005)	CARBON DI - SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
MAY 1996										
01...	<0.050	<0.050	<0.050	<5	2	<0.10	0.080	<5.00	<0.100	<0
16...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.230	<5.00	<0.100	<0
30...	<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
JUN										
10...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.300	<5.00	<0.100	<0
27...	<0.050	<0.050	<0.050	<5	<5	<0.10	<0.100	<5.00	<0.100	<0
AUG										
01...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.150	<5.00	<0.100	<0
22...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.360	<5.00	<0.100	<0
SEP										
18...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.110	<5.00	<0.100	<0

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	1,1,1- TRI- CHLORO- ETHANE	FREON- 113 WATER UNFLTRD	1,1-DI- CHLORO- ETHANE	1,2-DI- CHLORO- PROPANE	METHANE BROMO CHLORO- WAT UNFLTRD				
			TOTAL (UG/L) (34506)	REC (UG/L) (77652)	TOTAL (UG/L) (34496)	TOTAL (UG/L) (34541)	REC (UG/L) (77297)				
SEP 1996											
18...	1025	CANNISTER BLANK	<0.050	<0.050	<0.050	<0.050	<0.100				
18...	1035	FIELD BLANK	<0.050	<0.050	<0.050	E0.009	<0.100				
DATE	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- FORM TOTAL (UG/L) (32106)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)
SEP 1996											
18...	<0.100	<0.100	<0.100	E0.030	<0.100	<0.05	<0.200	E0.030	<0.100	<0.100	<0.050
18...	<0.100	<0.100	<0.100	E0.040	<0.100	<0.05	<0.200	E0.030	<0.100	<0.100	<0.050

[illegible]

PASSAIC RIVER BASIN

01390500 SADDLE RIVER AT RIDGEWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- BENZENE TOTAL (UG/L) (34301)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT- PENTYL METHYL- UNFLTRD RECOVER (UG/L) (50005)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
SEP 1996										
18...	<0.050	<0.050	<0.050	E1	6	<0.10	<0.100	E0.90	<0.100	<0
18...	<0.050	<0.050	<0.050	E1	6	<0.10	<0.100	E0.90	<0.100	E0

01391000 HOHOKUS BROOK AT HO-HO-KUS, NJ

LOCATION.--Lat 40°59'52", long 74°06'48", Bergen County, Hydrologic Unit 02030103, on left bank 500 ft upstream from bridge on Maple Avenue in Ho-Ho-Kus, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--16.4 mi².

PERIOD OF RECORD.--April 1954 to September 1973, October 1977 to September 1996 (converted to a crest-stage partial-record station October 1996). Operated as a crest-stage partial-record station, water years 1974-77.

REVISED RECORDS.--WDR NJ-77-1: 1955(M), 1968(M), 1976(M). WDR NJ-95-1: 1984-94 (P).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 120.09 ft above sea level (levels from New Jersey Geological Survey bench mark).

REMARKS.--Records good except those above 300 ft³/s, which are fair. Some regulation and diurnal fluctuation at low and medium flows caused by unknown sources, possibly sewage treatment plant upstream of gage. 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 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	0030	639	2.74	Apr. 16	0915	880	2.91
Oct. 28	0515	1,140	3.11	July 3	1845	1,150	3.12
Nov. 12	0215	1,350	3.28	July 8	2300	1,250	3.20
Jan. 19	1745	*1,360	*3.29	July 13	0845	1,010	3.00
Jan. 27	1630	1,030	3.02				

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	15	33	28	23	58	45	58	82	27	48	37	17
2	15	80	27	24	54	48	151	53	26	29	30	17
3	14	45	26	28	54	47	65	50	155	149	51	18
4	15	31	27	e30	49	42	54	49	117	81	33	20
5	109	27	26	e30	45	44	50	45	84	37	28	18
6	221	26	31	e30	44	93	47	58	45	29	26	19
7	38	43	27	e25	43	92	57	49	37	26	25	27
8	26	57	25	e30	46	67	77	43	33	104	24	23
9	22	32	28	e50	54	54	57	42	31	109	36	20
10	20	27	29	e40	55	49	80	52	31	41	36	20
11	19	89	26	e30	57	49	59	63	43	31	25	19
12	19	485	24	e35	54	54	51	113	38	27	23	19
13	18	77	23	e35	44	61	64	55	33	455	28	28
14	32	89	25	e30	43	64	52	45	30	113	26	35
15	72	128	26	e30	41	63	47	42	28	74	24	22
16	26	66	29	e30	40	65	394	72	26	87	23	20
17	20	50	29	e30	41	51	123	70	26	50	22	102
18	18	44	27	e30	38	48	79	49	27	41	21	88
19	18	46	26	e530	36	54	68	45	33	41	21	36
20	20	40	28	213	59	121	62	43	36	37	20	26
21	76	37	26	e90	139	65	57	40	31	31	20	23
22	46	35	25	e65	94	54	54	38	27	30	20	38
23	26	33	25	50	77	49	54	35	26	35	29	37
24	22	31	25	144	106	45	55	34	25	35	32	26
25	20	30	24	126	74	44	48	31	25	31	23	25
26	19	30	25	62	60	43	48	30	23	37	20	22
27	19	30	24	410	54	41	47	31	22	32	24	21
28	355	29	23	184	56	40	43	32	27	27	20	22
29	61	29	23	87	49	51	69	31	23	26	19	59
30	37	28	23	74	---	50	82	30	56	26	19	28
31	29	---	23	67	---	47	---	28	---	47	18	---
TOTAL	1467	1827	803	2662	1664	1740	2252	1480	1191	1966	803	895
MEAN	47.3	60.9	25.9	85.9	57.4	56.1	75.1	47.7	39.7	63.4	25.9	29.8
MAX	355	485	31	530	139	121	394	113	155	455	51	102
MIN	14	26	23	23	36	40	43	28	22	26	18	17
CFSM	2.89	3.71	1.58	5.24	3.50	3.42	4.58	2.91	2.42	3.87	1.58	1.82
IN.	3.33	4.14	1.82	6.04	3.77	3.95	5.11	3.36	2.70	4.46	1.82	2.03

PASSAIC RIVER BASIN

01391000 HOHOKUS BROOK AT HO-HO-KUS, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1996, BY WATER YEAR (WY)

MEAN	25.1	35.7	35.5	35.6	41.0	51.2	53.2	40.7	30.2	25.5	25.0	23.0
MAX	82.4	102	91.7	85.9	90.0	93.4	130	108	101	85.5	84.9	96.5
(WY)	1956	1978	1984	1996	1973	1994	1983	1989	1972	1984	1955	1971
MIN	6.21	7.10	12.3	9.07	15.3	20.8	19.4	13.9	7.58	3.91	5.17	5.78
(WY)	1965	1965	1981	1981	1980	1981	1985	1955	1965	1966	1966	1964

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

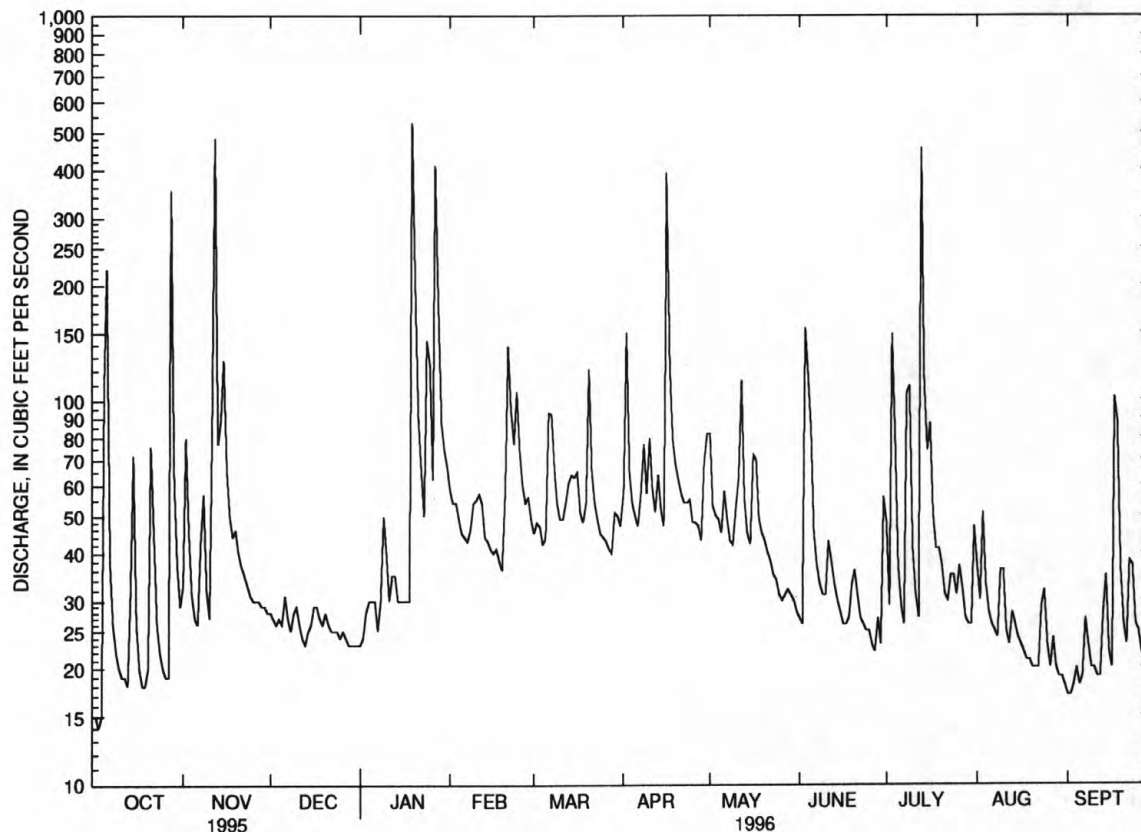
FOR 1996 WATER YEAR

WATER YEARS 1955 - 1996

ANNUAL TOTAL	11405		18750									
ANNUAL MEAN	31.2		51.2									
HIGHEST ANNUAL MEAN									35.1			
LOWEST ANNUAL MEAN									61.3			1984
HIGHEST DAILY MEAN	485	Nov 12	530	Jan 19	1220	Nov 8	1977					
LOWEST DAILY MEAN	12	Aug 26	14	Oct 3	2.5	Jul 13	1966					
ANNUAL SEVEN-DAY MINIMUM	13	Aug 24	18	Aug 30	2.8	Aug 2	1966					
INSTANTANEOUS PEAK FLOW			1360	Jan 19	3700a	Nov 8	1977					
INSTANTANEOUS PEAK STAGE			3.29	Jan 19	7.06	Nov 8	1977					
INSTANTANEOUS LOW FLOW			8.9	Oct 4	1.9	Aug 2	1966					
ANNUAL RUNOFF (CFSM)	1.91		3.12		2.14							
ANNUAL RUNOFF (INCHES)	25.87		42.53		29.07							
10 PERCENT EXCEEDS	44		83		64							
50 PERCENT EXCEEDS	26		36		25							
90 PERCENT EXCEEDS	15		21		10							

a From rating curve extended above 750 ft³/s by computation of peak flow over dam.

e Estimated.



01391000 HOHOKUS BROOK AT HOHOKUS, NJ, DAILY MEAN DISCHARGE

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 mi².

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 good. Occasional regulation at low flow. Diversion upstream from station at Arcola by United Water New Jersey, for municipal supply (records given herein). 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	1300	1,900	5.91	Jan. 27	2115	1,860	6.08
Nov. 12	0930	2,090	6.38	Apr. 16	1245	2,040	6.45
Jan. 19	2330	*2,390	*7.21	July 13	1815	1,770	5.87

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	9.4	85	69	59	164	119	139	245	74	163	115	33
2	9.1	229	67	62	152	125	464	143	71	69	83	32
3	11	123	64	68	149	125	174	136	315	169	128	33
4	7.6	83	67	62	138	112	141	136	547	289	99	33
5	178	69	62	57	126	112	131	123	227	102	79	33
6	616	66	85	52	124	253	122	147	127	81	74	35
7	83	102	53	44	120	294	140	133	103	60	71	49
8	39	169	47	37	124	190	219	119	94	145	66	44
9	28	85	51	66	152	146	146	113	87	313	64	40
10	21	69	56	66	152	131	239	130	84	110	76	34
11	17	113	45	61	150	130	158	152	86	82	54	31
12	16	1240	42	63	143	140	134	358	115	75	46	31
13	15	226	45	78	116	154	167	152	100	1010	68	45
14	47	235	58	70	114	165	133	122	94	441	57	95
15	294	382	66	70	110	166	121	111	81	196	46	38
16	52	175	74	64	106	178	1240	184	74	279	43	33
17	37	136	73	67	107	134	410	231	71	142	46	238
18	41	118	65	74	101	127	240	134	74	117	43	349
19	37	125	62	960	94	125	200	123	100	110	39	108
20	38	109	64	854	170	349	182	115	119	110	36	65
21	291	100	61	230	456	178	166	105	94	91	40	46
22	182	93	60	166	275	144	153	101	78	85	45	75
23	70	88	59	142	207	130	147	94	76	92	42	106
24	53	84	59	331	293	119	159	91	70	97	99	50
25	46	80	57	396	200	116	136	86	70	85	63	47
26	41	79	56	182	153	113	135	83	60	103	42	39
27	40	79	54	796	139	104	134	87	47	90	45	35
28	1000	73	54	636	142	101	121	85	66	77	42	35
29	204	74	52	259	130	137	170	83	50	74	33	160
30	106	71	51	212	---	131	226	81	136	74	32	77
31	80	---	51	193	---	120	---	76	---	126	34	---
TOTAL	3709.1	4760	1829	6477	4607	4668	6447	4079	3390	5057	1850	2069
MEAN	120	159	59.0	209	159	151	215	132	113	163	59.7	69.0
MAX	1000	1240	85	960	456	349	1240	358	547	1010	128	349
MIN	7.6	66	42	37	94	101	121	76	47	60	32	31
IN.	2.53	3.24	1.25	4.41	3.14	3.18	4.39	2.78	2.31	3.45	1.26	1.41
(†)	10.4	0.01	3.52	0	0	0	0	0	2.50	3.12	9.53	12.9
MEAN*	130	159	62.5	209	159	151	215	132	116	166	69.2	81.9
IN*	2.74	3.25	1.32	4.41	3.14	3.18	4.39	2.78	2.37	3.50	1.46	1.67

PASSAIC RIVER BASIN

01391500 SADDLE RIVER AT LODI, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996, BY WATER YEAR (WY)

MEAN	64.8	89.6	99.4	105	119	156	156	118	84.4	72.5	68.2	68.0
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

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

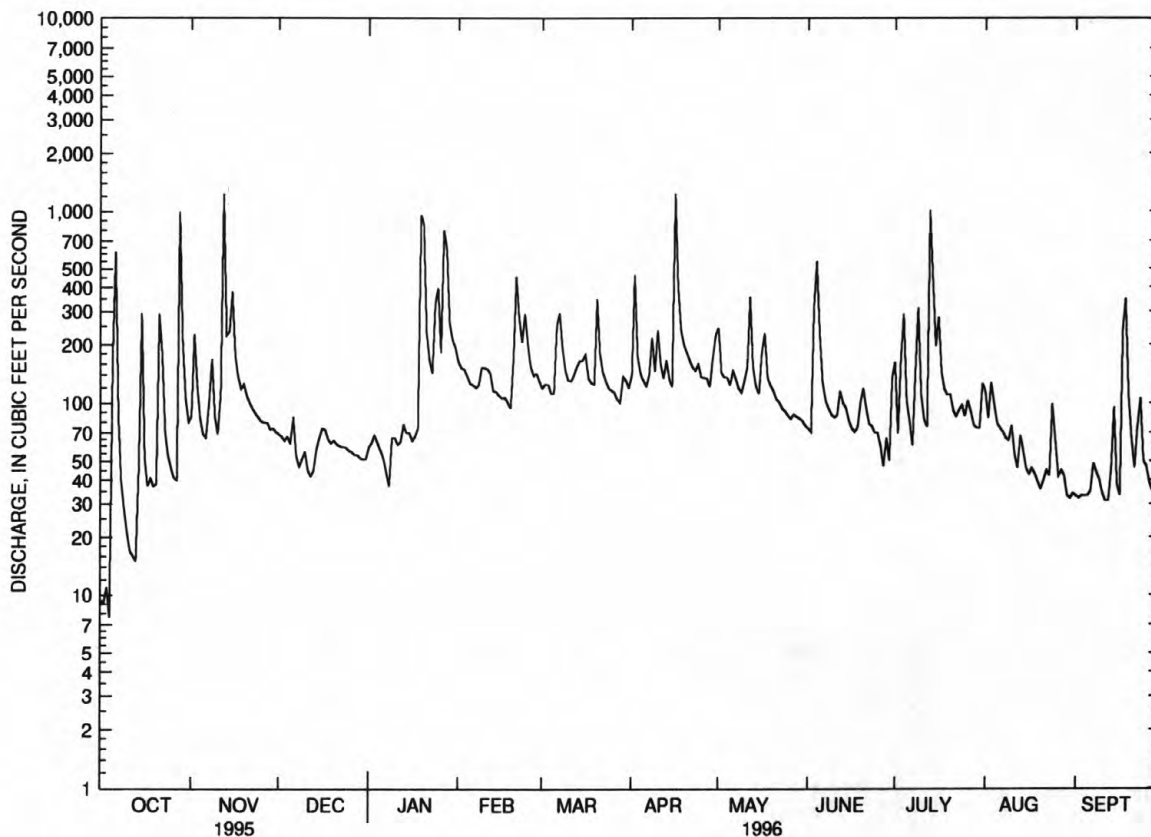
WATER YEARS 1924 - 1996

ANNUAL TOTAL	25257.7		48942.1									
ANNUAL MEAN	69.2		134									
HIGHEST ANNUAL MEAN									99.9			
LOWEST ANNUAL MEAN									187			1984
HIGHEST DAILY MEAN	1240	Nov 12	1240	Nov 12					45.2			1981
LOWEST DAILY MEAN	4.9	Sep 15	7.6	Oct 4					2970			Apr 5 1984
ANNUAL SEVEN-DAY MINIMUM	7.1	Sep 10	26	Oct 8					4.9			Sep 15 1995
INSTANTANEOUS PEAK FLOW			2390	Jan 19					7.1			Sep 10 1995
INSTANTANEOUS PEAK STAGE			7.21	Jan 19					4500			Nov 9 1977
INSTANTANEOUS LOW FLOW			3.9	Oct 2					12.36			Nov 9 1977
ANNUAL RUNOFF (INCHES)	17.21		33.35						1.0			May 25 1938
10 PERCENT EXCEEDS	114		232						24.87			
50 PERCENT EXCEEDS	55		98						191			
90 PERCENT EXCEEDS	14		41						69			
									26			

a From high-water mark in gage house.

† Diversion, equivalent in cubic feet per second, above station by United Water New Jersey for municipal supply. Records provided by United Water New Jersey.

* Adjusted for diversion.



01391500 SADDLE RIVER AT LODI, NJ, DAILY MEAN DISCHARGE

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 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 1995 TO SEPTEMBER 1996

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 1995										
19...	1010	35	710	7.6	12.0	767	7.6	70	3.5	17000
JAN 1996										
22...	1103	159	803	7.7	3.5	771	11.9	89	3.4	4300
MAR										
19...	1122	114	838	7.9	8.0	754	10.3	88	4.2	79
MAY										
22...	0950	98	707	7.6	18.5	754	6.0	65	2.2	2300
JUL										
15...	1020	169	502	7.6	21.5	759	7.2	82	<1.0	3300

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)	ALKA- LINITY 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 1995										
19...	1200	200	55	16	50	6.0	124	33	100	<0.1
JAN 1996										
22...	400	170	49	11	81	3.0	95	24	150	0.1
MAR										
19...	<10	190	55	13	79	3.0	115	27	150	<0.1
MAY										
22...	200	200	55	14	57	3.8	120	27	120	0.1
JUL										
15...	460	140	39	9.3	40	3.2	92	20	74	<0.1

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- PENDE (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 1995									
19...	14	386	391	5	0.190	9.10	1.50	1.60	2.0
JAN 1996									
22...	11	434	400	5	0.049	2.90	0.60	0.64	1.1
MAR									
19...	8.5	438	418	--	0.106	2.80	1.16	1.21	1.8
MAY									
22...	10	406	377	10	0.187	4.00	0.50	0.50	1.2
JUL									
15...	11	270	263	12	0.044	2.50	0.08	0.09	0.80

PASSAIC RIVER BASIN

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995 19...	1.9	11	11	1.00	0.91	4.2	0.5	--	--
JAN 1996 22...	0.89	4.0	3.8	0.23	0.18	4.3	0.5	--	--
MAR 19...	1.6	4.6	4.4	0.35	0.28	3.4	0.9	11	3.3
MAY 22...	0.97	5.2	5.0	0.39	0.30	3.6	0.7	--	--
JUL 15...	0.56	3.3	3.1	0.32	0.23	5.7	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 TOTAL RECOV- ERABLE (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 1995 19...	1010	19	1	<10	140	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 19...	320	2	100	<0.1	1	<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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 5	2400	693	4.56	Jan. 27	1600	784	4.79
Oct. 14	2230	912	5.11	Apr. 16	0400	866	4.99
Oct. 28	0545	1,010	5.37	June 3	1715	*1,420	*6.32
Nov. 11	2400	958	5.23	June 4	2345	625	4.40
Jan. 19	1600	931	5.16	June 12	2330	702	4.60

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	5.4	17	13	11	21	16	56	e30	e9.2	19	20	7.9
2	5.5	70	e11	13	19	20	81	e16	e8.8	15	17	9.0
3	5.6	14	11	14	18	17	e18	e22	e190	65	15	7.8
4	5.6	11	12	11	17	15	e17	e18	e41	23	16	8.0
5	125	11	11	11	e17	25	e16	e15	e25	19	35	8.2
6	104	10	20	e8.3	15	63	e15	e26	e13	30	12	11
7	12	34	e9.0	e7.0	14	46	e24	e16	e12	15	10	13
8	8.5	19	e9.0	e6.8	17	26	e37	e19	e11	49	12	21
9	7.9	11	13	e7.0	26	20	e21	e15	e10	45	12	13
10	8.1	10	12	e9.2	20	19	e53	e17	e13	20	9.6	8.8
11	7.4	91	e9.0	e8.8	21	21	e19	e19	e25	37	8.9	9.4
12	7.1	224	e9.0	e8.0	19	23	e17	e39	e24	13	9.0	9.9
13	6.6	22	e7.8	17	17	23	e21	e15	e22	239	25	49
14	71	81	e10	14	19	22	e15	e14	e13	27	10	27
15	76	76	15	13	15	22	e15	e13	e12	23	9.0	9.9
16	9.2	21	20	12	14	25	e282	e28	e10	31	8.5	8.5
17	8.0	18	15	13	15	19	e32	e25	e9.8	17	8.5	146
18	7.4	16	12	17	15	19	e22	e14	13	16	8.5	42
19	7.2	19	11	282	13	33	e21	e15	29	19	8.3	13
20	7.1	16	e10	61	49	47	e19	e14	32	18	7.7	11
21	55	14	e9.0	27	60	18	e17	e14	13	18	7.7	11
22	12	14	e9.0	21	26	17	e16	e13	13	15	8.1	35
23	7.9	14	e8.7	19	22	17	e17	e12	17	18	7.6	14
24	7.5	15	e8.2	75	53	16	e22	e12	12	17	11	11
25	7.6	13	e8.6	37	22	15	e15	e11	13	17	13	12
26	8.8	12	e8.1	22	20	14	e17	e10	13	19	9.9	9.6
27	13	12	e7.7	239	18	15	e16	e14	12	18	8.0	9.7
28	213	13	e7.6	54	18	14	e13	e11	29	17	8.2	13
29	15	13	e7.7	31	16	35	e27	e11	13	15	10	47
30	11	15	e7.7	27	---	21	e32	e10	79	15	8.3	11
31	11	---	e8.2	24	---	18	---	e9.5	---	35	7.9	---
TOTAL	856.4	926	330.3	1120.1	636	721	993	517.5	736.8	944	361.7	606.7
MEAN	27.6	30.9	10.7	36.1	21.9	23.3	33.1	16.7	24.6	30.5	11.7	20.2
MAX	213	224	20	282	60	63	282	39	190	239	35	146
MIN	5.4	10	7.6	6.8	13	14	13	9.5	8.8	13	7.6	7.8
CFSM	2.34	2.62	.90	3.06	1.86	1.97	2.81	1.41	2.08	2.58	.99	1.71
IN.	2.70	2.92	1.04	3.53	2.01	2.27	3.13	1.63	2.32	2.98	1.14	1.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1996, BY WATER YEAR (WY)

MEAN	16.1	22.5	19.9	22.9	19.0	25.5	28.0	25.9	18.4	17.6	17.9	15.9
MAX	34.3	66.1	60.2	64.3	31.0	48.1	70.4	56.4	38.8	31.7	44.1	29.3
(WY)	1990	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

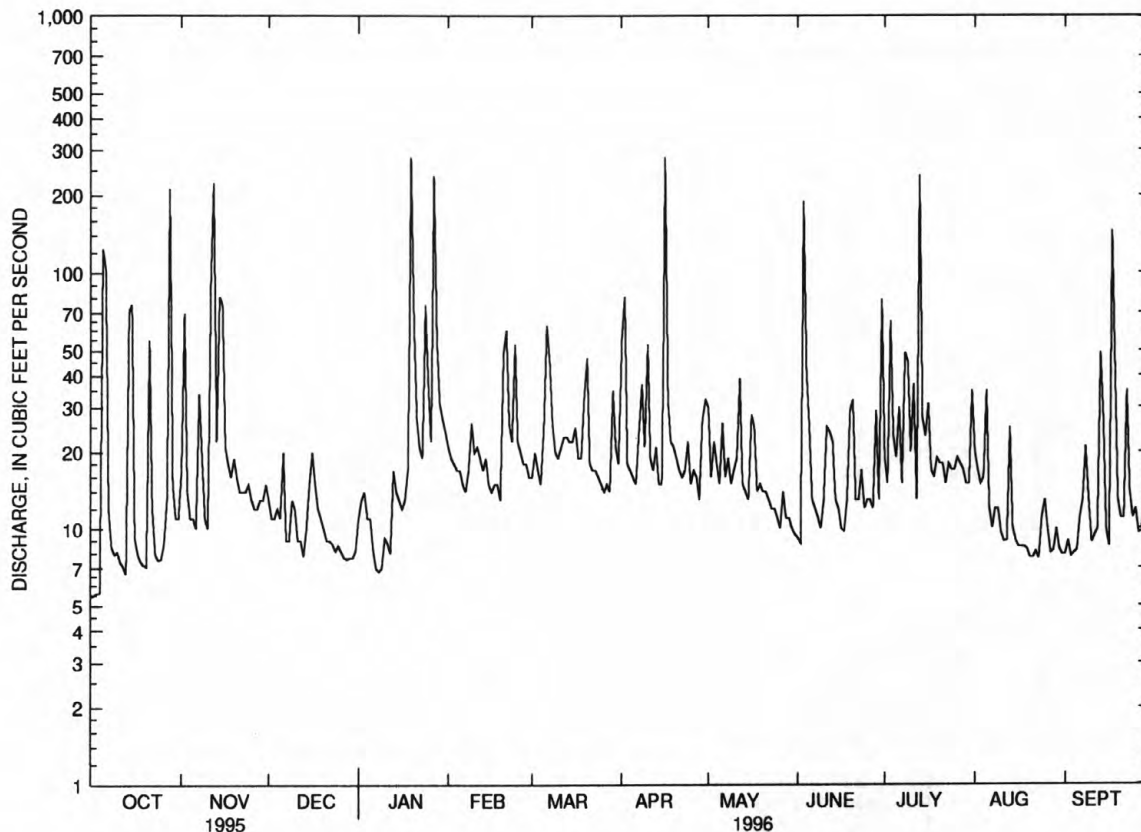
PASSAIC RIVER BASIN

01392210 THIRD RIVER AT PASSAIC, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1977 - 1996
ANNUAL TOTAL	5561.0	8749.5	
ANNUAL MEAN	15.2	23.9	20.8
HIGHEST ANNUAL MEAN			32.7 1978
LOWEST ANNUAL MEAN			12.7 1995
HIGHEST DAILY MEAN	224 Nov 12	282 Jan 19	798 Nov 8 1977
LOWEST DAILY MEAN	3.9 Sep 11	5.4 Oct 1	3.9 Sep 16 1980
ANNUAL SEVEN-DAY MINIMUM	4.2 Aug 24	7.9 Jan 6	4.2 Aug 24 1995
INSTANTANEOUS PEAK FLOW		1420 Jun 3	2300a Nov 8 1977
INSTANTANEOUS PEAK STAGE		6.32 Jun 3	8.25 Nov 8 1977
INSTANTANEOUS LOW FLOW		4.8 Oct 3	.84 Jul 3 1981
ANNUAL RUNOFF (CFSM)	1.29	2.03	1.76
ANNUAL RUNOFF (INCHES)	17.53	27.58	23.94
10 PERCENT EXCEEDS	23	41	38
50 PERCENT EXCEEDS	9.0	15	11
90 PERCENT EXCEEDS	5.2	8.2	6.2

a From rating curve extended above 700 ft³/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

PASSAIC RIVER BASIN

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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 mi².

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, Jan. 6 to Mar. 17, and May 5-11. 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 recorded, 6.40 ft, Dec. 20, 1995; 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, 6.40 ft, Dec. 20; minimum recorded, e-4.0 ft, Mar. 4.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	5.76	6.21	6.40	e5.8	e5.6	e6.2	e5.7	4.82	5.24	5.73	5.65	5.73
high tide	Date	7	15	20	8	17	20	16	30	30	30	28	17
Minimum	Elevation	-2.87	-2.77	-2.46	e-3.3	e-3.6	e-4.0	-2.63	-3.54	-2.93	-2.58	-2.70	-2.32
low tide	Date	29	23	21	20	18	4	17	6	3	5	30	29
Mean high tide		4.07	4.14	3.64	---	---	---	---	---	4.06	4.27	4.25	4.56
Mean water level		1.37	1.49	1.06	---	---	---	---	---	1.35	1.47	1.45	1.90
Mean low tide		-1.46	-1.36	-1.59	---	---	---	---	---	-1.53	-1.48	-1.47	-.93

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 mi². 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, 3,425,000,000 gal, Jan. 29, elevation, 835.80 ft; minimum, 3,137,000,000 gal, Oct. 1, 3-5, 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 mi². 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, 308.37 ft; minimum, 1,445,000,000 gal, Jan. 31, 1981, elevation 274.71 ft.
EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,279,000,000 gal, July 14, elevation, 306.08 ft; minimum, 4,096,000,000 gal, Oct. 5, elevation, 290.71 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 mi². 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 mi². 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 mi². 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 mi². 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. 200
- 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 mi². 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 mi². 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, 7,461,000,000 gal, Oct. 12, gage height, 10.97 ft; minimum, 6,518,000,000 gal, Oct. 3-4, gage height, 9.44 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 mi². 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 mi². 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, 28,200,000,000 gal, Apr. 17, elevation, 302.89 ft; minimum, 10,400,000,000 gal, Oct. 5, elevation, 274.46 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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.....	834.15	3,138	--	291.38	4,237	--	1,085.90	2,396	--
Oct. 31.....	835.00	3,345	+10.3	304.00	7,162	+146.0	1,086.10	2,417	+1.0
Nov. 30.....	835.15	3,335	-5	305.46	7,530	+19.0	1,086.00	2,407	-5
Dec. 31.....	835.05	3,315	-1.0	305.29	7,487	-2.1	1,085.90	2,396	-5
CAL YR 1995			+1				0		
Jan. 31.....	835.55	3,395	+4.0	306.27	7,691	+10.2	1,086.10	2,417	+1.0
Feb. 29.....	835.40	3,385	-5	305.77	7,609	-4.4	1,086.10	2,417	0
Mar. 31.....	835.25	3,355	-1.5	305.66	7,581	-1.4	1,086.10	2,417	0
Apr. 30.....	835.30	3,365	+5	307.69	8,102	+26.9	1,086.20	2,427	+0.5
May 31.....	835.05	3,315	-2.5	307.31	8,004	-4.9	1,086.00	2,407	-1.0
June 30.....	835.00	3,306	-5	306.81	7,875	-6.7	1,086.00	2,407	0
July 31.....	835.05	3,316	+5	307.23	7,983	+5.4	1,086.10	2,417	+5
Aug. 31.....	834.60	3,226	-4.5	304.60	7,313	-33.4	1,086.00	2,407	-5
Sept. 30.....	834.80	3,266	+2.1	305.43	7,523	+10.8	1,086.00	2,407	0
WTR YR 1996			+5				+13.9		
							0		

PASSAIC RIVER BASIN

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

CONTENTS, WHEN YEAR OCTOBER 1995 TO SEPTEMBER 1996									
Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)
01382200 OAK RIDGE RESERVOIR				01382300 CLINTON RESERVOIR			01382380 CHARLOTTEBURG RESER- VOIR		
Sept. 30.....	834.2	2,327	--	973.3	1,390	--	737.60	2,365	--
Oct. 31.....	843.4	3,530	+60.0	978.8	1,932	+27.1	739.20	2,536	+8.5
Nov. 30.....	846.1	3,909	+19.5	987.5	2,934	+51.7	743.05	2,970	+22.4
Dec. 31.....	845.3	3,796	-5.6	989.1	3,147	+10.6	737.80	2,386	-29.1
CAL YR 1995			+4.8	-1.5			-2.1		
Jan. 31.....	846.2	3,924	+6.4	992.2	3,544	+19.8	743.40	3,014	+31.3
Feb. 29.....	846.2	3,924	0	992.1	3,531	-7	743.40	3,014	0
Mar. 31.....	846.0	3,895	-1.4	992.2	3,544	+6	743.25	2,996	-9
Apr. 30.....	846.3	3,938	+2.2	992.3	3,556	+6	743.45	3,021	+1.3
May 31.....	846.0	3,895	-2.1	992.0	3,518	-1.9	741.15	2,748	-13.6
June 30.....	845.9	3,881	-7	992.0	3,518	0	737.60	2,365	-19.8
July 31.....	845.9	3,881	0	992.1	3,531	+6	734.15	2,030	-16.7
Aug. 31.....	844.5	3,683	-9.9	991.2	3,416	-5.7	731.55	1,798	-11.6
Sept. 30.....	843.5	3,544	-7.2	992.1	3,531	+5.9	735.20	2,129	+17.1
WTR YR 1996			+5.1	+9.0			-1.0		
Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)**	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)
01382400 ECHO LAKE				01383000 GREENWOOD LAKE			01384002 MONKSVILLE RESERVOIR		
Sept. 30.....	888.7	1,210	--	9.47	5,437	--	400.0	7,000	--
Oct. 31.....	889.9	1,312	+5.1	10.33	7,065	+81.3	400.0	7,000	0
Nov. 30.....	892.9	1,574	+13.5	10.18	6,972	-4.8	400.0	7,000	0
Dec. 31.....	892.9	1,574	0	10.12	6,934	-1.9	400.0	7,000	0
CAL YR 1995			+4.0	+4.6			0		
Jan. 31.....	893.1	1,592	+9	10.29	7,040	+5.3	400.0	7,000	0
Feb. 29.....	893.1	1,592	0	10.43	7,127	+4.6	400.0	7,000	0
Mar. 31.....	893.1	1,592	0	10.24	7,009	-5.9	400.0	7,000	0
Apr. 30.....	893.1	1,592	0	10.55	7,201	+9.9	400.0	7,000	0
May 31.....	893.0	1,583	-4	10.04	6,885	-15.8	400.0	7,000	0
June 30.....	893.1	1,592	+5	10.05	6,891	+3	400.0	7,000	0
July 31.....	893.4	1,621	+1.4	10.11	6,928	+1.8	400.0	7,000	0
Aug. 31.....	893.2	1,601	-1.0	9.88	6,787	-7.0	400.0	7,000	0
Sept. 30.....	893.4	1,621	+1.0	10.16	6,959	+8.9	400.0	7,000	0
WTR YR 1996			+1.7	+6.4			0		
Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)						
01386990 WANAQUE RESERVOIR									
Sept. 30.....	275.29	12,610	--						
Oct. 31.....	286.75	18,780	+307.9						
Nov. 30.....	294.37	23,740	+255.8						
Dec. 31.....	291.65	21,900	-91.8						
CAL YR 1995			+5.0						
Jan. 31.....	302.63	29,800	+394.3						
Feb. 29.....	302.57	29,670	-6.9						
Mar. 31.....	302.40	29,630	-2.0						
Apr. 30.....	302.56	29,750	+6.2						
May 31.....	301.36	28,830	-45.9						
June 30.....	302.12	29,410	+29.9						
July 31.....	301.15	28,670	-36.9						
Aug. 31.....	295.83	24,750	-195.6						
Sept. 30.....	291.58	21,860	-149.0						
WTR YR 1996			+39.1						

e Estimated.

* Elevation at 0900.

** Gage height at 2400.

† Elevation at 0800 on first day of following month.

PASSAIC RIVER BASIN

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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.
- 01380800 United Water New Jersey 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 of 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 1995 TO SEPTEMBER 1996

MONTH	<u>01379510</u> NJ-American Water Co. from Passaic River	<u>01379530</u> NJ-American Water Co. from Canoe Brook	<u>01380800</u> United Water New Jersey	<u>01382370</u> Newark
October	18.3	10.8	30.5	31.1
November	11.4	13.5	1.19	55.2
December	0	1.16	11.2	78.0
CAL YR 1995	4.80	4.37	60.3	62.7
January	8.91	4.18	30.6	81.8
February	12.7	3.32	0	74.2
March	2.76	3.03	0	71.9
April	8.94	9.44	0	73.5
May	6.95	6.84	0	80.9
June	3.27	8.21	4.46	77.8
July	3.17	7.94	15.8	78.2
August	3.02	3.20	5.45	64.9
September .....	.309	4.58	8.51	39.6
WTR YR 1996	6.62	6.33	9.08	67.3

PASSAIC RIVER BASIN

DIVERSIONS WITHIN PASSAIC RIVER BASIN--Continued

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996, Continued

MONTH	<u>01386980</u> Wanaque Reservoir	<u>01387990</u> Ramapo River to Wanaque Reservoir	<u>01388980</u> Pompton River to Wanaque Reservoir	<u>01388981*</u> Pompton River to Oradell Reservoir	<u>01389490</u> Passaic Valley Water Commission
October.....	216	107	277	32.6	75.5
November.....	171	49.3	0	0	62.6
December.....	175	0	0	10.3	62.1
CAL YR 1995	173	39.4	65.8	30.9	73.7
January.....	208	11.8	42.7	30.4	57.9
February.....	180	0	0	0	60.3
March.....	159	0	0	0	68.7
April.....	169	0	0	0	57.3
May.....	154	0	0	0	75.1
June.....	174	0	134	3.63	81.5
July.....	183	0	0	16.3	76.3
August.....	207	0	0	5.30	76.5
September.....	218	0	0	8.77	74.5
WTR YR 1996	184	14.1	38.1	9.05	69.1

* Diversion is to the Hackensack River Basin.

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 of bridge on Trotters Lane and 3.8 mi upstream from mouth.

DRAINAGE AREA.--16.9 mi².

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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0145	1,510	18.88	June 3	1700	*2,120	*19.63
Jan. 19	1645	1,790	19.24				

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	4.1	36	7.6	7.4	13	8.9	16	30	8.0	38	26	5.7
2	4.3	163	6.5	17	12	18	52	16	7.6	15	12	6.1
3	4.7	21	6.2	16	12	13	19	24	418	43	9.6	6.2
4	4.6	11	6.5	9.5	11	9.4	15	17	60	16	8.3	6.2
5	180	7.4	6.3	7.4	11	27	13	13	30	9.7	9.2	6.0
6	131	7.3	24	6.5	10	79	11	25	13	8.3	14	43
7	12	73	7.2	5.7	9.9	106	26	15	11	8.0	8.7	30
8	6.8	21	6.7	7.4	12	36	43	21	10	77	7.3	82
9	5.9	9.3	21	9.2	32	19	27	14	9.4	30	12	31
10	5.4	7.1	12	8.1	15	17	84	15	13	14	8.3	12
11	5.2	114	7.6	7.1	13	16	20	13	27	8.8	8.4	8.0
12	4.8	277	6.9	14	11	15	16	22	39	7.9	8.4	7.0
13	5.2	26	6.3	21	9.7	13	16	15	41	166	75	18
14	35	70	13	15	15	12	12	12	18	37	12	24
15	87	82	22	16	9.9	19	12	11	12	21	8.0	8.7
16	14	22	30	11	9.1	13	273	18	9.5	27	7.9	7.2
17	7.9	13	12	15	10	10	45	22	9.0	13	7.4	66
18	6.5	11	8.2	23	9.7	10	22	14	10	11	7.0	57
19	6.0	23	8.2	517	8.5	21	17	13	78	22	7.1	18
20	5.7	10	8.3	84	58	63	15	13	20	17	7.3	11
21	102	9.3	8.0	29	65	22	14	15	13	9.6	7.8	8.5
22	16	8.2	8.3	19	21	16	13	12	29	9.7	7.1	16
23	8.1	7.6	8.4	16	15	14	14	12	32	13	27	14
24	6.1	14	7.9	103	50	12	22	10	13	9.5	26	8.9
25	5.5	7.7	7.2	35	14	12	14	9.2	11	8.9	11	10
26	5.0	7.3	7.1	17	12	11	16	8.8	8.7	17	7.1	7.5
27	6.4	7.3	6.7	311	11	9.7	15	15	7.3	11	6.5	7.0
28	302	6.7	6.6	58	14	9.7	11	10	15	8.1	6.2	7.2
29	23	13	6.3	24	10	63	25	9.8	7.6	7.9	6.1	18
30	11	8.1	6.4	17	---	21	31	8.9	80	8.1	6.1	13
31	7.6	---	6.4	16	---	14	---	8.4	---	89	5.9	---
TOTAL	1028.8	1093.3	305.8	1462.3	503.8	729.7	929	462.1	1060.1	781.5	380.7	563.2
MEAN	33.2	36.4	9.86	47.2	17.4	23.5	31.0	14.9	35.3	25.2	12.3	18.8
MAX	302	277	30	517	65	106	273	30	418	166	75	82
MIN	4.1	6.7	6.2	5.7	8.5	8.9	11	8.4	7.3	7.9	5.9	5.7

ELIZABETH RIVER BASIN

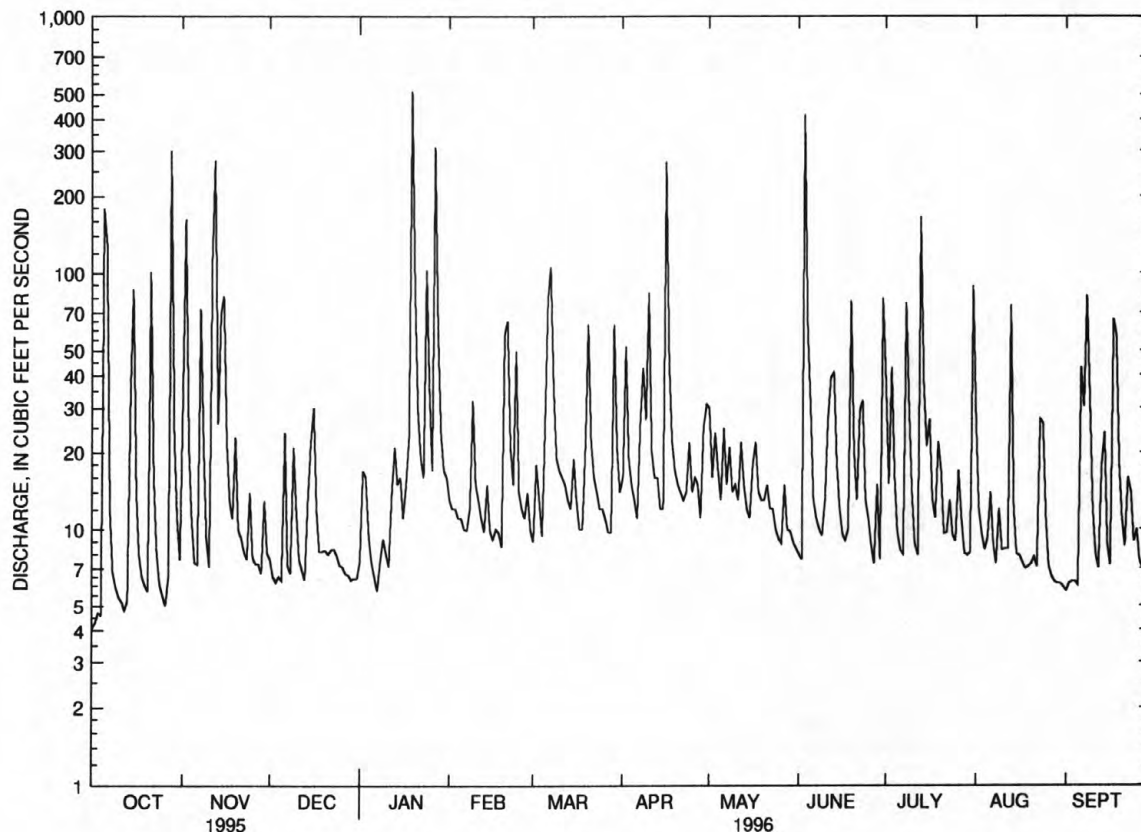
01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	20.3	24.8	23.1	23.5	26.1	32.0	29.5	26.8	23.0	27.0	27.7	25.2
MAX	60.1	90.6	85.1	86.3	55.1	75.5	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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1922 - 1996	
ANNUAL TOTAL	7476.1		9300.3			
ANNUAL MEAN	20.5		25.4		25.7	
HIGHEST ANNUAL MEAN					48.3	
LOWEST ANNUAL MEAN					10.2	
HIGHEST DAILY MEAN	454	Jul 18	517	Jan 19	1900	Aug 28 1971
LOWEST DAILY MEAN	4.1	Oct 1	4.1	Oct 1	.00	Jul 14 1922
ANNUAL SEVEN-DAY MINIMUM	5.3	Sep 28	6.0	Aug 30	.00	Aug 7 1923
INSTANTANEOUS PEAK FLOW			2120	Jun 3	4110	Aug 28 1971
INSTANTANEOUS PEAK STAGE			19.63	Jun 3	18.7a	Aug 28 1971
INSTANTANEOUS LOW FLOW			3.2	Jan 7	.00	Many days
10 PERCENT EXCEEDS	40		51		51	
50 PERCENT EXCEEDS	8.8		12		11	
90 PERCENT EXCEEDS	5.5		6.6		5.5	

a From floodmark, site and datum then in use, from rating curve extended above 1,100 ft³/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, ELIZABETH, NJ, DAILY MEAN DISCHARGE

ELIZABETH RIVER BASIN

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01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT ATION) (00301)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY BROTH (MG/L) (00310)	COLI-FORM, FECAL, EC (MPN) (31615)	ENTEROCOCCUS, ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)
OCT 1995 30...	1150	10	515	7.9	12.5	768	10.0	93	<1.0	1300	160	160
JAN 1996 18...	1050	14	3010	7.5	4.5	770	10.8	83	6.0	>24000	2500	200
MAR 19...	1105	9.7	1170	8.0	9.0	755	11.7	103	2.2	1100	200	260
MAY 20...	1115	13	892	8.1	20.5	752	9.7	110	E1.5	1700	<100	260
JUL 15...	1100	16	543	7.7	22.5	760	6.6	77	<1.2	1700	500	170
DATE	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CaCO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT 1995 30...	52	8.3	30	2.7	106	37	61	0.1	13	284	276	2
JAN 1996 18...	64	9.2	480	6.0	75	37	780	0.2	7.9	1580	1440	8
MAR 19...	82	13	110	2.8	148	50	230	0.1	13	638	600	3
MAY 20...	81	13	70	3.1	145	53	150	0.1	13	524	479	7
JUL 15...	54	8.0	42	2.7	104	28	80	0.1	13	340	296	1
DATE	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, DIS-SOLVED (MG/L AS N) (00602)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
OCT 1995 30...	0.015	1.80	<0.03	<0.03	0.40	0.33	2.2	2.1	0.07	0.04	5.4	0.3
JAN 1996 18...	0.102	1.40	0.49	0.55	1.4	1.3	2.8	2.7	0.06	0.05	5.2	0.6
MAR 19...	0.043	2.30	0.08	<0.03	0.50	0.32	2.8	2.6	0.06	0.01	3.0	0.4
MAY 20...	0.059	2.10	0.07	<0.03	0.40	0.31	2.5	2.4	0.09	0.04	3.3	0.4
JUL 15...	0.025	1.40	<0.03	<0.03	0.60	0.45	2.0	1.9	0.10	0.05	6.0	0.4

ELIZABETH RIVER BASIN

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 30...	1150	18	1	<10	90	<1	2	14
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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 30...		270	2	40	<0.1	5	<1	30

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 mi².

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. 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.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0545	1,150	5.72	Jan. 27	1830	1,330	6.14
Jan. 19	1915	*1,530	*6.55	Apr. 16	0915	1,140	5.71

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	6.0	32	16	10	33	20	95	48	13	69	21	9.6
2	6.5	216	15	19	28	25	251	22	13	21	16	9.9
3	6.5	37	14	21	27	23	40	41	303	36	15	9.5
4	7.0	19	15	13	23	18	28	27	115	21	14	9.5
5	140	16	14	10	19	38	24	21	52	16	22	9.5
6	159	15	27	9.1	19	151	21	43	20	14	25	41
7	10	67	11	8.4	18	170	44	24	17	15	13	41
8	8.1	42	11	8.8	21	72	78	36	16	80	12	140
9	7.8	15	20	12	50	41	48	20	14	34	13	22
10	8.0	17	17	11	39	35	162	24	21	16	13	12
11	8.2	79	11	10	34	34	51	46	69	15	12	11
12	8.7	532	11	12	28	38	30	77	44	15	12	11
13	9.0	50	9.9	22	20	42	29	25	62	407	56	104
14	39	207	13	15	23	47	22	18	37	58	13	27
15	160	305	24	15	19	47	18	17	20	32	12	12
16	10	51	31	12	18	40	603	83	15	41	11	11
17	8.2	29	16	16	20	29	92	46	14	21	11	238
18	7.6	22	13	22	17	26	51	22	15	19	11	96
19	8.6	31	12	687	15	84	40	19	68	74	10	22
20	11	18	12	338	86	218	33	17	21	26	10	16
21	132	16	11	68	164	51	29	17	16	18	10	14
22	18	15	11	44	68	36	26	15	42	16	11	42
23	9.2	16	11	33	45	30	36	15	39	18	25	17
24	8.7	22	11	225	108	26	37	14	14	16	24	14
25	10	14	11	146	43	24	22	13	14	15	14	14
26	9.2	13	11	48	30	21	22	14	14	27	10	12
27	9.6	14	9.9	546	26	20	23	16	13	19	9.9	12
28	331	14	9.4	242	28	19	19	13	17	12	9.7	18
29	30	21	9.5	64	23	96	56	14	14	13	9.5	82
30	16	16	9.6	46	---	46	89	14	167	14	9.5	14
31	13	---	9.6	40	---	36	---	13	---	92	9.5	---
TOTAL	1215.9	1961	426.9	2773.3	1092	1603	2119	834	1299	1290	464.1	1091.0
MEAN	39.2	65.4	13.8	89.5	37.7	51.7	70.6	26.9	43.3	41.6	15.0	36.4
MAX	331	532	31	687	164	218	603	83	303	407	56	238
MIN	6.0	13	9.4	8.4	15	18	18	13	13	12	9.5	9.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	17.2	27.6	29.8	30.6	33.8	47.6	42.7	34.0	23.9	24.6	22.9	21.2
MAX	65.3	107	129	116	77.7	120	139	112	110	138	112	100
(WY)	1990	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

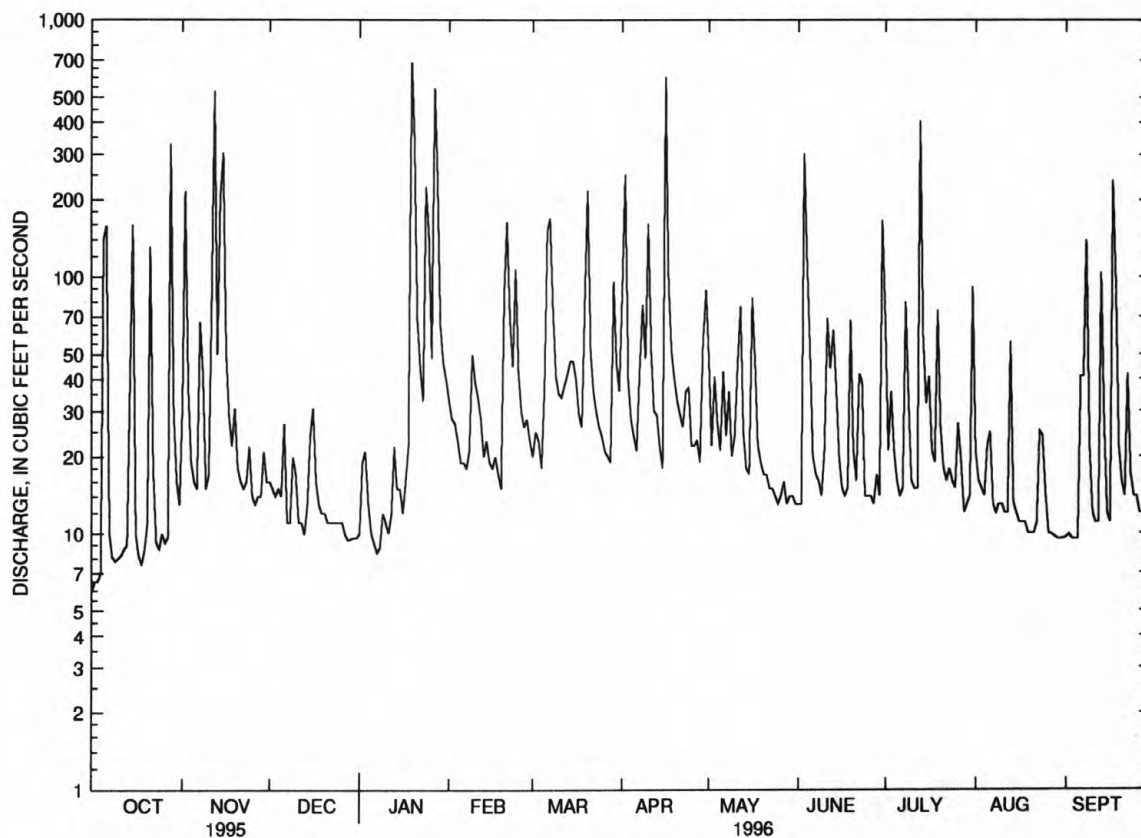
RAHWAY RIVER BASIN

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1939 - 1996	
ANNUAL TOTAL	9006.5		16169.2			
ANNUAL MEAN	24.7		44.2		29.6	
HIGHEST ANNUAL MEAN					55.9	1973
LOWEST ANNUAL MEAN					10.0	1965
HIGHEST DAILY MEAN	532	Nov 12	687	Jan 19	1620	Aug 28 1971
LOWEST DAILY MEAN	5.0	Aug 20	6.0	Oct 1	.40	Sep 11 1966
ANNUAL SEVEN-DAY MINIMUM	5.4	Aug 23	8.5	Oct 7	.71	Oct 8 1970
INSTANTANEOUS PEAK FLOW			1530	Jan 19	5430a	Aug 2 1973
INSTANTANEOUS PEAK STAGE			6.55	Jan 19	9.76b	Aug 2 1973
INSTANTANEOUS LOW FLOW			5.4	Jan 7	.10	Sep 11 1966
10 PERCENT EXCEEDS	40		87		59	
50 PERCENT EXCEEDS	9.6		20		10	
90 PERCENT EXCEEDS	6.1		10		3.4	

a From rating curve extended above 1,600 ft³/s on basis of slope-area measurement of peak flow.

b From floodmark.



01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ, DAILY MEAN DISCHARGE

RAHWAY RIVER BASIN

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01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 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 1995 TO SEPTEMBER 1996

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 (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY BROTH (MG/L) (00310)	COLI-FORM, FECAL, EC (MPN) (31615)	ENTERO-COCCI ME, MF TOTAL (COL / 100 ML) (31649)	HARD-NESS (MG/L AS CACO3) (00900)
OCT 1995 24...	0955	7.8	618	7.5	12.0	765	7.2	67	E1.7	<200	400	200
JAN 1996 31...	1041	40	762	7.8	4.0	757	10.9	84	<1.0	3500	250	170
MAR 25...	0940	25	865	7.8	7.5	763	12.0	100	E1.5	330	30	200
MAY 29...	0931	14	725	7.6	14.0	756	7.0	69	E1.2	1300	200	230
JUL 22...	0938	14	685	7.8	19.5	759	6.1	67	<1.1	1300	400	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)	ALKA-LINITY 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 AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1995 24...	61	12	35	2.6	127	31	82	0.1	18	352	329	<1
JAN 1996 31...	50	11	75	2.2	80	27	150	<0.1	15	396	388	6
MAR 25...	62	12	80	1.9	95	31	180	<0.1	13	466	444	2
MAY 29...	71	13	51	2.2	118	33	120	0.1	16	--	384	7
JUL 22...	61	13	45	2.3	119	32	110	0.1	18	398	361	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 1995 24...	0.012	2.50	0.05	<0.03	0.20	0.10	2.7	2.6	0.04	<0.01	3.4	0.3
JAN 1996 31...	0.010	2.30	0.04	0.04	0.40	0.27	2.7	2.6	0.05	0.02	2.9	0.3
MAR 25...	0.011	1.50	<0.03	<0.03	0.19	0.21	1.7	1.7	0.05	<0.01	2.6	0.4
MAY 29...	0.044	1.60	0.12	0.11	0.40	0.44	2.0	2.0	0.07	0.05	2.4	0.5
JUL 22...	0.027	1.80	0.14	0.09	0.30	0.33	2.1	2.1	0.03	0.02	2.4	0.5

RAHWAY RIVER BASIN

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 24...	0955	14	<1	<10	90	<1	<1	3
MAY 1996 29...	0931	18	<1	<10	70	<1	1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 24...	320	2	70	<0.1	2	<1	<10
MAY 1996 29...	430	2	150	<0.1	1	<1	10

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 mi².

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 of gage in Cranford, and Taylor Park Dam 11.6 mi upstream of 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	0430	670	3.32	Apr. 2	0415	655	3.29
Oct. 15	0330	639	3.26	Apr. 16	1215	1,090	4.04
Oct. 28	0845	810	3.58	June 3	1930	845	3.64
Nov. 12	0400	1,000	3.91	June 19	1830	787	3.54
Nov. 15	0030	706	3.39	July 13	1715	644	3.27
Jan. 19	1730	*1,790	*5.03	July 31	1330	754	3.48
Jan. 27	1830	1,170	4.17	Sept. 8	1915	701	3.38
Mar. 20	0630	644	3.27	Sept. 13	2200	649	3.28

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	4.7	18	14	11	37	26	59	135	14	243	55	6.5
2	24	329	14	19	e36	31	412	41	13	31	7.6	8.0
3	12	67	11	31	e35	35	77	74	277	44	17	6.8
4	5.5	23	11	19	e30	26	49	63	367	48	16	7.3
5	130	15	11	12	e25	32	39	34	74	20	16	6.9
6	289	12	34	e9.0	e25	196	36	69	29	16	23	41
7	24	59	12	e8.6	e24	290	45	44	21	15	19	98
8	12	102	10	e8.9	25	154	139	74	21	67	13	171
9	7.2	20	16	e16	59	61	71	35	17	159	16	142
10	7.0	13	28	e16	64	45	242	33	29	20	15	13
11	6.7	53	11	e13	43	46	95	55	119	11	10	9.4
12	6.1	820	8.7	e15	35	49	55	188	109	28	11	10
13	5.8	180	9.2	27	e24	52	49	41	128	403	112	131
14	16	160	12	21	e26	54	39	27	40	199	23	101
15	288	541	27	21	25	60	34	25	43	41	12	13
16	19	97	44	18	20	64	715	106	19	74	11	9.9
17	10	29	32	19	21	36	330	96	16	21	12	355
18	7.7	25	16	30	21	33	79	36	18	16	10	283
19	7.6	42	17	715	18	61	57	30	178	46	8.6	34
20	30	22	17	928	86	397	49	25	75	69	9.0	19
21	168	19	14	149	218	75	42	22	25	16	9.1	15
22	91	17	14	43	105	48	37	22	21	15	12	56
23	12	14	12	38	68	37	37	19	89	19	10	32
24	1.8	25	12	177	133	31	75	19	20	16	54	14
25	.77	16	12	278	67	27	34	17	17	14	21	16
26	4.5	14	13	86	39	27	31	17	16	24	9.2	e11
27	27	13	12	395	35	24	34	24	14	21	8.3	e10
28	467	13	10	715	36	24	27	19	14	12	8.0	e12
29	95	16	9.2	133	31	133	44	19	14	12	7.6	e97
30	15	20	9.4	65	---	76	138	16	173	13	7.6	e26
31	2.4	---	10	47	---	46	---	15	---	230	7.0	---
TOTAL	1796.77	2794	482.5	4083.5	1411	2296	3170	1440	2010	1963	570.0	1754.8
MEAN	58.0	93.1	15.6	132	48.7	74.1	106	46.5	67.0	63.3	18.4	58.5
MAX	467	820	44	928	218	397	715	188	367	403	112	355
MIN	.77	12	8.7	8.6	18	24	27	15	13	11	7.0	6.5

RAHWAY RIVER BASIN

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	27.1	43.7	46.5	50.7	57.6	78.7	68.7	52.3	36.8	41.1	39.3	36.0
MAX	130	221	255	211	156	190	246	199	173	268	242	175
(WY)	1928	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 1995 CALENDAR YEAR

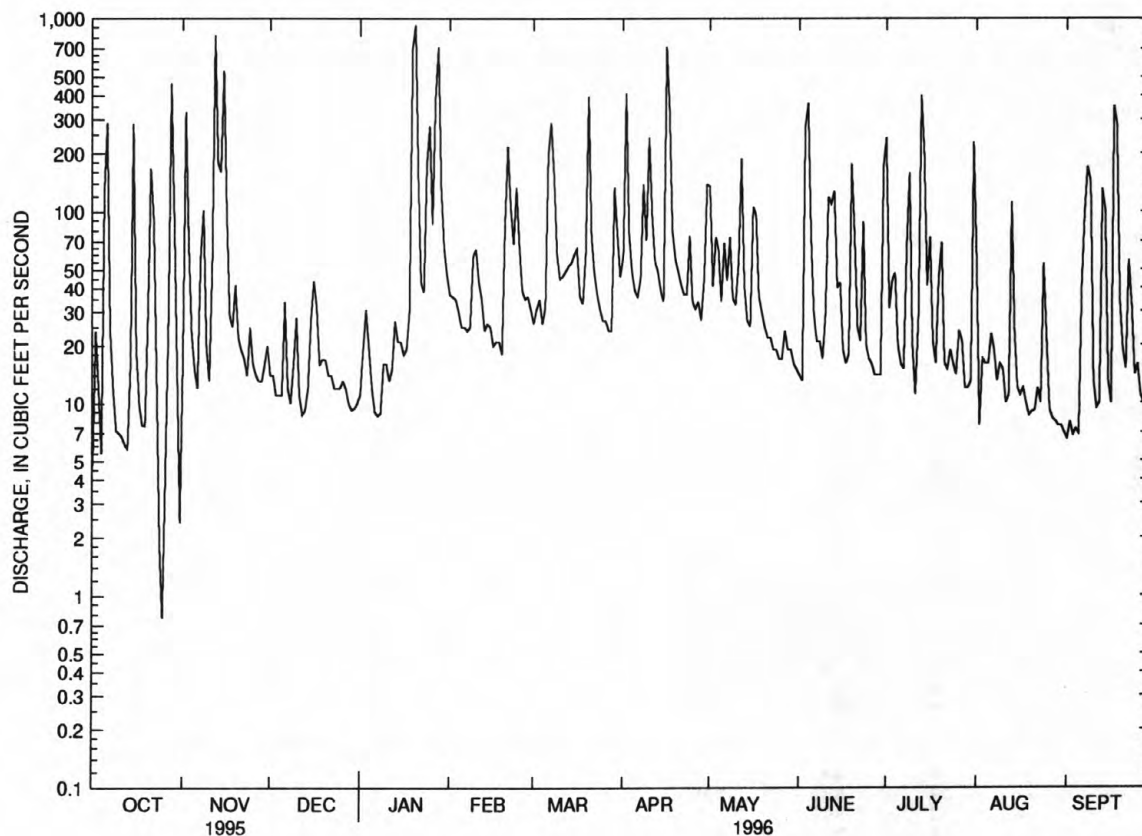
FOR 1996 WATER YEAR

WATER YEARS 1922 - 1996

ANNUAL TOTAL	12989.37		23771.57									
ANNUAL MEAN	35.6		64.9					48.2				
HIGHEST ANNUAL MEAN								105			1973	
LOWEST ANNUAL MEAN								15.0			1965	
HIGHEST DAILY MEAN	820	Nov 12	928	Jan 20	3450	Aug 28	1971					
LOWEST DAILY MEAN	.77	Oct 25	.77	Oct 25	.00	Oct 9	1964					
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 1	7.2	Aug 30	.00	Jul 10	1981					
INSTANTANEOUS PEAK FLOW			1790	Jan 19	5420a	Aug 2	1973					
INSTANTANEOUS PEAK STAGE			5.03	Jan 19	7.88	Aug 2	1973					
INSTANTANEOUS LOW FLOW			.66	Oct 24								
10 PERCENT EXCEEDS	68		155		99							
50 PERCENT EXCEEDS	13		25		18							
90 PERCENT EXCEEDS	4.4		9.7		3.3							

a From rating curve extended above 3,000 ft³/s.

e Estimated.



01395000 RAHWAY RIVER AT RAHWAY, NJ, DAILY MEAN DISCHARGE

RAHWAY RIVER BASIN

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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.

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 1995 TO SEPTEMBER 1996

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 1995 23...	1035	13	252	7.2	13.5	769	8.7	83	E1.6	920
FEB 1996 01...	1025	36	702	7.9	2.0	768	13.0	93	E1.3	490
MAR 25...	1200	28	782	8.4	9.0	763	14.5	126	2.7	40
MAY 29...	1215	22	669	7.6	15.5	759	8.5	86	3.0	220
JUL 22...	1200	14	367	7.8	21.5	761	6.8	77	2.2	170
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)	ALKA-LINITY 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 1995 23...	1100	80	25	4.2	13	2.3	56	19	23	<0.1
FEB 1996 01...	<100	170	50	9.9	70	1.6	75	36	130	0.1
MAR 25...	40	180	57	10	75	1.8	99	34	160	<0.1
MAY 29...	110	220	70	12	44	2.2	128	39	98	0.1
JUL 22...	50	120	36	6.3	22	1.8	77	24	46	<0.1
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 1995 23...	7.7	150	130	--	0.008	0.50	0.04	0.04	0.50	
FEB 1996 01...	6.1	390	358	3	0.010	2.10	0.04	0.04	0.40	
MAR 25...	11	432	414	8	0.011	1.30	<0.03	0.07	0.30	
MAY 29...	15	412	362	12	0.048	1.00	0.07	0.09	0.60	
JUL 22...	10	228	196	12	0.020	0.88	0.11	0.09	0.50	

RAHWAY RIVER BASIN

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 1995 23...	0.24	1.0	0.74	0.13	0.07	5.0	0.9	14	0.50
FEB 1996 01...	0.30	2.5	2.4	0.06	0.03	2.9	0.3	--	--
MAR 25...	0.18	1.6	1.5	0.07	<0.01	3.0	0.8	--	--
MAY 29...	0.44	1.6	1.4	0.10	0.04	2.8	0.8	--	--
JUL 22...	0.36	1.4	1.2	0.08	0.04	4.0	0.6	--	--

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 TOTAL RECOV- ERABLE (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 1996 29...	1215	15	1	<10	80	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
MAY 1996 29...	670	5	390	<0.1	1	<1	<10

01396000 ROBINSONS BRANCH AT RAHWAY, NJ

LOCATION.--Lat 40°36'20", long 74°17'57", Union County, Hydrologic Unit 02030104, on right bank of Milton Lake, 2,000 ft upstream from Maple Avenue in Rahway, 3,200 ft downstream from Middlesex Reservoir Dam, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--21.6 mi².

PERIOD OF RECORD.--September 1939 to current year. September 1939 to September 1978, published as "Robinsons Branch Rahway River at Rahway." October 1978 to September 1985, published as "Robinsons Branch Rahway River at Maple Avenue, at Rahway" (station 01396001).

REVISED RECORDS.--WDR NJ-75-1: 1973(P). WDR NJ-87-1: 1986(M).

GAGE.--Water-stage recorder. Datum of gage is 19.99 ft above sea level (levels from New Jersey Geological Survey bench mark). From Sept. 26, 1978 to Sept. 30, 1985, water-stage recorder 2,000 ft downstream at Maple Avenue at datum 8.69 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water diverted for municipal supply by Middlesex Water Co., from Middlesex Reservoir, capacity, 89,000,000 gal, 1.0 mi above station. No diversion this year. Several measurements of water temperature were made during the year.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	0630	458	4.58	Mar. 19	2400	587	4.69
Nov. 12	0245	725	4.79	Apr. 16	0930	640	4.73
Nov. 15	0015	526	4.64	June 19	1730	710	4.78
Jan. 19	1615	*1,650	*5.32	July 31	1230	817	4.85
Jan. 27	1645	958	4.94	Sept. 8	1645	696	4.77

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	1.2	15	26	21	24	10	57	e71	e5.6	60	145	.97
2	1.1	161	31	40	19	16	216	e28	e5.1	21	49	1.3
3	1.2	74	17	57	16	18	79	e39	e142	23	19	1.2
4	1.5	36	27	45	12	9.5	38	e33	e179	22	11	1.3
5	89	11	26	33	9.0	21	31	e19	e62	8.6	19	1.1
6	137	5.8	52	23	6.2	123	21	e34	e19	4.7	10	12
7	42	41	32	26	5.3	197	29	e23	e11	3.1	7.3	33
8	13	79	21	32	8.2	129	79	e35	e9.4	66	4.8	157
9	3.4	32	37	21	41	50	49	e20	e7.5	165	24	113
10	2.4	13	57	26	e30	32	151	e17	e12	54	26	40
11	2.0	38	33	21	e25	30	71	e23	e44	16	8.4	12
12	1.9	351	21	28	e16	31	33	e69	e61	6.1	3.8	3.6
13	1.8	116	17	e41	e11	29	23	e27	e78	230	88	86
14	22	151	25	e32	e9.8	24	20	e15	e28	140	42	70
15	153	298	52	e30	e10	31	13	e12	e20	71	17	14
16	47	113	72	e27	e9.7	46	357	e37	e11	138	9.7	3.7
17	13	41	65	e30	e7.5	24	159	e46	e7.1	54	6.8	195
18	4.0	23	48	e44	e6.0	20	51	e22	7.3	23	3.9	160
19	2.8	41	43	625	e5.0	66	30	e16	142	48	2.7	39
20	2.8	25	40	450	36	291	24	e13	100	47	2.5	10
21	129	21	34	162	111	102	22	e11	35	19	5.6	4.1
22	68	17	30	53	71	40	16	e10	18	12	12	22
23	31	12	29	38	52	25	e18	e8.7	17	17	5.7	13
24	13	37	32	113	73	17	e32	e8.1	10	12	22	5.1
25	11	21	29	126	43	16	e19	e7.3	14	7.5	6.0	5.3
26	23	13	28	53	28	13	e16	e6.9	6.1	23	3.8	3.0
27	6.6	11	24	312	22	9.2	e16	e10	2.6	15	3.5	2.4
28	247	14	21	264	22	8.6	e12	e8.2	2.8	4.3	2.7	5.1
29	92	22	20	92	14	80	e21	e8.0	2.4	3.1	1.9	74
30	28	33	19	43	---	73	e54	e6.8	83	3.7	1.6	17
31	8.2	---	18	33	---	40	---	e9.1	---	218	1.4	---
TOTAL	1198.9	1865.8	1026	2941	742.7	1621.3	1757	693.1	1141.9	1535.1	566.1	1105.17
MEAN	38.7	62.2	33.1	94.9	25.6	52.3	58.6	22.4	38.1	49.5	18.3	36.8
MAX	247	351	72	625	111	291	357	71	179	230	145	195
MIN	1.1	5.8	17	21	5.0	8.6	12	6.8	2.4	3.1	1.4	.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

MEAN	13.1	26.1	28.6	31.2	34.9	45.8	37.6	30.2	17.6	19.4	17.6	16.6
MAX	60.3	98.8	142	118	77.0	108	129	116	76.8	143	90.9	118
(WY)	1959	1973	1984	1979	1973	1953	1983	1989	1972	1975	1942	1975
MIN	.22	.48	1.03	.87	7.24	8.49	.45	.27	.15	.000	.13	.020
(WY)	1954	1965	1966	1966	1954	1981	1963	1963	1957	1954	1953	1955

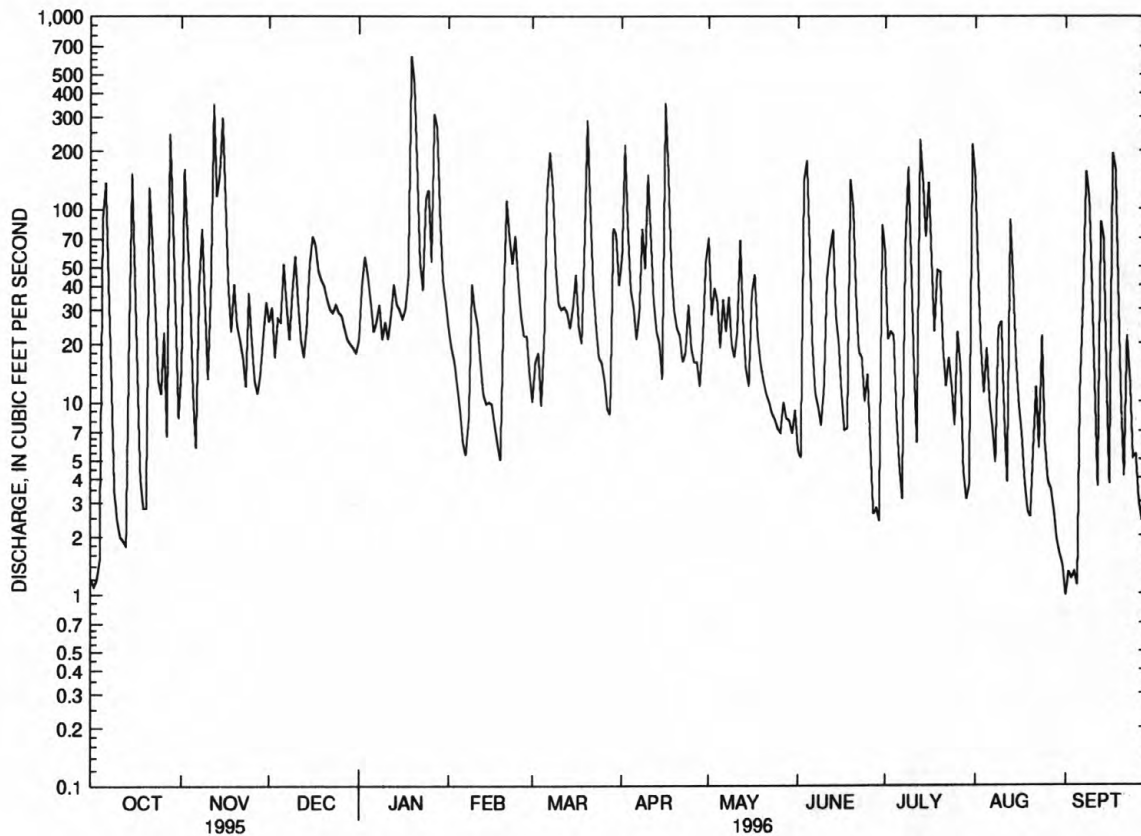
RAHWAY RIVER BASIN

01396000 ROBINSONS BRANCH AT RAHWAY, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1940 - 1996	
ANNUAL TOTAL	9792.11		16194.07			
ANNUAL MEAN	26.8		44.2		26.5	
HIGHEST ANNUAL MEAN					52.2	1984
LOWEST ANNUAL MEAN					5.79	1965
HIGHEST DAILY MEAN	351	Nov 12	625	Jan 19	1240	Jul 15 1975
LOWEST DAILY MEAN	.34	Sep 8	.97	Sep 1	.00	Jan 9 1942
ANNUAL SEVEN-DAY MINIMUM	.36	Sep 3	1.3	Aug 30	.00	Oct 5 1947
INSTANTANEOUS PEAK FLOW			1650	Jan 19	3110a	Jul 15 1975
INSTANTANEOUS PEAK STAGE			5.32	Jan 19	6.02	Aug 15 1969
INSTANTANEOUS LOW FLOW			.85	Sep 5	.00	Sep 17 1992
10 PERCENT EXCEEDS	61		113		59	
50 PERCENT EXCEEDS	13		23		7.8	
90 PERCENT EXCEEDS	1.2		4.0		.65	

a From rating curve extended above 750 ft³/s on basis of flow-over-dam computation.

e Estimated.



01396000 ROBINSONS BRANCH AT RAHWAY, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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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 mi².

PERIOD OF RECORD.--Water years 1964-65, 1967, 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 1995 TO SEPTEMBER 1996

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 BROTH (MG/L) (00310)	COLI-FORM, FECAL, EC (MPN) (31615)	ENTERO-COCCI ME,MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
OCT 1995 23...	1130	89	218	7.8	10.0	755	10.3	92	E1.4	230	90	69	
JAN 1996 16...	1045	52	333	7.9	0.0	760	15.3	105	E1.3	20	10	96	
MAR 19...	1130	100	261	--	6.5	752	13.1	108	E1.3	80	10	74	
MAY 15...	1145	100	245	8.4	12.0	756	12.3	115	E1.9	490	20	78	
JUL 15...	1130	105	214	7.7	20.0	746	8.1	91	<1.0	3500	1900	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)	ALKA-LINITY LAB 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 1995 23...	16	7.1	12		1.5	49	11	23	<0.1	13	130	119	<1
JAN 1996 16...	22	10	29		1.5	65	12	49	<0.1	14	164	185	3
MAR 19...	17	7.7	19		1.2	51	11	37	<0.1	9.8	138	139	2
MAY 15...	18	8.0	14		1.1	53	12	30	<0.1	9.7	154	129	<1
JUL 15...	16	6.8	14		1.5	47	9.5	25	<0.1	11	138	116	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-SOLVED (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 1995 23...	0.007	1.40	<0.03	<0.03		0.30	0.23	1.7	1.6	0.04	0.04	5.1	0.5
JAN 1996 16...	0.013	2.00	<0.03	<0.03		0.19	0.17	2.2	2.2	0.06	0.07	1.8	0.3
MAR 19...	0.004	1.40	<0.03	<0.03		0.15	0.08	1.6	1.5	0.04	0.03	1.6	0.5
MAY 15...	0.004	1.10	<0.03	<0.03		0.18	0.10	1.3	1.2	0.04	0.01	2.1	0.6
JUL 15...	0.008	0.96	<0.03	<0.03		0.50	0.35	1.5	1.3	0.08	0.02	4.7	1.2

01396280 SOUTH BRANCH RARITAN RIVER AT MIDDLE VALLEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	PH	OXYGEN	NITRO-	NITRO-	PHOS-	ARSENIC		BERYL-	BORON,	CADMIUM
		SED BED MAT (STD UNITS) (70310)	DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	GEN,NH4 TOTAL TOT IN BOT MAT (MG/KG AS N) (00626)	PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL (UG/L AS AS) (01002)	IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	TOTAL RECOV- ERABLE (UG/L AS B) (01022)	TOTAL RECOV- ERABLE (UG/L AS CD) (01027)
OCT 1995											
23...	1130	--	11	--	--	--	1	--	<10	30	<1
23...	1130	7.4	--	3.0	140	260	--	<1	--	--	--
MAY 1996											
15...	1145	--	11	--	--	--	<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/L UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. 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 1995										
23...	--	<1	--	--	2	--	270	--	<1	--
23...	<1	--	6	<5	--	5	--	8000	--	<10
MAY 1996										
15...	--	<1	--	--	<1	--	180	--	<1	--

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS HG) (71921)	NICKEL, RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS NI) (01068)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/L AS SE) (01147)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) AS SE) (01148)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS ZN) (01093)	
	OCT 1995										
	23...	10	--	<0.1	--	<1	--	<1	--	<10	--
	23...	--	190	--	0.01	--	<10	--	<1	--	50
	MAY 1996										
15...	20	--	<0.1	--	<1	--	<1	--	<10	--	

[illegible][illegible]

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 mi².

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 except for estimated daily discharges, which are poor. Occasional regulation from unknown source. Several measurements of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Outstanding 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 ft³/s, 3,840 ft³/s, and 2,670 ft³/s.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	0430	1,040	8.49	Jan. 24	2315	1,240	8.73
Oct. 21	1415	1,290	8.78	Jan. 27	2145	2,750	10.00
Nov. 12	1100	1,410	8.91	Apr. 16	1515	1,030	8.47
Jan. 19	2400	*3,440	*10.44	July 13	2045	1,730	9.22

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	30	103	107	73	e260	172	199	515	91	117	113	42
2	28	253	108	78	e240	171	626	251	88	77	88	41
3	27	172	99	85	e220	166	275	225	88	69	80	39
4	28	127	100	78	e180	150	228	219	98	67	81	38
5	180	108	98	71	e170	161	213	198	150	64	76	37
6	736	100	106	104	e160	310	195	227	106	59	72	40
7	152	113	96	181	e170	328	206	200	97	56	69	52
8	88	173	90	256	180	229	260	192	87	66	67	61
9	68	116	e77	461	204	186	217	180	83	172	68	59
10	61	99	e66	468	201	169	220	173	106	131	72	46
11	56	112	e63	424	203	166	198	211	96	77	64	43
12	52	877	e75	403	195	173	174	453	114	65	62	42
13	50	265	e88	393	146	192	183	218	101	899	68	56
14	65	289	e103	344	144	220	169	184	86	422	68	68
15	260	560	118	299	140	221	158	169	81	201	63	49
16	101	274	95	244	132	233	657	190	74	284	61	47
17	75	218	98	246	130	175	355	203	71	148	60	123
18	65	194	93	232	127	164	248	169	75	116	58	176
19	59	187	e70	1530	117	169	222	160	79	135	55	88
20	57	171	e65	1450	154	428	209	147	90	129	54	65
21	832	160	e80	421	564	243	197	136	83	95	55	57
22	367	148	e100	303	355	205	182	129	84	89	56	63
23	163	137	e102	256	300	182	175	124	89	97	53	67
24	124	136	e100	622	367	169	181	120	75	93	57	57
25	107	126	e95	651	282	163	162	112	72	85	54	54
26	96	122	e84	324	233	157	156	107	65	166	50	51
27	91	118	e68	1320	212	147	150	112	61	113	48	49
28	352	114	73	1070	214	145	139	110	59	88	48	48
29	183	117	73	478	190	241	275	107	58	83	47	123
30	123	112	71	e370	---	235	493	102	118	89	44	69
31	103	---	72	e300	---	204	---	95	---	107	43	---
TOTAL	4779	5801	2733	13535	6190	6274	7322	5738	2625	4459	1954	1850
MEAN	154	193	88.2	437	213	202	244	185	87.5	144	63.0	61.7
MAX	832	877	118	1530	564	428	657	515	150	899	113	176
MIN	27	99	63	71	117	145	139	95	58	56	43	37
CFSM	2.36	2.96	1.35	6.69	3.27	3.10	3.74	2.83	1.34	2.20	.97	.94
IN.	2.72	3.30	1.56	7.71	3.53	3.57	4.17	3.27	1.50	2.54	1.11	1.05

RARITAN RIVER BASIN

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1996, BY WATER YEAR (WY)

MEAN	73.5	110	132	141	153	204	193	143	97.0	85.3	76.7	71.3
MAX	257	335	382	480	301	466	528	337	401	295	285	195
(WY)	1928	1928	1974	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

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

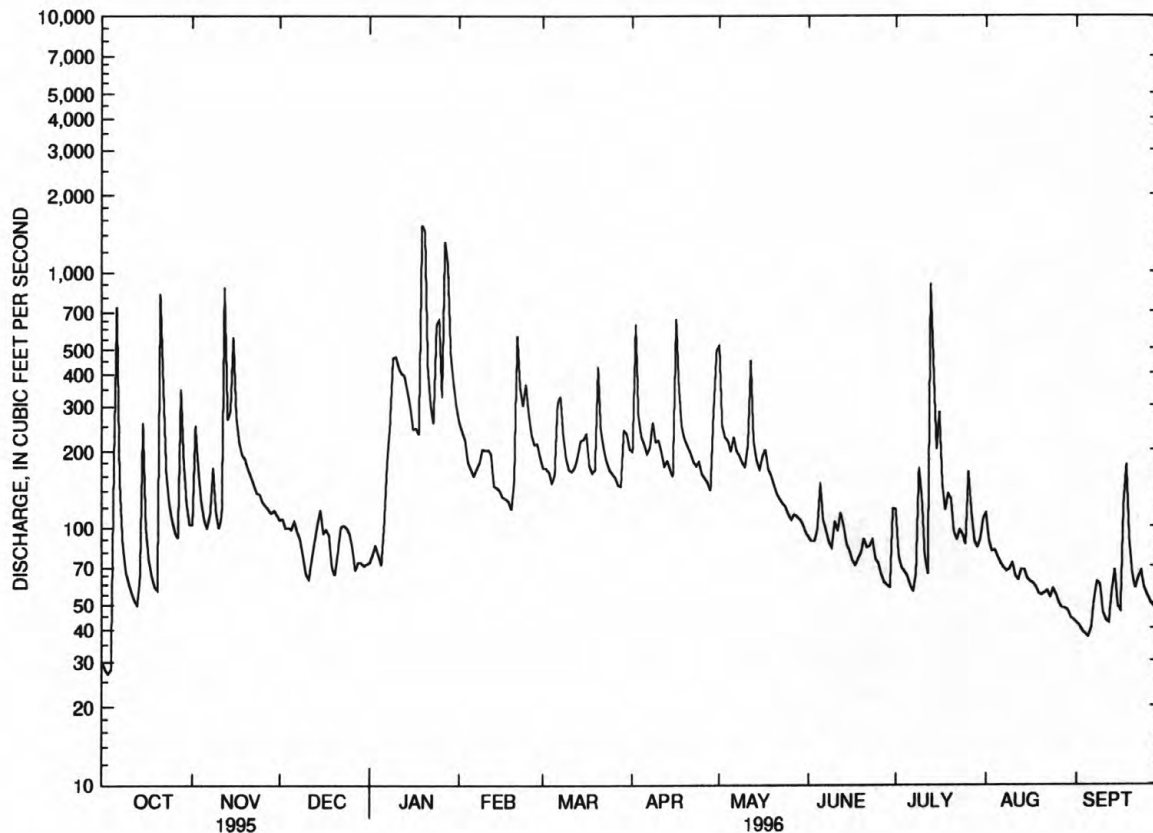
FOR 1996 WATER YEAR

WATER YEARS 1919 - 1996

ANNUAL TOTAL	36348			63260								
ANNUAL MEAN	99.6			173					123			
HIGHEST ANNUAL MEAN									213			1928
LOWEST ANNUAL MEAN									46.2			1965
HIGHEST DAILY MEAN	892	Mar 9		1530	Jan 19				3340	Jan 25		1979
LOWEST DAILY MEAN	18	Sep 2		27	Oct 3				13	Aug 11		1966
ANNUAL SEVEN-DAY MINIMUM	18	Sep 2		40	Aug 31				18	Aug 11		1965
INSTANTANEOUS PEAK FLOW				3440	Jan 19				6910	Jan 25		1979
INSTANTANEOUS PEAK STAGE				10.44	Jan 19				14.26a	Jan 28		1994
INSTANTANEOUS LOW FLOW				26	Oct 3				6.6	Oct 11		1930
ANNUAL RUNOFF (CFSM)	1.53			2.65					1.88			
ANNUAL RUNOFF (INCHES)	20.71			36.04					25.61			
10 PERCENT EXCEEDS	169			305					236			
50 PERCENT EXCEEDS	82			118					86			
90 PERCENT EXCEEDS	28			56					36			

a Result of ice jam.

e Estimated.



01396500 S B RARITAN RIVER NEAR HIGH BRIDGE, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

195

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 mi².

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 1995 TO SEPTEMBER 1996

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 1995	23...	1200	152	191	8.1	10.5	766	10.7	95	E1.7	230	65	
JAN 1996	16...	1315	E280	302	8.0	0.0	766	14.8	101	E1.5	80	91	
MAR 19...	1145	147	249	8.1	7.0	747	12.3	103	2.0	50	30	76	
MAY 16...	1130	173	232	8.0	12.0	758	10.3	96	E1.6	490	70	79	
JUL 16...	1130	315	180	--	21.0	757	8.7	98	E1.4	9200	1400	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)	ALKA-LINITY 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 1995	23...	15	6.6	9.0	1.5	47	12	18	<0.1	13	122	109	3
JAN 1996	16...	20	10	18	1.2	66	12	37	0.1	13	152	159	5
MAR 19...	17	8.1	17	17	1.1	56	12	32	<0.1	9.0	132	136	4
MAY 16...	18	8.3	12	12	1.2	57	12	24	<0.1	10	150	125	3
JUL 16...	13	5.6	11	11	1.6	42	9.3	19	<0.1	11	116	99	36
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-SOLVED (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 1995	23...	0.005	1.40	<0.03	<0.03	0.20	0.21	1.6	1.6	0.04	0.01	4.9	0.5
JAN 1996	16...	0.009	1.80	<0.03	<0.03	0.10	0.13	1.9	1.9	0.03	0.03	1.4	0.3
MAR 19...	0.007	1.30	<0.03	<0.03	<0.03	0.17	0.11	1.5	1.4	0.02	0.01	1.7	0.8
MAY 16...	0.007	1.10	<0.03	<0.03	<0.03	0.19	0.11	1.3	1.2	0.04	0.03	1.9	0.6
JUL 16...	0.009	0.76	<0.03	<0.03	<0.03	0.70	0.32	1.5	1.1	0.10	0.02	4.9	2.2

01396535 SOUTH BRANCH RARITAN RIVER AT ARCH STREET, AT HIGH BRIDGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	PH	OXYGEN	NITRO-	NITRO-	PHOS-		ARSENIC	BERYL-		CADMIUM
		SED	DEMAND,	GEN,NH4	GEN,NH4	PHORUS		TOTAL	LUM,	BORON,	
		BED MAT	CHEM-	TOTAL	TOTAL	TOTAL		IN BOT-	TOTAL	TOTAL	
		(STD	ICAL	IN BOT.	TOT IN	IN BOT.	ARSENIC	TOM MA-	RECOV-	RECOV-	RECOV-
		UNITS)	(HIGH	MAT.	MAT.	MAT.	TOTAL	TERIAL	ERABLE	ERABLE	ERABLE
		(MG/L)	(MG/KG	(MG/KG	(MG/KG	(UG/L	(UG/G	(UG/L	(UG/L	(UG/L	
		(70310)	(00340)	(00611)	(00626)	(00668)	(01002)	(01003)	(01012)	(01022)	(01027)
OCT 1995											
23...	1200	--	14	--	--	--	<1	--	<10	<10	<1
23...	1200	7.8	--	3.6	100	230	--	2	--	--	--
MAY 1996											
16...	1130	--	21	--	--	--	<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/L AS CO) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01038)	COPPER, RECOV. TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)
OCT 1995										
23...	--	<1	--	--	<1	--	260	--	<1	--
23...	<1	--	20	<5	--	30	--	15000	--	20
MAY 1996										
16...	--	<1	--	--	1	--	290	--	<1	--

DATE	MANGA- NESE, TOTAL RECOVER- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY TOTAL RECOVER- ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS HG) (71921)	NICKEL, TOTAL RECOVER- ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS NI) (01068)	SELE- NIUM, TOTAL RECOVER- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, TOTAL RECOVER- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS ZN) (01093)
OCT 1995										
23...	30	--	<0.1	--	<1	--	<1	--	<10	--
23...	--	860	--	<0.01	--	20	--	<1	--	80
MAY 1996										
16...	30	--	<0.1	--	1	--	<1	--	<10	--

[illegible][illegible]

RARITAN RIVER BASIN

197

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 mi².

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 upstream. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	0315	1,320	5.62	Jan. 27	1245	877	4.63
Oct. 21	0315	1,400	5.84	Apr. 16	0800	529	3.89
Nov. 12	0100	1,020	4.90	July 13	0730	977	4.82
Jan. 19	1600	*1,460	*6.02				

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	3.1	20	e14	e8.2	e35	e24	64	61	e13	21	16	6.9
2	3.1	65	e13	e12	e32	e24	80	39	e13	13	8.7	6.9
3	3.1	30	e11	e14	e30	e23	29	39	e14	12	7.6	6.9
4	3.0	22	e11	e9.8	e27	29	27	38	e15	12	7.6	6.9
5	70	19	e10	e6.8	e24	32	27	36	e21	e9.7	7.3	7.1
6	242	18	e12	e3.8	e22	62	28	41	e14	e8.3	7.3	9.3
7	e21	28	e11	e3.4	e21	51	33	35	11	e7.6	7.3	14
8	e16	36	e10	e3.8	e22	36	36	36	11	21	7.3	13
9	e11	20	e11	e4.1	e40	31	29	35	12	41	7.1	13
10	e11	17	e11	e3.3	e37	32	30	35	14	22	7.0	12
11	e10	23	e9.0	e3.0	e41	32	28	68	13	12	7.0	11
12	e9.0	176	e8.5	e3.0	e30	33	28	81	13	12	7.0	11
13	e9.0	28	e8.2	e4.2	25	40	28	e38	15	264	7.1	14
14	59	57	e9.7	e4.3	25	44	28	e31	13	24	7.0	17
15	51	62	e11	e4.0	25	43	27	e28	13	19	7.0	13
16	e15	e33	e15	e3.4	25	40	154	36	13	18	6.8	12
17	e13	e26	e16	e2.9	25	30	53	33	13	11	6.6	29
18	e12	e23	e13	3.8	26	31	41	e27	13	8.9	6.6	27
19	e11	e23	e12	452	26	38	38	e26	14	20	6.6	15
20	e10	e20	e14	45	36	82	36	e23	14	17	6.5	12
21	493	e18	e12	e36	105	40	35	e21	13	8.7	7.1	11
22	e54	e17	e12	e29	58	34	32	e20	27	8.1	8.1	14
23	e27	e16	e11	26	47	e27	32	e19	22	11	8.2	14
24	e21	e19	e12	111	59	e25	34	e17	13	8.3	9.4	12
25	e19	e15	e11	e91	38	e24	32	e16	14	7.3	9.0	12
26	19	e15	e10	e46	33	e22	32	e16	e11	56	8.2	11
27	18	e14	e9.1	272	31	e21	32	e18	e10	16	7.9	10
28	78	e13	e8.5	e98	33	e22	32	e17	e9.7	9.5	7.9	16
29	27	e14	e8.6	e60	29	64	81	e16	e9.1	8.2	7.5	33
30	20	e13	e6.7	e50	---	50	106	e15	36	9.1	7.2	15
31	18	---	e6.8	e44	---	37	---	e14	---	14	7.2	---
TOTAL	1376.3	900	338.1	1457.8	1007	1123	1292	975	436.8	729.7	239.1	405.0
MEAN	44.4	30.0	10.9	47.0	34.7	36.2	43.1	31.5	14.6	23.5	7.71	13.5
MAX	493	176	16	452	105	82	154	81	36	264	16	33
MIN	3.0	13	6.7	2.9	21	21	27	14	9.1	7.3	6.5	6.9
CFSM	3.93	2.65	.97	4.16	3.07	3.21	3.81	2.78	1.29	2.08	.68	1.19
IN.	4.53	2.96	1.11	4.80	3.32	3.70	4.25	3.21	1.44	2.40	.79	1.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

	MEAN	12.2	19.4	22.4	27.2	26.1	37.2	36.8	24.9	14.8	12.3	6.69	8.71
MAX	44.4	34.6	49.2	106	44.7	83.5	73.7	61.3	31.4	46.9	11.4	29.5	
(WY)	1996	1986	1984	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	

RARITAN RIVER BASIN

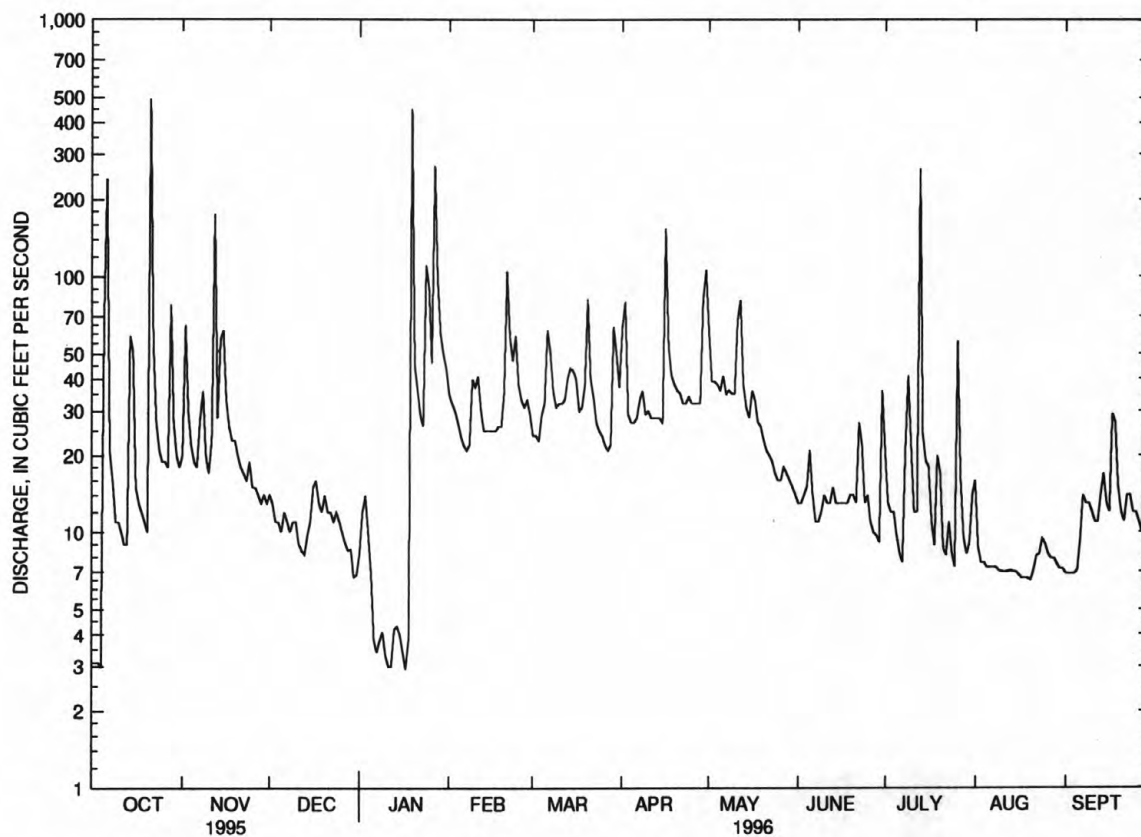
01396580 SPRUCE RUN AT GLEN GARDNER, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1978 - 1996	
ANNUAL TOTAL	5727.1		10279.8			
ANNUAL MEAN	15.7		28.1		21.1	
HIGHEST ANNUAL MEAN					33.2	
LOWEST ANNUAL MEAN					11.3	
HIGHEST DAILY MEAN	493	Oct 21	493	Oct 21	570	Jan 21 1979
LOWEST DAILY MEAN	1.4	Aug 23	2.9	Jan 17	1.2	Oct 1 1982
ANNUAL SEVEN-DAY MINIMUM	1.5	Aug 20	3.5	Jan 6	1.5	Oct 1 1982
INSTANTANEOUS PEAK FLOW			1460a	Jan 19	1820a	Jan 24 1979
INSTANTANEOUS PEAK STAGE			6.02	Jan 19	7.60b	Jan 24 1979
INSTANTANEOUS LOW FLOW			2.8	Jan 17	1.1	Oct 1 1982
ANNUAL RUNOFF (CFSM)	1.39		2.49		1.86	
ANNUAL RUNOFF (INCHES)	18.85		33.84		25.34	
10 PERCENT EXCEEDS	23		50		41	
50 PERCENT EXCEEDS	9.9		17		11	
90 PERCENT EXCEEDS	2.9		7.1		3.8	

a From rating curve extended above 700 ft³/s on basis of slope-conveyance computation.

b From high-water mark.

c Estimated.



01396580 SPRUCE RUN AT GLEN GARDNER, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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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 of 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 mi².

PERIOD OF RECORD.--Water years 1979 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 1995 TO SEPTEMBER 1996

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 1995													
25...	1145	E25	170	7.8	12.5	760	10.0	94	E1.9	1100	20	52	
JAN 1996													
17...	1030	E4.0	186	8.0	1.5	758	14.6	105	<1.0	70	<10	54	
MAR													
20...	1130	100	158	7.6	5.5	739	12.3	101	2.1	230	80	40	
MAY													
23...	1200	44	--	8.1	17.0	751	10.0	--	E1.3	60	10	54	
JUL													
17...	1130	16	186	7.9	19.5	754	8.8	97	<1.0	1100	130	57	
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)	ALKA-LINITY 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 1995													
25...	13	4.7	9.3	1.4	30	16	17	0.1	16	112	99	3	
JAN 1996													
17...	13	5.3	11	1.0	29	14	22	<0.1	16	108	109	6	
MAR													
20...	9.8	3.8	12	1.0	20	13	21	<0.1	12	94	89	5	
MAY													
23...	13	5.2	11	1.2	32	16	19	<0.1	16	122	104	<1	
JUL													
17...	14	5.4	11	1.4	35	14	19	0.1	17	122	106	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-SOLVED (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 1995													
25...	0.003	0.72	<0.03	<0.03	0.11	0.08	0.83	0.80	0.03	0.01	2.6	0.2	
JAN 1996													
17...	0.012	2.00	0.04	<0.03	0.20	0.34	2.2	2.3	0.11	0.11	2.2	0.4	
MAR													
20...	0.004	0.93	<0.03	<0.03	0.20	0.16	1.1	1.1	0.03	<0.01	2.6	0.4	
MAY													
23...	0.005	0.80	<0.03	<0.03	0.18	0.11	0.98	0.91	0.03	<0.01	1.5	0.3	
JUL													
17...	0.003	0.81	<0.03	<0.03	0.50	0.24	1.3	1.0	0.05	<0.01	3.7	1.1	

01396588 SPRUCE RUN NEAR GLEN GARDNER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	PH	OXYGEN	NITRO-	NITRO-	PHOS-		ARSENIC	BERYL-		CADMIUM
		SED	DEMAND,	GEN,NH4	GEN,NH4	PHORUS		TOTAL	LIUM,	BORON,	
		BED MAT	CHEM-	TOTAL	TOTAL	TOTAL		IN BOT-	TOTAL	TOTAL	TOTAL
		(STD	ICAL	IN BOT.	TOT IN	IN BOT.	ARSENIC	TOM MA-	RECOV-	RECOV-	RECOV-
UNITS)	(HIGH	MAT.	(MG/KG	(MG/KG	(MG/KG	TOTAL	TERIAL	ERABLE	ERABLE	ERABLE	
(70310)	(MG/L)	AS N)	AS N)	AS P)	(UG/L	AS AS)	AS AS)	AS BE)	AS B)	AS CD)	
		(00340)	(00611)	(00626)	(00668)	(01002)	(01003)	(01012)	(01022)	(01027)	
OCT 1995											
25...	1145	--	<10	--	--	--	<1	--	<10	<10	<1
25...	1145	7.5	--	3.9	<20	230	--	<1	--	--	--
MAY 1996											
23...	1200	--	<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, RECOV. TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS CU) (01043)	IRON, RECOV. TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS FE) (01170)	LEAD, RECOV. TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS PB) (01052)
OCT 1995										
25...	--	<1	--	--	5	--	160	--	<1	--
25...	<1	--	8	<5	--	10	--	11000	--	<10
MAY 1996										
23...	--	<1	--	--	1	--	70	--	<1	--

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS HG) (71921)	NICKEL, RECOV. TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, TOTAL RECOV- ERABLE (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 1995										
	25...	20	--	--	--	<1	--	<1	--	<10	--
	25...	--	180	--	<0.01	--	<10	--	<1	--	40
	MAY 1996										
23...	<10	--	<0.1	--	<1	--	<1	--	<10	--	

[illegible][illegible]

RARITAN RIVER BASIN

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01396588 SPRUCE RUN NEAR GLEN GARDNER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
MAY 1996 23...	1200	FIELD BLANK	<1	<1	<0.1	<1	<1

RARITAN RIVER BASIN

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 mi².

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 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 5	1830	332	2.71	Jan. 27	1630	790	3.98
Oct. 6	0245	1,010	4.43	Apr. 1	2230	426	3.02
Oct. 21	1330	1,100	4.58	Apr. 16	0745	577	3.49
Nov. 11	2400	767	3.93	May 11	2230	315	2.65
Jan. 19	1630	*1,990	*5.83	June 22	1900	1,830	5.63
Jan. 24	1700	309	2.63	July 13	1145	881	4.17

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	3.6	16	14	12	35	24	71	56	12	17	e18	4.6
2	3.5	58	13	15	33	24	117	33	12	11	e11	4.4
3	3.3	23	12	16	31	23	42	36	12	11	e10	4.2
4	3.6	17	12	12	28	21	36	32	12	10	e10	4.3
5	85	14	11	10	25	28	36	28	17	8.4	e8.4	4.4
6	162	13	13	7.5	22	60	33	37	11	7.4	e8.8	6.8
7	15	25	12	e5.5	22	53	48	28	10	7.0	e8.4	7.5
8	9.9	24	11	e8.1	22	33	50	31	11	8.8	e8.1	5.8
9	7.6	15	12	e9.3	39	26	39	31	13	26	e8.3	5.4
10	6.6	13	11	e9.1	35	24	40	27	16	11	e8.3	4.6
11	6.0	51	9.8	e8.1	40	26	32	77	15	7.5	e7.7	4.4
12	5.5	141	9.5	e9.4	28	32	29	74	15	6.9	e7.9	4.6
13	5.2	29	9.4	e8.4	21	35	28	34	14	255	e9.5	7.8
14	27	52	11	e8.2	21	32	27	29	27	34	e8.2	7.5
15	39	69	12	e9.2	21	30	25	26	15	30	e9.5	4.7
16	12	28	16	e8.4	19	28	178	34	14	33	8.9	4.5
17	8.3	23	16	12	20	23	50	30	14	e17	11	39
18	7.2	21	13	13	18	23	38	26	13	e14	7.9	21
19	6.8	21	12	505	17	38	35	24	15	e24	7.1	7.8
20	7.3	19	14	126	25	75	33	22	16	e17	6.9	5.9
21	343	18	e11	52	99	33	31	20	13	e11	6.7	5.2
22	42	17	e13	39	60	28	29	19	196	e10	6.6	12
23	20	16	e11	34	46	25	29	18	46	e13	6.4	8.3
24	16	19	e12	149	64	24	28	17	16	e12	7.7	6.4
25	13	15	e9.8	78	38	23	26	16	16	e9.5	6.1	6.3
26	12	15	e10	42	31	22	25	16	10	77	5.5	5.2
27	12	14	11	306	29	21	24	17	8.9	e13	5.3	5.0
28	54	13	11	86	30	22	23	16	8.2	e11	5.4	14
29	19	14	10	57	25	83	64	15	7.8	e9.2	5.1	30
30	14	13	9.9	49	---	41	97	14	36	e11	4.7	8.3
31	12	---	10	43	---	29	---	13	---	e23	4.6	---
TOTAL	981.4	826	362.4	1747.2	944	1009	1363	896	641.9	755.7	248.0	259.9
MEAN	31.7	27.5	11.7	56.4	32.6	32.5	45.4	28.9	21.4	24.4	8.00	8.66
MAX	343	141	16	505	99	83	178	77	196	255	18	39
MIN	3.3	13	9.4	5.5	17	21	23	13	7.8	6.9	4.6	4.2
CFSM	2.68	2.33	.99	4.78	2.76	2.76	3.85	2.45	1.81	2.07	.68	.73
IN.	3.09	2.60	1.14	5.51	2.98	3.18	4.30	2.82	2.02	2.38	.78	.82

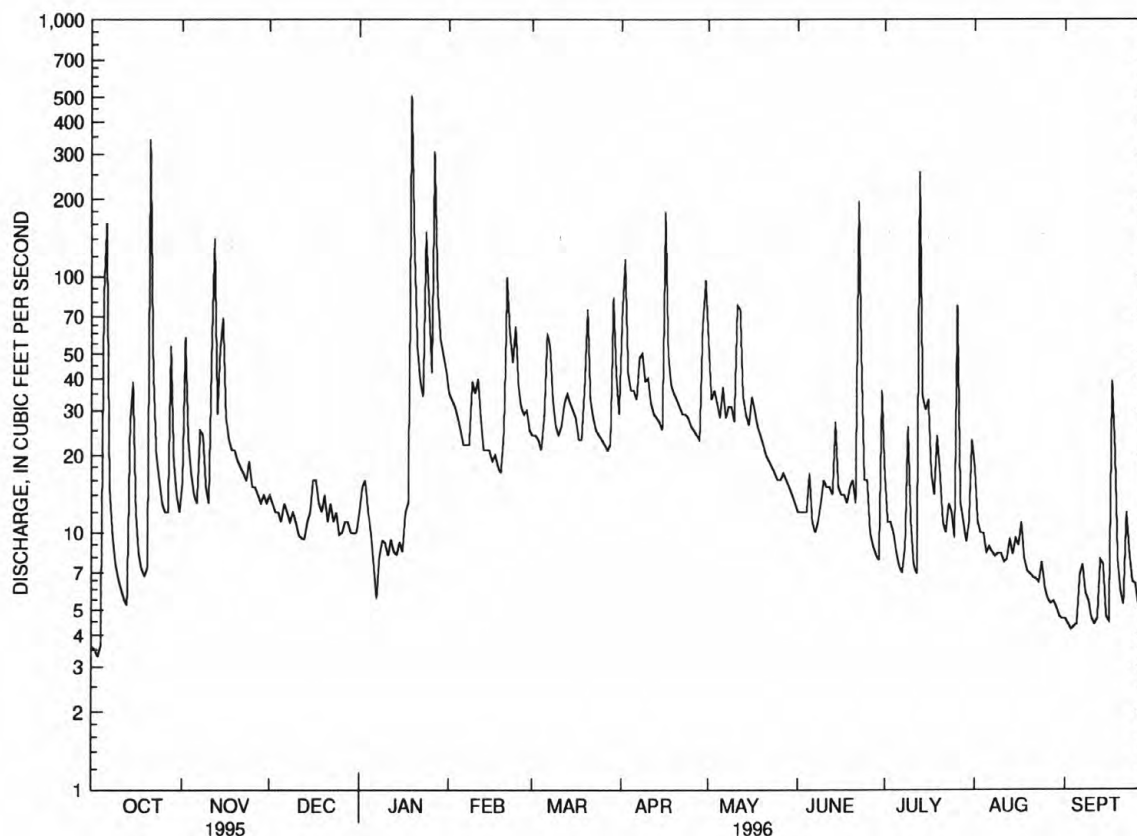
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1996, BY WATER YEAR (WY)

MEAN	11.9	17.5	20.4	24.9	24.2	32.3	36.0	26.6	18.0	13.0	8.87	8.98
MAX	35.6	32.6	47.9	79.2	40.2	76.8	94.1	59.2	61.1	53.2	25.3	22.8
(WY)	1990	1986	1984	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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1977 - 1996	
ANNUAL TOTAL	5589.9		10034.5			
ANNUAL MEAN	15.3		27.4		20.2	
HIGHEST ANNUAL MEAN					35.2	1984
LOWEST ANNUAL MEAN					11.1	1992
HIGHEST DAILY MEAN	343	Oct 21	505	Jan 19	700	Apr 5 1984
LOWEST DAILY MEAN	1.4	Aug 25	3.3	Oct 3	1.4	Aug 25 1995
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 1	4.5	Aug 30	1.4	Sep 1 1995
INSTANTANEOUS PEAK FLOW			1990	Jan 19	3590	Sep 20 1989
INSTANTANEOUS PEAK STAGE			5.83	Jan 19	7.41	Sep 20 1989
INSTANTANEOUS LOW FLOW			3.2	Oct 2	1.1	Sep 23 1980
ANNUAL RUNOFF (CFSM)	1.30		2.32		1.71	
ANNUAL RUNOFF (INCHES)	17.62		31.63		23.29	
10 PERCENT EXCEEDS	24		50		39	
50 PERCENT EXCEEDS	11		16		12	
90 PERCENT EXCEEDS	2.7		6.7		4.3	

e Estimated.



— 01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, 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 1995 TO SEPTEMBER 1996

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 AS CACO3 (00900)	
OCT 1995													
24...	1200	16	200	7.9	12.5	758	10.0	94	E1.9	1100	80	70	
JAN 1996													
17...	1330	11	380	8.0	2.0	758	14.8	108	<1.0	110	<10	84	
MAR													
20...	1130	55	225	7.5	5.5	735	11.8	97	2.1	80	60	53	
MAY													
22...	1130	20	188	8.1	17.5	747	9.6	102	E1.0	1100	300	65	
JUL													
16...	1130	27	201	7.7	20.0	754	8.2	91	<1.0	5400	1400	64	
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)	ALKA-LINITY LAB 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 1995													
24...	18	6.1	9.2	1.6	53	15	14	<0.1	14	120	116	<1	
JAN 1996													
17...	22	7.1	40	1.1	49	15	68	0.1	14	192	202	1	
MAR													
20...	14	4.4	20	1.3	31	13	37	<0.1	11	126	122	6	
MAY													
22...	17	5.4	9.6	1.2	44	15	18	<0.1	14	116	110	2	
JUL													
16...	17	5.3	11	1.6	50	12	17	<0.1	14	134	110	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-SOLVED (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 1995													
24...	0.003	1.50	<0.03	<0.03	0.13	0.10	1.6	1.6	<0.01	0.02	2.6	0.2	
JAN 1996													
17...	0.010	1.10	0.04	<0.03	0.12	0.15	1.2	1.2	<0.01	0.01	1.2	0.2	
MAR													
20...	0.004	0.72	<0.03	<0.03	0.17	0.13	0.89	0.85	0.02	<0.01	2.4	0.4	
MAY													
22...	0.004	0.66	<0.03	<0.03	0.17	0.22	0.83	0.88	<0.01	<0.01	1.5	0.2	
JUL													
16...	0.005	0.58	<0.03	<0.03	0.20	0.21	0.78	0.79	0.02	0.01	3.3	0.3	

RARITAN RIVER BASIN

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01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 IN BOT- TOM MA- TERIAL (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 TOTAL RECOV- ERABLE (UG/L AS CD) (01027)
OCT 1995											
24...	1200	--	<10	--	--	--	<1	--	<10	30	<1
24...	1200	7.5	--	2.5	60	170	--	<1	--	--	--
DATE		CADMIUM 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 1995											
24...		--	<1	--	--	4	--	130	--	<1	--
24...		<1	--	4	<5	--	4	--	5800	--	<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 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 RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01148)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)
OCT 1995											
24...		20	--	<0.1	--	<1	--	<1	--	<10	--
24...		--	120	--	<0.01	--	<10	--	<1	--	20
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 1995											
24...		--	--	--	--	--	--	--	--	--	--
24...		<0.1	2.8	<2	<1	<0.1	<1	<0.1	<0.1	<0.1	<0.1
DATE		ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)	ENDO- SULFAN 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, TOTAL IN BOT- TOM MA- TERIAL (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. TOTAL SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1995											
24...		--	--	--	--	--	--	--	--	--	--
24...		<0.1	<0.1	<0.1	<0.1	<0.1	<0.8	<0.1	<1	<10	1

RARITAN RIVER BASIN

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 mi².

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. New Jersey Water Supply Authority gage-height telemeter at station.

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	113	8.0	9.4	95	204	124	140	307	26	56	123	127
2	120	8.2	8.7	95	184	124	461	162	30	39	79	138
3	114	7.3	9.1	95	180	126	206	132	33	37	56	141
4	59	6.1	8.9	95	178	124	157	136	43	46	54	150
5	25	5.5	8.9	122	221	123	150	117	88	23	43	150
6	10	7.0	8.9	146	258	53	129	136	53	17	35	133
7	4.7	8.0	8.9	163	258	8.1	149	119	40	29	30	121
8	3.4	7.6	8.6	214	258	43	199	117	36	62	28	120
9	3.0	7.8	9.2	214	258	43	159	112	31	68	33	67
10	39	8.9	8.8	214	243	18	185	106	36	61	45	62
11	56	9.9	56	214	238	60	124	141	110	26	23	80
12	33	12	92	197	239	91	101	375	71	19	19	94
13	21	9.2	92	185	203	112	96	167	10	601	33	107
14	18	8.4	92	183	182	128	107	120	12	315	32	63
15	9.0	8.3	50	182	163	128	81	107	28	148	27	49
16	8.0	7.9	9.4	163	136	137	479	119	22	162	25	78
17	8.6	7.9	9.1	150	136	95	294	134	20	89	28	41
18	9.8	7.9	9.1	69	135	91	169	111	24	60	33	8.3
19	9.8	7.8	9.6	20	134	98	144	103	32	75	46	7.1
20	9.7	7.5	51	15	59	263	135	98	43	87	59	4.9
21	21	7.5	92	12	8.5	170	131	87	45	35	65	4.4
22	10	7.3	92	9.8	7.9	133	112	67	131	16	68	5.0
23	8.4	5.8	92	7.4	8.2	120	118	61	279	36	79	6.5
24	8.8	5.7	92	9.6	9.0	82	134	64	88	39	79	8.2
25	8.8	5.7	92	8.6	8.6	78	68	46	79	31	79	8.5
26	6.4	5.9	92	7.9	8.5	100	83	34	42	187	81	8.6
27	5.7	7.6	106	12	9.2	72	93	47	24	151	98	18
28	6.9	9.8	124	9.6	58	66	70	49	52	70	107	30
29	5.1	10	107	8.6	124	199	141	50	61	49	106	32
30	6.1	9.9	95	45	---	191	304	65	70	47	109	32
31	8.5	---	95	226	---	141	---	27	---	83	116	---
TOTAL	769.7	236.4	1638.6	3187.5	4108.9	3341.1	4919	3516	1659	2764	1838	1894.5
MEAN	24.8	7.88	52.9	103	142	108	164	113	55.3	89.2	59.3	63.1
MAX	120	12	124	226	258	263	479	375	279	601	123	150
MIN	3.0	5.5	8.6	7.4	7.9	8.1	68	27	10	16	19	4.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1996, BY WATER YEAR (WY)

MEAN	56.9	31.0	44.5	62.0	67.9	81.3	102	71.9	60.7	72.5	56.9	74.4
MAX	290	96.2	196	258	162	190	342	225	278	244	171	241
(WY)	1990	1990	1974	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

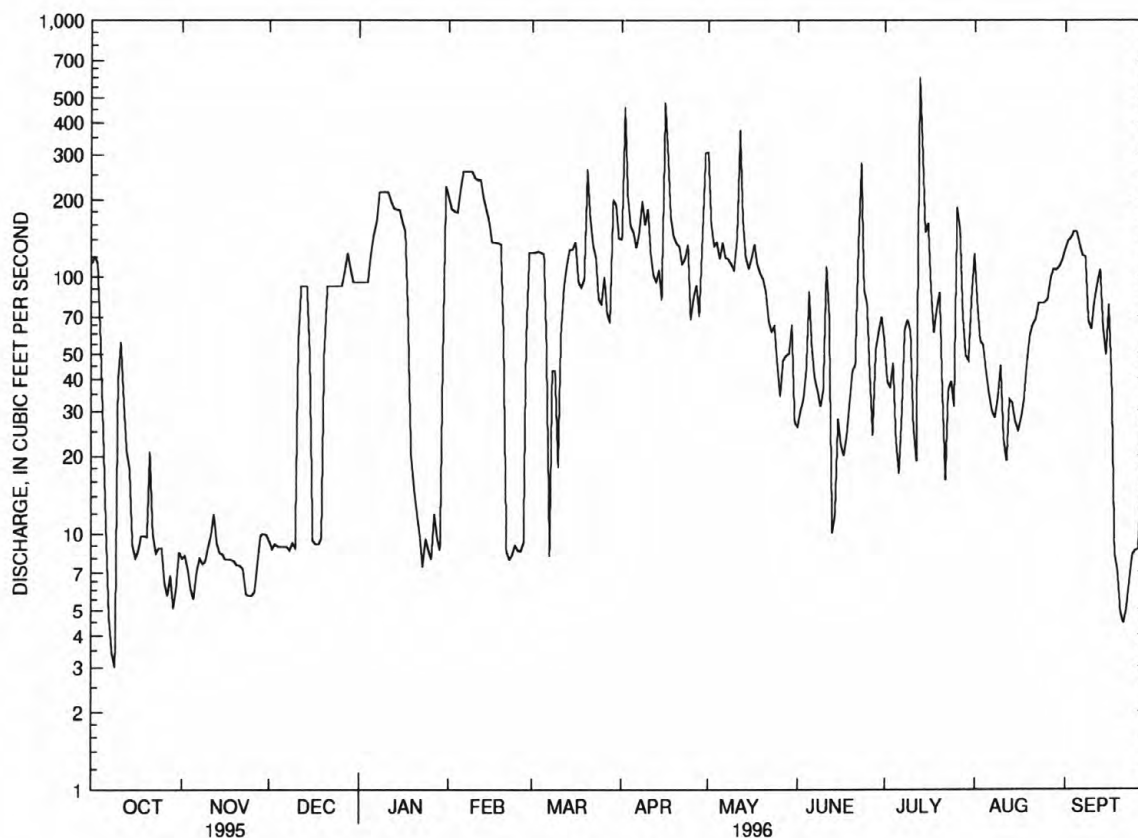
RARITAN RIVER BASIN

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01396800 SPRUCE RUN AT CLINTON, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1959 - 1996	
ANNUAL TOTAL	22036.7		29872.7		65.1	
ANNUAL MEAN	60.4		81.6		107	
HIGHEST ANNUAL MEAN					3.81	
LOWEST ANNUAL MEAN					2060	
HIGHEST DAILY MEAN	244	Aug 21	601	Jul 13		Jul 7 1984
LOWEST DAILY MEAN	3.0	Oct 9	3.0	Oct 9	.00a	Aug 22 1963
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 19	6.3	Sep 18	.00a	Aug 22 1963
INSTANTANEOUS PEAK FLOW			1210	Jul 13	6410	Apr 2 1970
INSTANTANEOUS PEAK STAGE			3.09	Jul 13	5.17	Apr 2 1970
INSTANTANEOUS LOW FLOW			2.8	Oct 8	.00a	Aug 22 1963
10 PERCENT EXCEEDS	159		182		150	
50 PERCENT EXCEEDS	30		62		41	
90 PERCENT EXCEEDS	7.7		8.0		7.1	

a Result of reservoir filling.



— 01396800 SPRUCE RUN AT CLINTON, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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 mi².

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 ft³/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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	154	144	158	e700	384	472	1210	132	274	361	179
2	142	378	144	167	649	383	1550	615	130	145	239	191
3	141	281	135	181	591	375	756	508	130	123	200	197
4	113	185	135	170	e540	336	584	504	148	125	198	205
5	262	163	130	e170	e510	363	525	443	279	106	172	204
6	1190	148	138	e175	e530	531	473	502	190	87	156	199
7	247	165	131	e200	e540	625	489	450	151	83	143	190
8	126	244	123	2040	566	457	666	429	132	121	136	195
9	97	166	126	e670	e590	384	549	401	120	308	144	178
10	98	147	127	e370	e600	306	588	379	148	234	159	122
11	120	164	142	e330	594	332	477	475	206	120	131	142
12	100	1520	229	e300	578	388	393	1180	234	93	116	149
13	83	520	e220	290	447	432	383	582	134	1660	141	173
14	93	453	176	284	410	482	381	443	114	1260	141	178
15	419	1000	162	e275	391	482	328	395	124	480	125	118
16	149	484	132	e245	337	522	1500	413	105	626	117	137
17	110	344	133	238	327	377	1020	481	98	346	124	245
18	98	287	124	189	323	349	639	387	108	249	136	294
19	89	267	124	2340	303	367	542	356	149	259	133	162
20	85	235	145	2820	280	1050	502	328	156	309	131	110
21	1930	212	e210	915	880	629	470	292	144	189	137	92
22	848	193	e190	614	589	500	416	249	367	155	144	101
23	297	179	175	486	501	435	399	229	606	179	149	114
24	192	181	167	997	574	362	441	223	216	181	161	97
25	164	165	165	1310	471	333	315	192	176	158	151	92
26	145	159	162	643	372	345	320	171	125	544	149	85
27	135	155	173	1860	332	295	320	186	98	393	163	85
28	600	153	181	2070	360	268	273	190	113	226	163	101
29	300	153	e170	916	418	647	475	180	122	185	162	202
30	180	151	163	753	---	613	1080	194	278	189	164	143
31	156	---	163	e770	---	499	---	143	---	288	171	---
TOTAL	8843	9006	4839	22946	14303	13851	17326	12730	5233	9695	4917	4680
MEAN	285	300	156	740	493	447	578	411	174	313	159	156
MAX	1930	1520	229	2820	880	1050	1550	1210	606	1660	361	294
MIN	83	147	123	158	280	268	273	143	98	83	116	85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1996, BY WATER YEAR (WY)

MEAN	161	206	260	289	320	405	377	268	191	179	164	161
MAX	641	659	767	1099	807	1057	1137	750	967	752	793	554
(WY)	1904	1952	1974	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

RARITAN RIVER BASIN

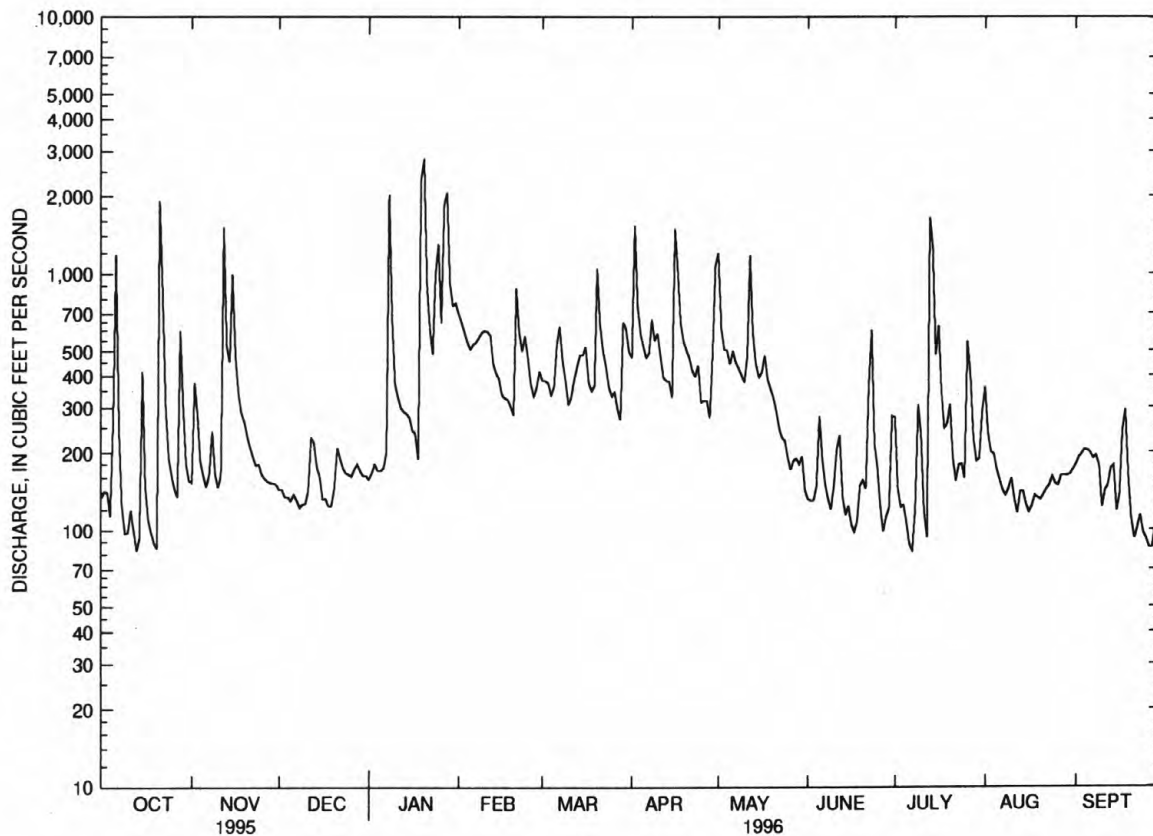
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01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1904 - 1996	
ANNUAL TOTAL	72761		128369			
ANNUAL MEAN	199		351		248	
HIGHEST ANNUAL MEAN					413	1952
LOWEST ANNUAL MEAN					95.0	1966
HIGHEST DAILY MEAN	1930	Oct 21	2820	Jan 20	8060	Aug 19 1955
LOWEST DAILY MEAN	62	Mar 26	83	Oct 13	12	Oct 18 1963
ANNUAL SEVEN-DAY MINIMUM	73	Apr 1	95	Sep 21	25	Sep 4 1957
INSTANTANEOUS PEAK FLOW			6430a	Jan 19	18000a	Aug 19 1955
INSTANTANEOUS PEAK STAGE			9.76	Jan 19	15.22	Aug 19 1955
INSTANTANEOUS LOW FLOW			46	Oct 5	9.0	Nov 7 1931
10 PERCENT EXCEEDS	302		625		489	
50 PERCENT EXCEEDS	159		221		166	
90 PERCENT EXCEEDS	96		122		63	

a From rating curve extended above 6,400 ft³/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.

e Estimated.



01397000 S B 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 current year.

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 1995 TO SEPTEMBER 1996

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 1995	24...	1130	190	217	7.7	11.5	760	10.1	93	<1.1	490	40	76
JAN 1996	18...	1300	220	252	8.0	2.0	764	14.7	106	1.6	230	30	76
MAR	19...	1100	330	235	8.2	6.5	753	14.1	116	2.4	2400	20	75
MAY	21...	1230	282	237	8.0	21.0	750	8.7	99	<1.0	40	10	77
JUL	17...	1130	343	197	7.9	22.5	760	8.5	99	<1.0	790	70	63
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)	ALKA-LINITY 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 1995	24...	18	7.6	11	2.0	54	14	19	<0.1	13	128	121	<1
JAN 1996	18...	18	7.5	15	1.5	52	12	28	<0.1	8.9	132	127	4
MAR	19...	18	7.3	16	1.4	51	13	29	<0.1	8.3	130	129	2
MAY	21...	18	7.7	13	1.5	56	13	23	<0.1	8.2	144	122	5
JUL	17...	15	6.2	11	1.6	48	12	19	<0.1	10	110	108	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-SOLVED (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 1995	24...	0.005	0.90	<0.03	<0.03	0.20	0.18	1.1	1.1	0.04	0.04	3.6	0.3
JAN 1996	18...	0.009	1.20	<0.03	<0.03	0.20	0.25	1.4	1.5	<0.01	<0.01	2.1	0.3
MAR	19...	0.007	1.30	<0.03	<0.03	0.30	0.16	1.6	1.5	0.01	<0.01	1.8	0.1
MAY	21...	0.016	0.98	<0.03	<0.03	0.30	0.22	1.3	1.2	<0.01	<0.01	2.1	0.4
JUL	17...	0.009	0.94	<0.03	<0.03	0.18	0.17	1.1	1.1	0.01	<0.01	--	0.3

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	PH SED BED MAT	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL)	NITRO- GEN,NH4 TOTAL IN BOT.	NITRO- GEN,NH4 TOTAL BOT MAT	PHOS- PHORUS TOTAL IN BOT.	ARSENIC TOTAL IN BOT.	ARSENIC TOTAL IN BOT.	BERYL- LIUM, TOTAL RECOV- ERABLE	BORON, TOTAL RECOV- ERABLE	CADMIUM TOTAL RECOV- ERABLE
		(STD UNITS) (70310)	(MG/L) (00340)	(MG/KG AS N) (00611)	(MG/KG AS N) (00626)	(MG/KG AS P) (00668)	(UG/L AS AS) (01002)	(UG/G AS AS) (01003)	(UG/L AS BE) (01012)	(UG/L AS B) (01022)	(UG/L AS CD) (01027)
OCT 1995											
24...	1130	--	<10	--	--	--	<1	--	<10	30	<1
24...	1130	6.8	--	3.7	130	210	--	2	--	--	--
MAY 1996											
21...	1230	--	<10	--	--	--	<1	--	<10	30	<1
		CADMIUM RECOV. FM BOT- TOM MA- TERIAL	CHRO- MIUM, TOTAL RECOV- ERABLE	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL	COBALT, RECOV. FM BOT- TOM MA- TERIAL	COPPER, RECOV. FM BOT- TOM MA- TERIAL	COPPER, RECOV. FM BOT- TOM MA- TERIAL	IRON, RECOV. FM BOT- TOM MA- TERIAL	IRON, RECOV. FM BOT- TOM MA- TERIAL	LEAD, RECOV. FM BOT- TOM MA- TERIAL	LEAD, RECOV. FM BOT- TOM MA- TERIAL
DATE		(UG/G AS CD) (01028)	(UG/L AS CR) (01034)	(UG/G) (01029)	(UG/G AS CO) (01038)	(UG/L AS CU) (01042)	(UG/L AS CU) (01043)	(UG/G AS FE) (01045)	(UG/G AS FE) (01170)	(UG/L AS PB) (01051)	(UG/G AS PB) (01052)
OCT 1995											
24...	--	--	<1	--	--	2	--	180	--	<1	--
24...	<1	--	--	10	<5	--	50	--	9400	--	60
MAY 1996											
21...	--	--	<1	--	--	1	--	240	--	<1	--
		MANGA- NESE, TOTAL RECOV- ERABLE	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL	MERCURY TOTAL RECOV- ERABLE	MERCURY FM BOT- TOM MA- TERIAL	NICKEL, RECOV. FM BOT- TOM MA- TERIAL	NICKEL, RECOV. FM BOT- TOM MA- TERIAL	SELE- NIUM, TOTAL RECOV- ERABLE	SELE- NIUM, TOTAL RECOV- ERABLE	ZINC, RECOV. FM BOT- TOM MA- TERIAL	ZINC, RECOV. FM BOT- TOM MA- TERIAL
DATE		(UG/L AS MN) (01055)	(UG/G) AS CR) (01053)	(UG/L AS HG) (71900)	(UG/G) AS CO) (71921)	(UG/L AS NI) (01067)	(UG/G) AS NI) (01068)	(UG/L AS SE) (01147)	(UG/G) AS SE) (01148)	(UG/L AS ZN) (01092)	(UG/G) AS ZN) (01093)
OCT 1995											
24...	30	--	<0.1	--	<1	--	<1	--	<10	--	280
24...	--	200	--	0.01	--	30	--	<1	--	--	--
MAY 1996											
21...	40	--	<0.1	--	<1	--	<1	--	<10	--	--
		CARBON, INOR- GANIC, TOT IN BOT MAT	CARBON, INORG + ORGANIC TOT. IN BOT MAT	PCB, TOTAL IN BOT- TOM MA- TERIAL	PCN, TOTAL IN BOT- TOM MA- TERIAL	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL	P,P'- DDD, RECOVER TOT. IN BOT- TOM MA- TERIAL	P,P'- DDE, RECOVER TOT. IN BOT- TOM MA- TERIAL	P,P'- DDT, RECOVER TOT. IN BOT- TOM MA- TERIAL	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL
DATE		(G/KG AS C) (00686)	(GM/KG AS C) (00693)	(UG/KG) (39519)	(UG/KG) (39251)	(UG/KG) (39333)	(UG/KG) (39351)	(UG/KG) (39363)	(UG/KG) (39368)	(UG/KG) (39373)	(UG/KG) (39383)
OCT 1995											
24...	--	--	--	--	--	--	--	--	--	--	--
24...	0.4	1.9	<2	<1	0.1	<1	0.3	0.6	8.4	<0.1	--
MAY 1996											
21...	--	--	--	--	--	--	--	--	--	--	--
		ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL	HEPTA- CHLOR EPOXIDE TOT. IN BOT- TOM MA- TERIAL	LINDANE TOTAL IN BOT- TOM MA- TERIAL	METH- OXY- CHLOR, TOT. IN BOT- TOM MA- TERIAL	MIREX, TOTAL IN BOT- TOM MA- TERIAL	PER- THANE TOTAL IN BOT- TOM MA- TERIAL	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL	BED MAT. SIEVE DIAM. % FINER THAN .062 MM
DATE		(UG/KG) (39389)	(UG/KG) (39393)	(UG/KG) (39413)	(UG/KG) (39423)	(UG/KG) (39343)	(UG/KG) (39481)	(UG/KG) (39758)	(UG/KG) (81886)	(UG/KG) (39403)	(UG/KG) (80164)
OCT 1995											
24...	--	--	--	--	--	--	--	--	--	--	--
24...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<0.1	<1	<10	0
MAY 1996											
21...	--	--	--	--	--	--	--	--	--	--	--

RARITAN RIVER BASIN

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 of Bushkill Brook, and 2.2 mi southeast of Darts Mills.

DRAINAGE AREA.--181 mi².

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 1995 TO SEPTEMBER 1996

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 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, MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
OCT 1995													
25...	1100	250	296	7.7	14.0	761	9.6	93	<1.1	790	90	89	
JAN 1996													
18...	1030	295	347	7.7	1.5	766	13.2	94	3.3	50	50	92	
MAR													
20...	1100	1490	242	7.8	6.0	744	11.9	98	3.8	1100	940	61	
MAY													
22...	1200	275	269	7.8	20.0	755	8.9	99	E1.1	330	30	86	
JUL													
18...	1130	280	270	7.7	23.0	760	8.7	102	<1.0	1300	90	80	
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)	ALKA-LINITY LAB (MG/L AS CAC03) (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 (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70301)	RESIDUE TOTAL AT 105 DEG.C, SUS-PENDED (MG/L) (00530)
OCT 1995													
25...	22	8.2	17	2.5	61	23	32	0.1	14	180	163	5	
JAN 1996													
18...	23	8.5	32	1.9	57	18	54	0.1	9.3	170	186	2	
MAR													
20...	15	5.7	20	1.7	39	13	34	<0.1	8.4	130	127	74	
MAY													
22...	21	8.1	17	1.9	59	19	30	<0.1	8.7	164	148	4	
JUL													
18...	20	7.4	17	2.1	59	18	27	0.1	11	160	144	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. TOTAL (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS P) (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 1995													
25...	0.005	1.80	0.03	<0.03	0.30	0.22	2.1	2.0	0.19	0.20	3.4	0.3	
JAN 1996													
18...	0.011	1.20	0.09	0.08	0.30	0.36	1.5	1.6	0.09	0.10	2.4	0.4	
MAR													
20...	0.025	1.30	0.08	0.06	0.90	0.35	2.2	1.7	0.20	0.05	3.4	--	
MAY													
22...	0.016	1.50	0.03	<0.03	0.30	0.28	1.8	1.8	0.10	0.08	2.4	0.5	
JUL													
18...	0.008	1.40	<0.03	<0.03	0.40	0.22	1.8	1.6	0.14	0.10	3.5	0.7	

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

RARITAN RIVER BASIN

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 mi².

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 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 21	1530	3,060	8.82	Mar. 20	0115	1,780	7.40
Oct. 28	0615	1,910	7.59	June 22	2115	2,930	8.70
Nov. 12	0230	3,130	8.89	July 13	0845	1,640	7.20
Jan. 19	1800	*7,770	*11.53	July 31	0645	3,150	8.91
Jan. 27	1500	2,920	8.69				

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	1.4	44	e11	e6.8	44	29	97	104	7.7	52	93	4.1
2	1.3	151	e11	e14	39	30	488	48	7.1	30	52	3.9
3	1.3	76	e9.4	e31	34	27	111	48	7.7	39	39	3.7
4	1.3	46	e9.4	e18	30	22	75	41	8.4	38	30	3.5
5	88	34	e7.7	e10	25	30	58	33	22	21	23	3.5
6	63	28	e12	e7.0	23	167	48	51	7.3	16	18	4.2
7	14	42	e8.8	e8.7	22	244	63	38	6.2	13	15	5.0
8	7.9	55	e7.1	e20	25	152	105	52	5.5	19	13	12
9	5.3	29	e9.9	e14	74	84	76	44	5.0	30	16	12
10	4.1	24	e12	e7.6	64	60	101	38	8.2	12	12	5.1
11	3.5	79	e7.8	e5.4	68	61	64	73	6.2	9.6	9.6	4.3
12	3.0	807	e6.4	e8.5	46	83	50	196	105	8.3	13	4.2
13	2.6	106	e5.1	e8.9	28	82	41	64	53	727	37	7.3
14	37	186	e6.2	e7.0	29	69	35	46	200	138	13	8.6
15	168	248	e9.3	e7.6	26	62	30	37	85	123	10	4.5
16	33	89	e17	e6.9	18	68	504	46	27	84	9.5	4.0
17	16	62	e23	e8.5	23	44	130	39	35	40	8.4	103
18	e11	49	e16	e11	18	39	80	30	32	30	7.3	52
19	e7.8	49	e16	3180	17	66	60	26	93	52	6.5	21
20	7.1	38	e15	457	29	413	49	22	60	23	5.8	13
21	1140	33	e13	128	240	102	41	18	38	17	5.7	10
22	137	27	e13	86	144	70	34	17	514	15	5.5	45
23	60	23	e11	68	119	51	31	15	226	17	42	35
24	39	32	e12	494	149	41	30	13	60	13	22	20
25	28	e14	e10	242	80	36	23	11	41	11	8.8	16
26	21	e13	e9.1	98	57	31	22	10	28	151	7.4	12
27	18	e11	e7.5	1100	46	25	22	12	30	35	6.4	10
28	501	e10	e7.0	207	47	25	17	11	35	21	5.8	9.6
29	90	e12	e6.2	101	35	199	34	11	29	17	5.3	28
30	50	e12	e5.7	83	---	108	149	10	124	17	4.7	13
31	37	---	e5.9	66	---	67	---	8.6	---	701	4.4	---
TOTAL	2597.6	2429	320.5	6510.9	1599	2587	2668	1212.6	1906.3	2519.9	549.1	477.5
MEAN	83.8	81.0	10.3	210	55.1	83.5	88.9	39.1	63.5	81.3	17.7	15.9
MAX	1140	807	23	3180	240	413	504	196	514	727	93	103
MIN	1.3	10	5.1	5.4	17	22	17	8.6	5.0	8.3	4.4	3.5
CFM	3.26	3.15	.40	8.17	2.15	3.25	3.46	1.52	2.47	3.16	.69	.62
IN.	3.76	3.52	.46	9.42	2.31	3.74	3.86	1.76	2.76	3.65	.79	.69

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1996, BY WATER YEAR (WY)

MEAN	13.7	34.6	47.2	57.4	58.4	77.3	56.0	32.5	21.8	18.9	18.7	15.5
MAX	83.8	139	162	280	147	201	200	135	119	138	216	135
(WY)	1996	1933	1984	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

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

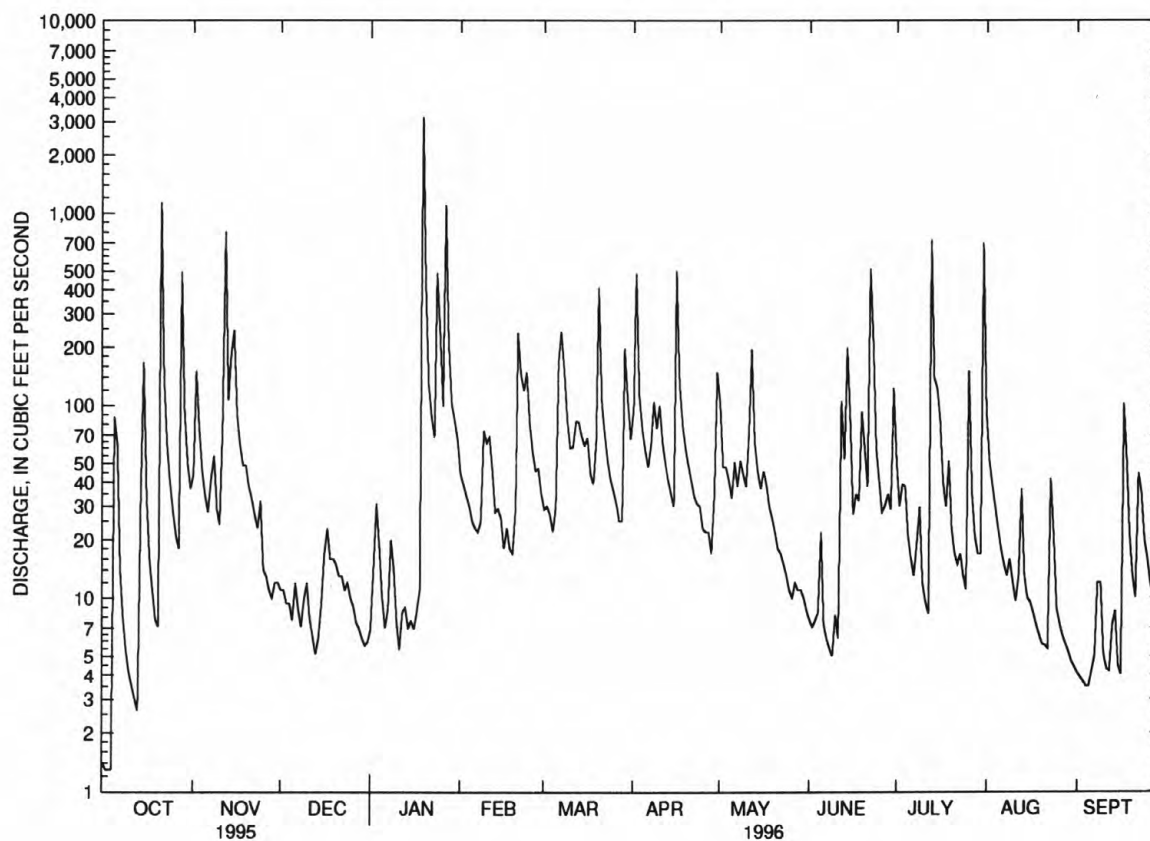
WATER YEARS 1931 - 1996

ANNUAL TOTAL	10538.58		25377.4									
ANNUAL MEAN	28.9		69.3									
HIGHEST ANNUAL MEAN								37.6				
LOWEST ANNUAL MEAN								70.8			1994	
HIGHEST DAILY MEAN	1140	Oct 21	3180	Jan 19				14.5			1965	
LOWEST DAILY MEAN	.00	Aug 20	1.3	Oct 2				4740		Aug 28	1971	
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 20	3.9	Aug 31				.00		Jul 29	1965	
INSTANTANEOUS PEAK FLOW			7770	Jan 19				.00		Aug 4	1966	
INSTANTANEOUS PEAK STAGE			11.53	Jan 19				15900a		Aug 28	1971	
INSTANTANEOUS LOW FLOW			1.1	Oct 3				13.84b		Aug 28	1971	
ANNUAL RUNOFF (CFSM)	1.12		2.70					.00		Jul 17	1968	
ANNUAL RUNOFF (INCHES)	15.25		36.73					1.46				
10 PERCENT EXCEEDS	53		123					19.86				
50 PERCENT EXCEEDS	9.6		28					76				
90 PERCENT EXCEEDS	.23		6.2					12				
								1.4				

a From rating curve extended above 1,700 ft³/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.

c Estimated.



01398000 NESHANIC RIVER AT REAVILLE, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1962, 1979 to current year.

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 Long Island-New Jersey Coastal Plain NAWQA study.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR	TEMPER-ATURE WATER	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML)	
		(00061)	(US/CM) (00095)	(00400)	(DEG C) (00020)	(DEG C) (00010)	(00025)	(00300)	(00301)	(00310)	(31615)	(31649)	
OCT 1995													
26...	1100	22	275	7.8	--	11.5	762	10.6	97	<1.4	790	240	
JAN 1996													
23...	1345	65	296	7.7	--	3.0	760	12.5	93	<1.0	20	80	
MAR													
21...	1300	98	250	7.6	--	6.0	743	11.8	97	22.1	50	40	
MAY													
02...	0930	51	226	8.1	--	12.0	758	10.4	97	--	--	--	
21...	1350	19	250	9.3	30.5	26.0	--	--	--	--	--	--	
23...	1130	15	267	8.2	--	16.5	755	9.4	97	2.3	790	100	
JUN													
04...	1200	8.2	292	9.4	27.5	19.0	757	15.1	165	--	--	--	
18...	1120	28	219	7.8	24.0	20.0	756	7.3	81	--	--	--	
JUL													
10...	1110	13	266	8.3	28.0	22.0	756	10.9	125	--	--	--	
13...	0915	1500	99	7.4	--	--	--	--	--	--	--	--	
16...	1200	85	230	7.6	--	22.0	762	9.0	103	21.8	16000	2600	
AUG													
07...	1350	15	269	8.6	30.0	24.5	763	13.3	159	--	--	--	
SEP													
03...	1420	3.9	315	9.2	30.0	24.0	759	16.2	194	--	--	--	
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 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)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 1995													
26...	91	23	8.2	12	2.6	--	--	44	--	30	22	0.1	
JAN 1996													
23...	80	20	7.4	21	1.9	--	--	31	--	21	41	0.1	
MAR													
21...	68	17	6.1	18	1.6	--	--	29	--	20	31	0.1	
MAY													
02...	68	17	6.3	15	1.5	52	--	43	43	21	22	0.1	
21...	76	19	6.9	15	2.1	66	--	55	54	25	22	<0.1	
23...	83	21	7.5	16	1.7	--	--	57	--	26	23	<0.1	
JUN													
04...	100	27	9.1	18	1.7	82	8	67	67	37	22	<0.1	
18...	70	18	6.1	12	3.1	52	--	43	42	19	18	0.1	
JUL													
10...	86	22	7.6	16	2.2	76	--	61	62	24	22	0.1	
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	71	18	6.4	11	2.6	--	--	48	--	19	16	<0.1	
AUG													
07...	89	23	7.7	14	2.0	65	2	58	53	33	19	<0.1	
SEP													
03...	120	31	10	13	1.9	85	6	--	70	53	14	<0.1	

RARITAN RIVER BASIN

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01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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- PENDE (MG/L) (00530)	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- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 1995 26...	14	172	141	2	--	--	--	3.1	0.2	--	--
JAN 1996 23...	12	170	162	2	--	--	--	2.1	0.2	--	--
MAR 21...	11	138	137	6	--	--	--	2.6	0.5	--	--
MAY 02...	9.1	136	126	--	10	41	20	2.9	0.5	5	0.65
21...	6.7	155	133	--	40	53	9	2.5	0.3	4	0.19
23...	5.6	164	140	<1	--	--	--	2.6	0.3	--	--
JUN 04...	1.7	179	169	--	60	31	7	3.2	0.3	3	0.06
18...	10	252	124	--	40	74	22	5.1	1.1	95	7.1
JUL 10...	7.4	134	146	--	50	170	15	2.8	0.4	4	0.15
13...	--	--	--	--	--	--	--	--	--	501	2020
16...	13	130	126	9	--	--	--	4.8	0.1	--	--
AUG 07...	12	162	153	--	50	49	6	2.2	0.3	1	0.03
SEP 03...	4.7	187	178	--	70	18	4	2.4	0.6	2	0.02

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE U.S. GEOLOGICAL SURVEY
NATIONAL WATER QUALITY LABORATORY

DATE	TIME	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)	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)
OCT 1995 26...	1100	--	0.64	--	0.19	0.33	0.83	0.97	0.05	0.06	--
JAN 1996 23...	1345	--	4.40	--	0.18	0.11	4.6	4.5	0.04	0.03	--
MAR 21...	1300	--	3.30	--	0.20	0.19	3.5	3.5	0.06	0.04	--
MAY 02...	0930	<0.01	1.90	0.03	0.30	<0.20	2.2	--	0.04	<0.01	0.02
21...	1350	0.10	0.91	0.02	0.30	0.30	1.2	1.2	0.02	<0.01	<0.01
23...	1130	--	1.20	--	0.40	0.26	1.6	1.5	0.05	0.02	--
JUN 04...	1200	0.03	0.99	0.03	0.40	0.30	1.4	1.3	0.04	0.03	0.02
18...	1120	0.06	2.60	0.17	0.90	0.60	3.5	3.2	0.24	0.09	0.08
JUL 10...	1110	0.04	1.60	0.03	<0.20	0.30	--	1.9	0.05	0.02	0.03
13...	0915	--	--	--	2.0	--	--	--	0.68	--	--
16...	1200	--	2.50	--	0.50	0.45	3.0	3.0	0.08	0.06	--
AUG 07...	1350	0.01	1.80	0.02	0.30	0.20	2.1	2.0	0.02	0.05	0.04
SEP 03...	1420	0.02	0.57	<0.02	0.30	<0.20	0.87	--	0.03	0.01	0.02

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995 26...	1100	0.011	0.03	<0.03
JAN 1996 23...	1345	0.006	<0.03	<0.03
MAR 21...	1300	0.004	<0.03	0.03
MAY 23...	1130	0.022	0.04	<0.03
JUL 16...	1200	0.012	<0.03	<0.03

ANALYSES PERFORMED BY THE U.S. GEOLOGICAL SURVEY NATIONAL WATER QUALITY LABORATORY--Continued

[illegible]

DATE	CADMIUM	CHRO-	CHRO-	COBALT,		COPPER,		IRON,		LEAD,	MANGA-
	RECOV.	MIUM,	MIUM,	RECOV.	COPPER,	RECOV.	IRON,	RECOV.	LEAD,	RECOV.	NESE,
	FM BOT-	TOTAL	RECOV.	FM BOT-	TOTAL	FM BOT-	TOTAL	FM BOT-	TOTAL	FM BOT-	TOTAL
	TOM MA-	RECOV-	FM BOT-	TOM MA-	RECOV-	TOM MA-	RECOV-	TOM MA-	RECOV-	TOM MA-	RECOV-
	TERIAL	ERABLE	TOM MA-	TERIAL	ERABLE	TERIAL	ERABLE	TERIAL	ERABLE	TERIAL	ERABLE
(UG/G	(UG/L	TERIAL	(UG/G	(UG/L	(UG/G	(UG/L	(UG/G	(UG/L	(UG/G	(UG/L	(UG/L
AS CD)	AS CR)	(UG/G)	AS CO)	AS CU)	AS CU)	AS FE)	AS FE)	AS PB)	AS PB)	AS MN)	
(01028)	(01034)	(01029)	(01038)	(01042)	(01043)	(01045)	(01170)	(01051)	(01052)	(01055)	
OCT 1995											
26...	--	<1	--	--	4	--	80	--	<1	--	30
26...	<1	--	50	50	--	440	--	37000	--	250	--
MAY 1996											
23...	--	<1	--	--	4	--	130	--	<1	--	20

DATE	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. TOTAL FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. TOTAL FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)	SELE- NIUM, TOTAL FM BOT- TOM MA- TERIAL (UG/L AS SE) (01147)	SELE- NIUM, TOTAL FM BOT- TOM MA- TERIAL (UG/G AS SE) (01148)	ZINC, RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. TOTAL FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	CARBON, INOR- GANIC TOT IN BOT MAT (G/KG AS C) (00686)	
	OCT 1995										
	26...	--	<0.1	--	<1	--	<1	--	<10	--	
	26...	170	--	0.02	--	330	--	<1	--	90	4
	MAY 1996										
23...	--	<0.1	--	1	--	<1	--	<10	--	--	

[illegible]

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 BOT- TOM MA- TERIAL (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (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 1995										
26...	--	--	--	--	--	--	--	--	--	--
26...	<0.1	<0.1	<0.1	<0.1	<8	<0.1	<1	<10	4	12
MAY 1996										
23...	--	--	--	--	--	--	--	--	--	--

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels on p. 18). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels on p. 18). 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 ZINE, WATER, DISS, REC (UG/L) (04040)	BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD GF, REC (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
MAY 1996												
02...	0930	<0.002	0.011	0.056	E0.034	E0.003	E0.012	<0.003	<0.004	<0.004	<0.002	E0.002
21...	1350	E0.004	E0.003	0.092	E0.027	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
JUN												
04...	1200	0.043	0.071	0.110	E0.028	<0.002	E0.006	<0.003	<0.004	0.015	<0.002	<0.002
18...	1120	0.860	0.200	6.60	E0.120	<0.002	E0.022	<0.003	<0.004	0.013	E0.002	0.008
JUL												
10...	1110	0.008	0.048	0.570	E0.099	0.006	E0.300	<0.003	<0.004	0.010	E0.002	<0.002
AUG												
07...	1350	<0.002	<0.002	0.160	E0.071	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	E0.004
SEP												
03...	1420	<0.002	0.004	0.054	E0.038	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
DATE		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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
MAY 1996												
02...		<0.001	<0.003	<0.002	<0.005	0.032	<0.004	<0.004	<0.003	<0.004	<0.008	E0.011
21...		<0.001	<0.003	<0.002	<0.005	0.073	<0.004	<0.004	<0.003	<0.004	<0.004	E0.011
JUN												
04...		<0.001	<0.003	<0.002	<0.005	0.170	0.011	<0.004	<0.003	<0.004	<0.004	E0.010
18...		<0.001	<0.003	<0.002	<0.005	1.70	0.052	0.017	<0.003	<0.004	<0.004	E0.016
JUL												
10...		<0.001	<0.003	<0.002	0.012	0.230	0.007	<0.004	<0.003	<0.004	<0.004	E0.017
AUG												
07...		<0.001	<0.003	<0.002	<0.005	0.033	<0.004	<0.004	<0.003	<0.004	<0.004	E0.010
SEP												
03...		<0.001	<0.003	<0.002	<0.005	0.011	<0.004	<0.004	<0.003	<0.004	<0.004	E0.008
DATE		SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	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)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
MAY 1996												
02...		0.007	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
21...		0.007	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
JUN												
04...		<0.005	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
18...		0.019	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	E0.360	<0.020	<0.035	<0.018
JUL												
10...		0.010	<0.010	<0.013	<0.001	<0.002	0.050	E0.050	<0.035	<0.020	<0.035	<0.018
AUG												
07...		0.005	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
SEP												
03...		E0.004	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--

RARITAN RIVER BASIN

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for volatile organic compounds (VOCs) on custom method schedule 9090 (listed with minimum reporting levels on p. 19). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	1,1,1- TRI- CHLORO- ETHANE (UG/L) (34506)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	1,1-DI- CHLORO- ETHANE (UG/L) (34496)	1,2-DI- CHLORO- PROPANE (UG/L) (34541)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	DI- CHLORO- BROMO- METHANE (UG/L) (32101)
MAY 1996							
02...	0929	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
JUN							
04...	1159	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
18...	1119	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
JUL							
10...	1109	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
AUG							
07...	1349	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
SEP							
03...	1419	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100

DATE	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- FORM TOTAL (UG/L) (32106)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)
MAY 1996										
02...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
JUN										
04...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.010	<0.100	<0.100	<0.050
18...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
JUL										
10...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
AUG										
07...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
SEP										
03...	<0.100	<0.100	E0.020	<0.100	<0.05	E0.010	E0.008	<0.100	<0.100	<0.050

DATE	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BENZENE TOTAL (UG/L) (34030)	STYRENE TOTAL (UG/L) (77128)	BENZENE 124-TRI METHYL WATER UNFLTRD RECOVER (UG/L) (77222)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	ETHYL- BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)
MAY 1996										
02...	E0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
JUN										
04...	E0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
18...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.050	E0.070	<0.100
JUL										
10...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
AUG										
07...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SEP										
03...	E0.003	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

DATE	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- BENZENE TOTAL (UG/L) (34301)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT- PENTYL METHYL- WATER UNFLTRD RECOVER (UG/L) (50005)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
MAY 1996										
02...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.400	<5.00	<0.100	<0
JUN										
04...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.100	<5.00	<0.100	<0
18...	<0.100	<0.100	<0.100	<10	<10	<0.20	0.650	<10.0	<0.200	<0
JUL										
10...	<0.050	<0.050	<0.050	<5	<5	<0.10	<0.100	<5.00	<0.100	<0
AUG										
07...	<0.050	<0.050	<0.050	<5	2	<0.10	0.140	<5.00	<0.100	<0
SEP										
03...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.350	<5.00	<0.100	E0

RARITAN RIVER BASIN

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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 mi².

PERIOD OF RECORD.--Water years 1964-65, 1967, 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 1995 TO SEPTEMBER 1996

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,MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
OCT 1995													
18...	1100	8.2	335	7.6	8.5	760	11.2	96	<1.0	140	150	98	
JAN 1996													
22...	1100	26	278	7.7	1.5	760	13.3	95	<1.0	490	160	60	
MAR													
21...	1100	26	242	7.7	5.5	737	13.0	107	2.5	<200	60	56	
MAY													
21...	1100	16	256	7.8	18.0	741	8.4	91	E1.5	20	30	72	
JUL													
22...	1130	8.2	283	7.9	16.5	748	8.8	92	E1.4	220	240	81	
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)	ALKA-LINITY 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 1995													
18...	26	8.1	22	3.3	50	20	44	<0.1	16	188	173	3	
JAN 1996													
22...	15	5.5	24	1.5	26	11	51	<0.1	14	150	145	1	
MAR													
21...	14	5.2	23	1.6	28	12	43	<0.1	13	138	134	4	
MAY													
21...	18	6.6	18	1.8	40	13	38	0.1	14	158	140	6	
JUL													
22...	20	7.6	17	1.9	50	13	39	<0.1	17	184	155	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-SOLVED (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	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 1995													
18...	0.020	0.74	0.04	0.05	0.30	0.34	1.0	1.1	0.04	0.02	3.2	0.5	
JAN 1996													
22...	0.005	1.60	0.12	0.14	0.30	0.12	1.9	1.7	0.03	<0.01	1.8	0.2	
MAR													
21...	0.013	1.30	<0.03	<0.03	0.20	0.17	1.5	1.5	0.06	0.03	3.2	0.4	
MAY													
21...	0.018	1.50	<0.03	<0.03	0.30	0.30	1.8	1.8	0.04	0.02	2.2	0.4	
JUL													
22...	0.010	2.20	0.06	0.04	0.30	0.24	2.5	2.4	0.03	0.02	2.3	0.5	

RARITAN RIVER BASIN

01398260 NORTH BRANCH RARITAN RIVER NEAR CHESTER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 18...	1100	11	<1	<10	80	<1	<1	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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
OCT 1995 18...	130	<1	20	<0.1	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 mi².

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 poor. Records given herein include diversion by small turbine at dam (average discharge, 3.0 ft³/s) and returned to river 1,000 ft downstream from Ravine Lake Dam. Turbine was operating intermittently. Flow regulated occasionally by operation of waste gate in dam. Recording rain gage, with telemeter, 500 ft downstream of 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 ft³/s.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0445	1,050	3.78	Apr. 2	0100	859	3.56
Nov. 15	0445	850	3.55	Apr. 16	0815	998	3.72
Jan. 19	1700	*2,510	*5.08	Apr. 30	2030	859	3.56
Jan. 24	1830	761	3.44	July 14	0030	1,520	4.25
Jan. 27	1700	1,660	4.38				

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	9.3	65	e38	e29	104	e65	102	246	e35	40	30	e12
2	8.7	157	e37	e30	96	e64	374	98	e34	27	30	e11
3	6.5	91	e35	e35	e90	e61	91	100	e45	23	28	e11
4	5.3	68	e35	e30	e82	e56	81	95	e49	22	27	e11
5	72	63	e33	e25	e66	e61	66	77	e45	20	24	e10
6	152	60	e38	e24	e89	e129	58	131	e36	17	23	e10
7	51	65	e36	e32	e75	108	76	91	31	15	24	e17
8	37	90	e33	e50	e69	71	110	79	28	14	21	e22
9	28	61	e34	e52	e82	54	83	55	27	51	23	e28
10	21	57	e34	e48	e85	49	102	52	27	32	18	e16
11	19	59	e37	e46	e77	47	78	83	29	24	17	e14
12	18	453	e28	e51	e71	51	63	189	38	18	19	e13
13	17	129	e27	e49	e54	57	76	59	30	212	e23	e16
14	31	188	e26	e48	e57	63	60	53	e28	354	e22	e24
15	91	482	e29	e45	e48	62	55	50	24	85	e21	e16
16	36	101	e35	e43	e47	86	518	70	23	77	e20	e15
17	23	73	e41	e44	e47	71	149	64	21	48	e19	e65
18	19	68	e37	e45	e46	64	103	52	24	40	e18	e78
19	17	e67	e34	914	e48	73	93	49	27	37	e17	e32
20	16	e61	e30	291	e53	259	84	44	31	58	e16	21
21	144	e58	e35	127	e165	63	75	41	27	36	e19	17
22	82	e54	e31	102	e121	69	69	40	24	34	e18	26
23	51	e50	e30	90	e117	64	69	38	28	35	e16	33
24	40	e49	e30	327	e135	63	79	37	25	33	e18	24
25	33	e46	e30	186	e102	62	69	39	22	31	e15	21
26	29	e45	e31	113	e95	61	68	40	19	40	e15	19
27	25	e42	e30	635	e83	59	65	e43	17	32	e14	17
28	266	e41	e31	253	e78	59	56	e42	16	30	e14	16
29	107	e40	e29	168	e72	112	201	e41	15	29	e13	31
30	80	e39	e28	143	---	90	395	e39	24	31	e13	27
31	63	---	e30	124	---	81	---	e36	---	34	e13	---
TOTAL	1597.8	2922	1012	4199	2354	2334	3568	2173	849	1579	608	673
MEAN	51.5	97.4	32.6	135	81.2	75.3	119	70.1	28.3	50.9	19.6	22.4
MAX	266	482	41	914	165	259	518	246	49	354	30	78
MIN	5.3	39	26	24	46	47	55	36	15	14	13	10
CFSM	1.97	3.72	1.25	5.17	3.10	2.87	4.54	2.68	1.08	1.94	.75	.86
IN.	2.27	4.15	1.44	5.96	3.34	3.31	5.07	3.09	1.21	2.24	.86	.96

RARITAN RIVER BASIN

01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	25.6	43.3	49.5	54.6	59.6	82.4	82.8	59.4	38.8	30.9	28.1	26.9
MAX	97.4	170	124	182	128	207	226	178	190	132	153	134
(WY)	1956	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

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

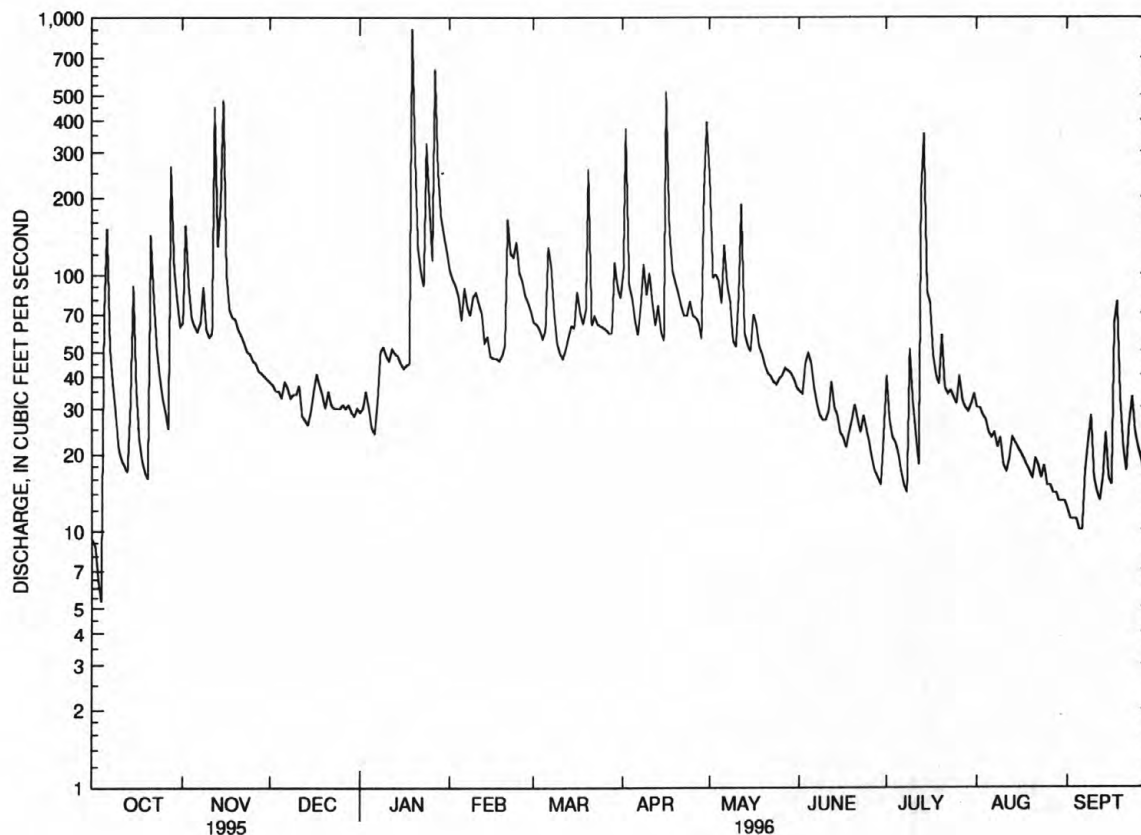
WATER YEARS 1922 - 1996

ANNUAL TOTAL	14548.6	23868.8	
ANNUAL MEAN	39.9	65.2	48.4
HIGHEST ANNUAL MEAN			89.7
LOWEST ANNUAL MEAN			17.7
HIGHEST DAILY MEAN	482	Nov 15	914
LOWEST DAILY MEAN	4.5	Sep 16	5.3
ANNUAL SEVEN-DAY MINIMUM	5.4	Aug 25	11
INSTANTANEOUS PEAK FLOW			2510
INSTANTANEOUS PEAK STAGE			5.08
INSTANTANEOUS LOW FLOW			4.7
ANNUAL RUNOFF (CFSM)	1.52		2.49
ANNUAL RUNOFF (INCHES)	20.66		33.89
10 PERCENT EXCEEDS	65		111
50 PERCENT EXCEEDS	33		43
90 PERCENT EXCEEDS	7.5		17

a From rating curve extended above 2,000 ft³/s on basis of computation of peak flow over dam.

b Several times when lake was filling.

c Estimated.



01398500 N B RARITAN RIVER NEAR FAR HILLS, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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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 mi².

PERIOD OF RECORD.--Water years 1964, 1977 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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (DEG C) (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 BROTH (MG/L) (00310)	COLI-FORM, FECAL, EC (MPN) (31615)	ENTERO-COCCI ME,MP TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
OCT 1995 19...	1200	44	297	8.4	10.5	764	10.9	97	<1.1	790	170	100	
JAN 1996 22...	1130	220	267	7.8	1.0	767	13.7	96	<1.0	490	120	68	
MAR 25...	1100	275	255	8.5	5.5	760	14.9	119	E1.4	<20	<10	79	
MAY 22...	1100	160	252	7.8	18.5	755	10.0	108	E1.6	170	10	80	
JUL 23...	1100	120	252	8.1	19.0	755	8.3	90	<1.0	1300	350	79	
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)	ALKA-LINITY 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 1995 19...	28	8.4	16	2.6	73	21	32	<0.1	15	178	170	4	
JAN 1996 22...	17	6.1	21	1.6	35	12	46	0.1	12	154	143	8	
MAR 25...	20	7.1	18	1.3	45	15	39	<0.1	12	156	144	3	
MAY 22...	20	7.2	15	1.7	52	15	31	<0.1	13	158	138	1	
JUL 23...	20	7.1	15	1.8	56	15	28	<0.1	14	164	138	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 (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 1995 19...	0.015	0.74	0.03	0.03	0.18	0.16	0.92	0.90	0.05	0.03	3.1	0.4	
JAN 1996 22...	0.004	1.30	0.04	0.07	0.16	0.11	1.5	1.4	<0.01	<0.01	2.3	0.3	
MAR 25...	0.006	0.94	0.05	<0.03	0.14	0.12	1.1	1.1	0.03	0.01	1.7	0.3	
MAY 22...	0.015	0.78	<0.03	0.03	0.30	0.25	1.1	1.0	<0.01	<0.01	2.0	0.3	
JUL 23...	0.008	0.85	0.06	0.04	0.20	0.15	1.0	1.0	0.02	<0.01	2.8	0.3	

RARITAN RIVER BASIN

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 19...	1200	16	<1	<10	70	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 19...		610	<1	30	<0.1	<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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 19	1,630	*898	*3.91	July 13	1145	453	3.21
Jan. 27	1330	757	3.72				

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	21	70	45	38	180	99	110	197	46	40	e52	13
2	18	98	44	39	152	94	188	159	43	32	e45	12
3	15	74	42	38	e120	89	130	138	42	32	e44	12
4	13	56	42	e35	e105	82	126	125	43	35	e43	11
5	69	50	41	e35	e99	90	111	112	60	34	e39	11
6	147	47	47	e28	e89	127	100	122	50	30	e36	12
7	65	53	48	36	e80	135	102	117	55	28	e35	15
8	50	58	44	91	e71	121	110	111	55	31	e33	24
9	50	47	42	e94	e74	108	104	103	50	48	e33	22
10	48	43	45	e75	68	113	109	97	56	38	e33	18
11	43	57	e72	e59	78	103	101	112	59	32	e31	18
12	35	184	e65	e49	84	99	93	159	61	31	e30	18
13	29	98	e57	45	79	103	92	110	53	198	e33	21
14	38	129	e50	39	73	103	87	106	49	143	e30	22
15	64	172	e45	34	59	101	84	97	46	131	e30	20
16	40	130	e42	33	55	101	237	105	41	152	e30	20
17	32	118	e40	34	e51	95	173	104	38	120	e24	47
18	32	108	37	33	e50	91	163	93	37	103	20	57
19	32	99	e35	334	e46	92	133	91	40	e85	19	42
20	30	88	e36	269	78	137	120	83	39	e72	18	43
21	97	80	e37	189	192	117	110	76	37	e56	18	45
22	84	73	e37	199	178	121	100	71	37	e52	18	48
23	49	67	38	173	179	107	96	65	37	e52	17	43
24	51	63	37	242	188	97	91	60	35	e47	17	36
25	53	58	36	239	167	88	86	56	34	e44	17	33
26	47	54	e35	193	155	81	84	52	32	e70	16	30
27	41	52	e34	411	135	76	82	52	31	e53	15	29
28	107	49	e35	358	123	74	79	51	29	e48	15	29
29	69	48	e36	297	108	98	118	51	28	e47	14	37
30	64	45	e35	240	---	99	175	50	47	e47	14	29
31	72	---	e36	199	---	93	---	48	---	e52	13	---
TOTAL	1605	2368	1315	4178	3116	3134	3494	2973	1310	1983	832	817
MEAN	51.8	78.9	42.4	135	107	101	116	95.9	43.7	64.0	26.8	27.2
MAX	147	184	72	411	192	137	237	197	61	198	52	57
MIN	13	43	34	28	46	74	79	48	28	28	13	11
CFSM	1.58	2.41	1.29	4.11	3.28	3.08	3.55	2.92	1.33	1.95	.82	.83
IN.	1.82	2.69	1.49	4.74	3.53	3.55	3.96	3.37	1.49	2.25	.94	.93

RARITAN RIVER BASIN

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	33.8	50.2	59.0	65.0	70.5	90.5	88.7	66.7	45.7	37.2	33.1	32.7
MAX	116	163	171	225	144	230	239	169	191	165	126	123
(WY)	1956	1928	1974	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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

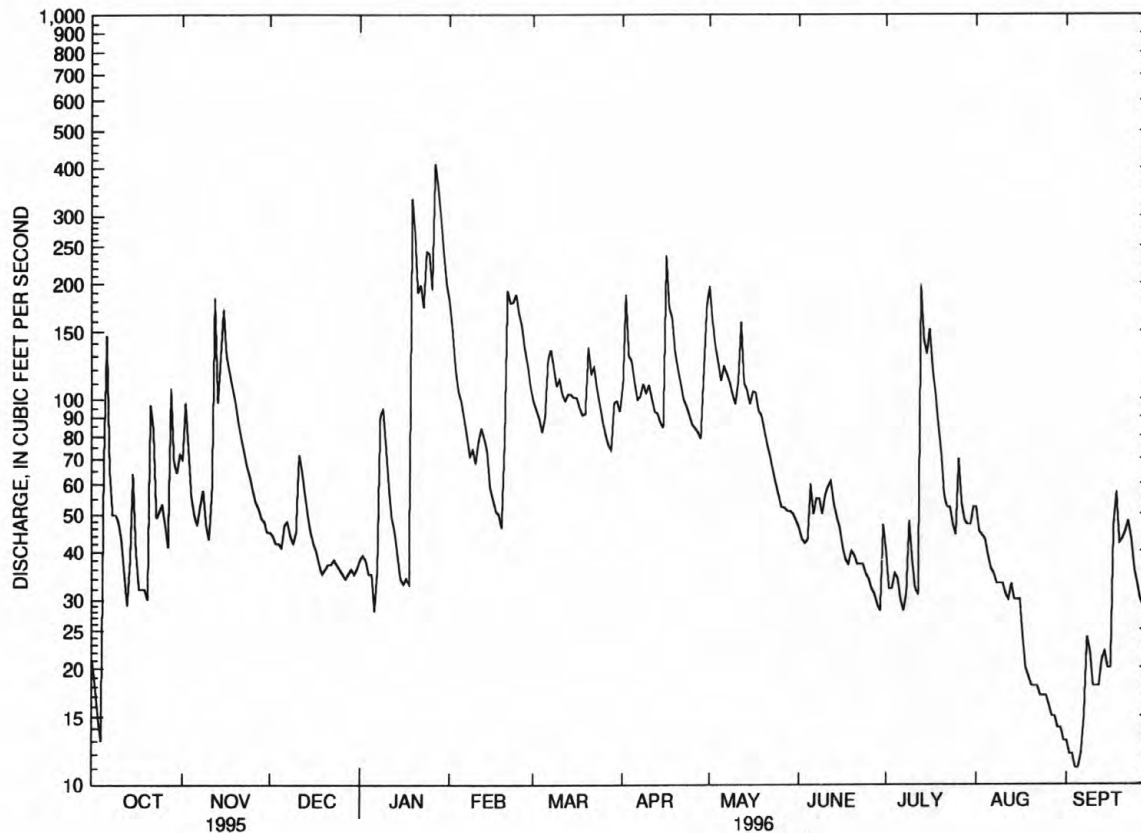
WATER YEARS 1922 - 1996

ANNUAL TOTAL	14337.0	27125	
ANNUAL MEAN	39.3	74.1	56.0
HIGHEST ANNUAL MEAN			104
LOWEST ANNUAL MEAN			20.5
HIGHEST DAILY MEAN	184	Nov 12	411
LOWEST DAILY MEAN	2.9	Sep 7	11
ANNUAL SEVEN-DAY MINIMUM	3.1	Sep 2	12
INSTANTANEOUS PEAK FLOW			898
INSTANTANEOUS PEAK STAGE			3.91
INSTANTANEOUS LOW FLOW			10
ANNUAL RUNOFF (CFSM)	1.20		2.26
ANNUAL RUNOFF (INCHES)	16.26		30.76
10 PERCENT EXCEEDS	71		137
50 PERCENT EXCEEDS	35		53
90 PERCENT EXCEEDS	7.5		28

a From rating curve extended above 380 ft³/s on basis of slope-area measurement at gage height 4.71 ft.

b From floodmark.

c Estimated.



01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 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 1995 TO SEPTEMBER 1996

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, MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL AS CACO3 (00900)
OCT 1995 18...	1200	32	238	7.9	10.0	762	11.0	97	<1.0	130	30	70
JAN 1996 22...	1400	200	242	7.7	1.0	762	14.2	100	E1.3	50	140	50
MAR 21...	1130	115	232	7.8	5.5	737	12.4	102	2.3	80	<10	58
MAY 23...	1100	66	245	8.0	17.0	752	8.5	89	2.1	<20	<10	78
JUL 24...	1130	E47	272	8.1	19.0	751	8.8	96	<1.0	50	60	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)	ALKA-LINITY 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 1995 18...	17	6.6	15	2.4	28	27	34	<0.1	15	156	151	1
JAN 1996 22...	12	4.8	21	1.6	23	9.5	45	<0.1	9.2	110	121	9
MAR 21...	14	5.5	22	1.5	35	12	39	<0.1	6.1	134	124	<1
MAY 23...	19	7.5	19	1.7	54	8.0	34	<0.1	10	140	134	4
JUL 24...	18	7.3	20	1.7	56	7.6	40	<0.1	17	182	147	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-SOLVED (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 1995 18...	0.003	3.90	<0.03	<0.03	0.40	0.30	4.3	4.2	0.02	<0.01	7.6	0.2
JAN 1996 22...	0.009	0.88	0.06	0.13	0.30	0.10	1.2	0.98	0.01	<0.01	4.0	0.3
MAR 21...	0.004	0.70	0.06	<0.03	0.20	0.19	0.90	0.89	0.01	0.01	3.3	0.4
MAY 23...	0.006	0.46	<0.03	<0.03	0.50	0.47	0.96	0.93	0.09	0.04	6.1	-
JUL 24...	0.008	0.45	0.04	0.05	0.40	0.30	0.85	0.75	0.08	0.05	6.4	0.5

RARITAN RIVER BASIN

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 18...	1200	19	<1	<10	40	<1	<1	2
MAY 1996 23...	1100	24	<1	<10	20	<1	<1	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 1995 18...	330	<1	20	<0.1	<1	<1	<10
MAY 1996 23...	960	<1	80	<0.1	<1	<1	<10

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)	MERCURY DIS- SOLVED (UG/L) AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L) AS NI) (01065)	ZINC, DIS- SOLVED (UG/L) AS ZN) (01090)
MAY 1996 23...	1100	FIELD BLANK	<1	<1	<0.1	<1	<1

RARITAN RIVER BASIN

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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 mi².

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 mi².

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 ft³/s, which are poor. Releases from Round Valley Reservoir enter stream directly upstream of 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 1995 TO SEPTEMBER 1996 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.91	15	12	9.0	28	18	53	70	10	21	35	2.0
2	.90	75	11	14	26	20	135	35	10	14	15	1.9
3	.86	29	9.7	19	24	19	43	34	11	12	12	1.8
4	.90	17	10	13	20	15	35	31	12	12	12	1.8
5	59	13	9.0	9.9	17	21	31	25	25	9.6	10	1.9
6	58	11	12	7.7	17	65	27	37	12	8.1	9.5	2.6
7	7.9	23	9.6	9.4	17	76	33	28	10	7.2	8.4	5.6
8	4.1	31	8.4	11	18	49	43	32	9.3	8.5	8.0	19
9	2.5	14	10	11	32	33	34	27	8.7	19	11	16
10	2.0	11	9.3	9.1	32	27	41	24	13	12	9.6	3.2
11	1.8	18	7.0	7.3	34	29	28	74	10	6.3	6.7	2.6
12	1.6	175	6.7	8.7	25	36	25	93	10	5.7	6.6	2.6
13	1.6	32	6.5	9.6	15	35	23	37	12	301	11	4.5
14	11	67	7.9	8.6	16	32	21	30	18	38	7.4	4.9
15	49	93	9.7	9.1	15	29	19	26	13	26	5.5	2.7
16	8.0	33	14	7.7	14	29	186	36	8.0	26	5.0	2.5
17	4.3	24	15	9.2	13	22	53	31	8.3	14	4.5	46
18	3.2	20	12	11	12	20	38	24	8.8	12	3.7	31
19	2.6	20	12	496	10	29	33	22	19	16	3.2	8.9
20	2.6	16	12	125	18	86	31	20	15	11	3.0	8.5
21	345	16	11	49	92	34	27	18	11	8.3	3.0	4.9
22	46	15	10	36	54	27	24	17	37	8.3	3.2	12
23	20	14	10	31	42	23	23	15	28	12	3.1	11
24	13	16	10	162	60	20	22	14	12	12	7.6	6.3
25	9.9	13	10	85	34	19	19	13	12	8.6	3.2	6.4
26	7.3	12	9.9	42	28	18	20	13	9.3	82	2.7	4.9
27	6.7	11	8.6	326	24	16	18	14	8.4	21	2.5	4.1
28	112	11	8.6	84	25	16	16	14	8.2	13	2.5	4.3
29	24	13	8.1	51	20	72	45	14	8.0	11	2.4	15
30	18	12	7.3	44	---	40	106	12	37	13	2.1	5.3
31	8.9	---	8.1	37	---	28	---	11	---	32	2.1	---
TOTAL	833.57	870	305.4	1752.3	782	1003	1252	891	414.0	800.6	221.5	244.2
MEAN	26.9	29.0	9.85	56.5	27.0	32.4	41.7	28.7	13.8	25.8	7.15	8.14
MAX	345	175	15	496	92	86	186	93	37	301	35	46
MIN	.86	11	6.5	7.3	10	15	16	11	8.0	5.7	2.1	1.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1996, BY WATER YEAR (WY)

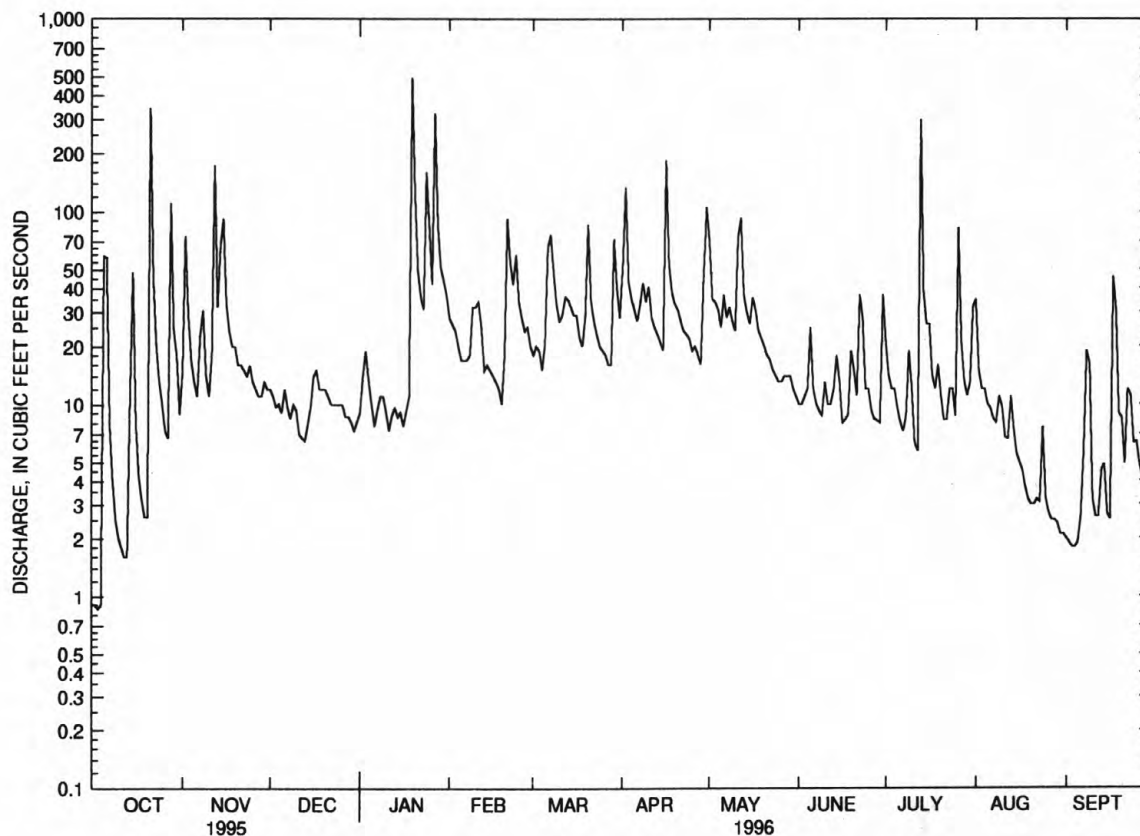
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	26.8	26.4	31.3	34.3	26.5	33.3	32.6	25.0	19.3	21.1	27.7	30.8								
MAX	116	64.0	91.6	93.3	51.1	74.5	85.0	60.5	38.7	80.5	128	146								
(WY)	1981	1981	1981	1981	1979	1994	1983	1989	1989	1984	1980	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								

RARITAN RIVER BASIN

01399670 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE STATION, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1977 - 1996	
ANNUAL TOTAL	9148.62		9369.57			
ANNUAL MEAN	25.1		25.6		28.2	
HIGHEST ANNUAL MEAN					55.2	1981
LOWEST ANNUAL MEAN					11.1	1992
HIGHEST DAILY MEAN	345	Oct 21	496	Jan 19	600	Jan 26 1978
LOWEST DAILY MEAN	.08	Aug 8	.86	Oct 3	.07	Nov 12 1994
ANNUAL SEVEN-DAY MINIMUM	.09	Aug 5	1.9	Aug 30	.09	Aug 5 1995
INSTANTANEOUS PEAK FLOW			1370	Jan 19	2190	Jul 7 1984
INSTANTANEOUS PEAK STAGE			7.96	Jan 19	15.89a	Jul 7 1984
INSTANTANEOUS LOW FLOW			.15	Oct 31	.00	Feb 2 1993
10 PERCENT EXCEEDS	83		46		64	
50 PERCENT EXCEEDS	9.9		14		14	
90 PERCENT EXCEEDS	2.0		4.0		5.0	

a Site and datum then in use.



— 01399670 S B 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 mi².

PERIOD OF RECORD.--Water years 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1977 to September 1978.

WATER TEMPERATURES: 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 1995 TO SEPTEMBER 1996

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 AS CACO3 (00900)	
OCT 1995													
26...	1100	38	221	8.0	10.5	759	10.2	92	E1.3	700	116	75	
JAN 1996													
23...	1045	110	235	7.8	3.0	759	11.8	88	<1.0	220	40	68	
MAR													
21...	1100	115	239	8.1	5.5	743	12.3	100	E1.6	110	130	63	
MAY													
29...	1130	82	220	8.1	13.0	755	9.8	94	E1.7	790	40	88	
JUL													
18...	1130	34	249	8.1	23.0	759	8.4	98	E1.5	1100	60	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)	ALKA-LINITY LAB 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 1995													
26...	19	6.7	10		1.9	55	20	17	0.1	16	144	129	3
JAN 1996													
23...	17	6.2	16		1.6	40	15	32	0.1	14	138	133	2
MAR													
21...	16	5.7	17		1.4	40	15	29	0.1	13	128	126	10
MAY													
29...	22	8.0	11		1.4	61	16	17	<0.1	14	178	130	4
JUL													
18...	21	7.6	13		2.2	66	17	20	<0.1	16	132	141	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-SOLVED (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (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 1995													
26...	0.007	1.12	0.03	<0.03	0.15	0.18	1.3	1.3	0.06	0.07	2.9	0.3	
JAN 1996													
23...	0.015	1.60	0.15	0.11	0.20	0.13	1.8	1.7	0.01	<0.01	1.8	0.2	
MAR													
21...	0.024	1.10	0.17	0.17	0.40	0.36	1.5	1.5	0.08	0.05	3.2	0.6	
MAY													
29...	0.038	1.00	0.05	0.05	0.30	0.30	1.3	1.3	0.06	0.07	1.8	0.4	
JUL													
18...	0.017	1.10	0.05	0.03	0.30	0.23	1.4	1.3	0.07	0.05	2.7	0.5	

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	PH	OXYGEN	NITRO-	NITRO-	PHOS-	ARSENIC	BERYL-	BORON,	CADMIUM
		SED	DEMAND,	GEN,NH4	GEN,NH4	PHORUS	TOTAL	LIUM,	TOTAL	CADMIUM
		BED MAT	CHEM- ICAL (HIGH LEVEL) (MG/L) (70310)	TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	TOT IN BOT MAT (MG/KG AS N) (00626)	TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	TOTAL IN BOT- TOM MA- TERIAL (UG/L AS AS) (01002)	TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	TOTAL RECOV- ERABLE (UG/L AS B) (01022)	TOTAL RECOV- ERABLE (UG/L AS CD) (01027)
OCT 1995										
26...	1100	--	11	--	--	--	<1	--	<10	40
26...	1100	7.4	--	3.1	40	300	--	7	--	--
MAY 1996										
29...	1130	--	<10	--	--	--	<1	--	<10	40
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 AS CO) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS FE) (01045)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01051)
OCT 1995										
26...		--	<1	--	--	1	--	180	--	<1
26...		<1	--	10	<5	--	9	--	11000	<10
MAY 1996										
29...		--	<1	--	--	<1	--	130	--	<1
DATE		MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (01053)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (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 RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01148)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995										
26...		30	--	<0.1	--	<1	--	<1	--	<10
26...		--	237	--	<0.01	--	<10	--	<1	50
MAY 1996										
29...		40	--	<0.1	--	<1	--	<1	--	<10
DATE		CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	CARBON, INORG + ORGANIC TOT. IN BOT. 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)
OCT 1995										
26...		--	--	--	--	--	--	--	--	--
26...		<0.1	0.7	<2	<1	<0.1	<1	<0.1	<0.1	<0.1
MAY 1996										
29...		--	--	--	--	--	--	--	--	--
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 BOT- TOM MA- MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOT- TOM MA- 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)
OCT 1995										
26...		--	--	--	--	--	--	--	--	--
26...		<0.1	<0.1	<0.1	<0.1	<0.1	<2.7	<0.1	<1	<10
MAY 1996										
29...		--	--	--	--	--	--	--	--	--

RARITAN RIVER BASIN

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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 mi².

PERIOD OF RECORD.--Water years 1964, 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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (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 1995 19...	1200	E58	252	8.1	10.0	759	11.1	99	E1.3	790	40	85	
JAN 1996 22...	1330	405	229	7.6	0.5	766	14.3	99	<1.0	80	70	56	
MAR 25...	1230	187	--	8.5	7.0	760	15.1	--	E1.7	20	10	69	
MAY 29...	1100	125	237	8.0	13.5	758	10.6	102	E1.5	330	60	83	
JUL 25...	1100	92	269	8.2	21.5	758	8.9	101	<1.1	2400	70	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)	ALKA-LINITY 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 1995 19...	21	7.9	14	2.4	50	26	26	<0.1	14	146	142	<1	
JAN 1996 22...	14	5.2	17	1.6	30	12	34	<0.1	11	124	118	9	
MAR 25...	17	6.4	16	1.3	44	15	30	<0.1	7.9	132	123	2	
MAY 29...	20	8.0	15	1.5	60	14	25	<0.1	10	172	132	<1	
JUL 25...	20	7.9	17	1.8	66	13	29	<0.1	14	170	145	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-SOLVED (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (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 1995 19...	0.004	0.22	<0.03	0.03	0.30	0.22	0.52	0.44	0.07	0.03	5.1	0.2	
JAN 1996 22...	0.007	1.10	0.06	0.05	0.30	0.19	1.4	1.3	0.03	0.03	2.8	0.3	
MAR 25...	0.009	0.77	<0.03	<0.03	0.30	0.16	1.1	0.93	0.04	0.01	2.8	0.1	
MAY 29...	0.016	0.66	<0.03	<0.03	0.40	0.35	1.1	1.0	0.06	0.04	3.0	0.3	
JUL 25...	0.011	0.67	<0.03	<0.03	0.30	0.17	0.97	0.84	0.06	0.02	4.1	0.3	

RARITAN RIVER BASIN

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 19...	1200	14	<1	<10	50	<1	<1	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 1995 19...	170		<1	<10	<0.1	<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 mi².

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 of 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0745	6,060	8.53	Jan. 26	2245	8,410	9.51
Jan. 19	2230	*23,700	*14.30	July 13	1815	5,710	8.36

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	62	251	187	191	547	354	551	1250	172	276	422	59
2	58	1130	184	183	535	353	2190	623	165	153	226	57
3	54	516	172	246	521	341	714	577	172	134	178	55
4	49	313	174	187	e497	298	587	545	200	132	216	55
5	429	243	164	133	e350	338	520	448	412	121	158	54
6	1010	224	188	121	678	983	451	600	210	106	146	55
7	245	302	181	133	565	1150	488	495	183	97	133	82
8	152	580	164	155	533	786	704	523	173	127	127	122
9	125	274	166	266	685	530	540	438	160	371	130	233
10	114	220	178	271	732	452	718	402	164	165	141	96
11	102	266	109	245	551	448	510	701	173	119	113	79
12	90	2970	149	241	478	546	426	1430	234	110	107	75
13	83	634	147	252	358	567	403	578	212	3040	140	88
14	106	758	158	228	425	546	371	473	216	815	128	142
15	722	1470	179	221	299	488	341	415	192	642	109	90
16	203	623	202	196	280	493	2460	499	144	570	102	78
17	132	472	248	212	284	388	938	519	133	350	101	421
18	110	402	203	219	284	374	688	390	146	276	94	570
19	103	391	174	7330	344	397	582	367	276	388	86	197
20	97	336	143	10200	351	1300	521	330	231	421	82	135
21	1540	307	178	3910	1630	584	466	293	167	218	81	122
22	701	277	192	1690	1000	496	414	266	172	189	92	232
23	264	250	190	658	822	425	393	245	252	208	82	265
24	198	267	184	2230	1040	375	379	231	143	192	111	144
25	175	234	182	1680	694	353	337	212	136	166	83	126
26	157	220	175	807	563	331	332	202	119	629	75	111
27	142	209	167	3410	491	302	321	210	107	302	71	101
28	2110	201	199	2410	475	296	288	208	102	188	72	98
29	492	199	191	1130	399	857	549	203	97	168	68	205
30	289	197	178	e867	---	629	1410	194	290	176	65	132
31	245	---	211	e890	---	461	---	181	---	720	61	---
TOTAL	10359	14736	5517	40912	16411	16241	19592	14048	5553	11569	3800	4279
MEAN	334	491	178	1320	566	524	653	453	185	373	123	143
MAX	2110	2970	248	10200	1630	1300	2460	1430	412	3040	422	570
MIN	49	197	109	121	280	296	288	181	97	97	61	54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996, BY WATER YEAR (WY)

MEAN	170	286	348	395	434	524	477	341	225	185	188	168
MAX	826	824	994	1416	948	1272	1368	1027	1270	1291	1068	672
(WY)	1956	1973	1984	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

RARITAN RIVER BASIN

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ--Continued

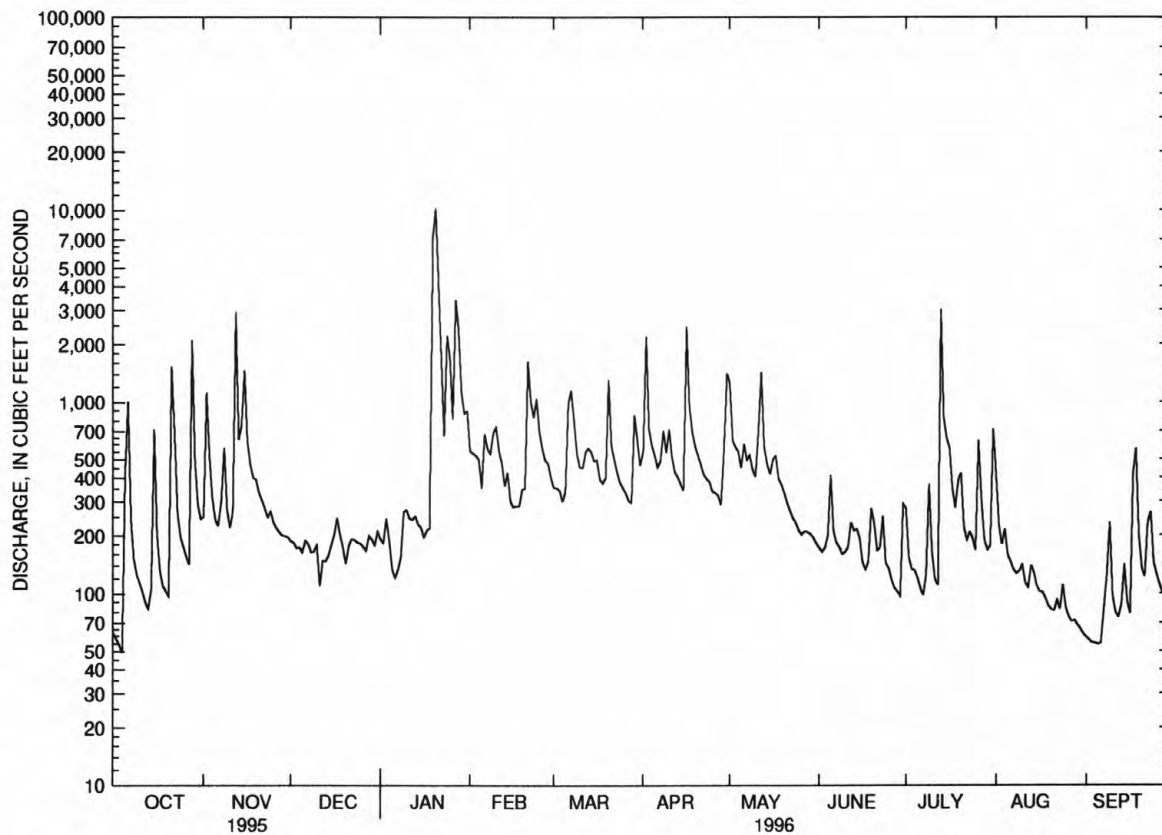
SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1924 - 1996	
ANNUAL TOTAL	84200		163017		311	
ANNUAL MEAN	231		445		605	
HIGHEST ANNUAL MEAN					120	
LOWEST ANNUAL MEAN					15300	
HIGHEST DAILY MEAN	2970	Nov 12	10200	Jan 20	7.5	Jul 7 1984
LOWEST DAILY MEAN	24	Sep 1	49	Oct 4	8.9	Sep 26 1964
ANNUAL SEVEN-DAY MINIMUM	25	Aug 26	57	Aug 31	28600a	Sep 22 1964
INSTANTANEOUS PEAK FLOW			23700	Jan 19	15.47b	Aug 28 1971
INSTANTANEOUS PEAK STAGE			14.30	Jan 19	3.0c	Aug 28 1971
INSTANTANEOUS LOW FLOW			48	Oct 4	625	Nov 28 1930
10 PERCENT EXCEEDS	395		740		184	
50 PERCENT EXCEEDS	165		245		56	
90 PERCENT EXCEEDS	45		100			

a From rating curve extended above 15,000 ft³/s.

b From high-water mark in gage house.

c About, result of freezeup.

e Estimated.



— 01400000 N B RARITAN RIVER NEAR RARITAN, NJ, DAILY MEAN DISCHARGE

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 mi².

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 of 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 20	0330	*24,300	19.76	Jan. 28	0615	11,400	14.30
Jan. 20	0445	d	*19.82				

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	192	659	407	e470	1620	893	1180	3780	381	1070	2160	250
2	231	2420	410	e430	1400	879	3960	1700	365	496	1060	263
3	230	1630	383	e610	1240	864	2640	1320	381	416	665	261
4	226	937	377	e480	1260	748	1720	1330	419	479	634	269
5	542	690	363	e380	e875	781	1370	1110	738	374	505	270
6	3190	594	394	e350	e1010	1990	1200	1270	535	306	453	280
7	1010	613	390	e340	e1080	3260	1170	1210	407	275	405	311
8	422	1300	356	e470	e1200	2750	1920	1210	374	433	371	353
9	303	729	354	e1200	e1500	1590	1440	1100	345	872	358	576
10	254	568	366	e870	1730	1160	2020	1030	346	517	404	268
11	261	600	e340	e600	1480	1100	1510	1060	395	375	340	231
12	249	6610	e310	e580	1380	1250	1200	3690	556	312	294	231
13	215	2510	e400	e570	973	1420	1080	1610	893	3970	469	282
14	258	1760	e410	e570	944	1390	982	1170	519	4370	399	391
15	1890	4300	e430	e550	875	1260	880	1020	896	3110	321	260
16	706	2040	448	e520	727	1360	4960	1030	395	2130	290	220
17	389	1290	514	e510	831	1060	3180	1220	331	1140	283	997
18	305	1040	486	e530	847	953	1910	959	382	791	279	1250
19	269	953	366	e16000	676	921	1450	867	625	851	268	561
20	250	806	e360	16600	765	3560	1250	784	872	979	252	346
21	4070	705	e400	4250	2980	2050	1150	698	492	581	249	278
22	3950	635	e460	2400	2780	1430	1050	642	526	468	266	397
23	1100	557	e440	1640	2120	1150	983	575	2680	480	264	655
24	683	580	e430	2910	2320	1010	1010	540	1000	483	356	368
25	564	508	e410	5190	1780	880	846	500	511	422	287	312
26	480	481	e400	2360	1270	832	791	455	409	1630	254	273
27	423	455	e390	4290	1100	751	798	468	332	1230	251	252
28	4620	437	e430	7470	1050	695	706	486	296	674	261	244
29	2070	426	e380	3110	1010	2020	845	468	302	548	253	488
30	940	432	e390	2290	---	2260	2600	458	674	527	247	419
31	711	---	e530	1990	---	1430	---	423	---	2920	253	---
TOTAL	31003	37265	12524	80530	38823	43697	47801	34183	17377	33229	13151	11556
MEAN	1000	1242	404	2598	1339	1410	1593	1103	579	1072	424	385
MAX	4620	6610	530	16600	2980	3560	4960	3780	2680	4370	2160	1250
MIN	192	426	310	340	676	695	706	423	296	275	247	220

RARITAN RIVER BASIN

01400500 RARITAN RIVER AT MANVILLE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1996, BY WATER YEAR (WY)

MEAN	450	684	875	994	1072	1369	1164	795	527	475	466	460
MAX	2433	2460	2383	3856	2406	3260	3507	2707	2581	2542	2552	2068
(WY)	1904	1933	1984	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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1904 - 1996

ANNUAL TOTAL	211992			401139								
ANNUAL MEAN	581			1096								
HIGHEST ANNUAL MEAN									776			
LOWEST ANNUAL MEAN									1365			1984
HIGHEST DAILY MEAN	6610	Nov 12		16600	Jan 20				309			1965
LOWEST DAILY MEAN	151	Sep 30		192	Oct 1				21600	Sep 22		1938
ANNUAL SEVEN-DAY MINIMUM	214	Sep 28		253	Aug 26				17a	Sep 19		1964
INSTANTANEOUS PEAK FLOW				24300b	Jan 20				29	Aug 27		1944
INSTANTANEOUS PEAK STAGE				19.82	Jan 20				36300b	Aug 28		1971
10 PERCENT EXCEEDS	915			2300					23.80c	Aug 28		1971
50 PERCENT EXCEEDS	362			638					1590			
90 PERCENT EXCEEDS	236			277					440			
									138			

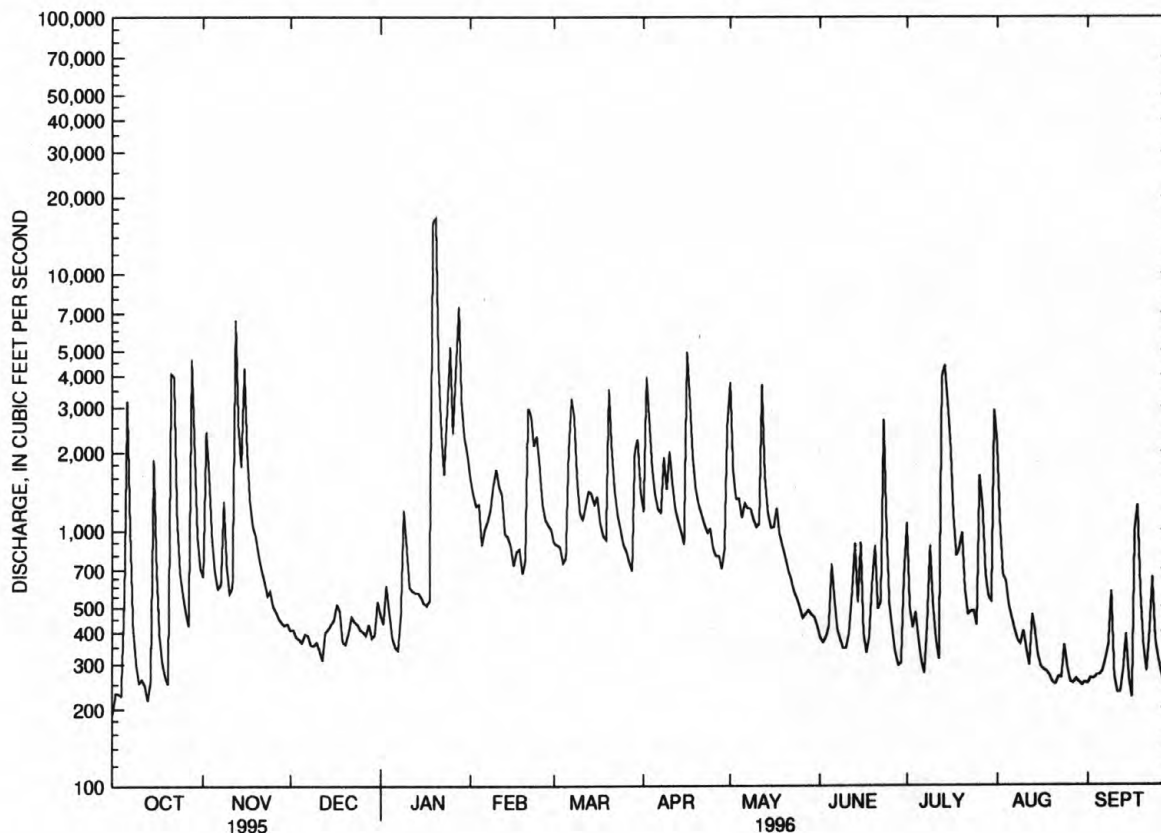
a Does not include water diverted to Johns-Manville plant.

b From rating curve extended above 14,000 ft³/s on basis of slope-area measurements at gage heights 14.9 and 20.42 ft.

c From floodmark (backwater from Millstone River).

d Maximum gage height did not occur at the same time as maximum discharge.

e Estimated.



01400500 RARITAN RIVER AT MANVILLE, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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01400500 RARITAN RIVER AT MANVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1959, 1962-73, 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 1995 TO SEPTEMBER 1996

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) (MG/L) (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 1995 01...	1100	607	249	7.2	11.5	772	10.3	93	<1.0	800	120	81
JAN 1996 23...	1100	1630	270	--	1.5	761	13.4	96	<1.0	130	280	70
MAR 26...	1130	831	264	8.5	10.5	763	12.9	116	2.3	50	10	80
JUN 10...	1330	337	276	7.6	25.0	762	6.6	80	E1.5	230	20	93
JUL 24...	1130	478	275	8.0	20.0	759	8.3	92	<1.0	490	30	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)	ALKA-LINITY 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 1995 01...	20	7.6	13	2.4	51	21	22	<0.1	13	150	139	1
JAN 1996 23...	17	6.6	20	1.8	36	15	42	0.1	12	132	146	14
MAR 26...	20	7.4	18	1.5	48	18	34	<0.1	7.4	152	141	6
JUN 10...	23	8.7	15	2.0	64	18	28	<0.1	9.1	--	146	11
JUL 24...	22	8.1	16	2.0	64	18	27	<0.1	12	168	149	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-SOLVED (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 1995 01...	0.009	2.20	0.05	0.05	0.40	0.46	2.6	2.7	0.08	0.10	4.1	0.3
JAN 1996 23...	0.008	2.30	0.05	0.07	0.20	0.08	2.5	2.4	0.03	0.01	2.4	0.5
MAR 26...	0.019	1.30	<0.03	<0.03	0.40	0.20	1.7	1.5	0.02	0.02	2.3	0.6
JUN 10...	0.043	0.93	0.13	0.13	0.50	0.43	1.4	1.4	0.11	0.08	3.1	0.2
JUL 24...	0.007	1.30	0.06	<0.03	0.40	0.15	1.7	1.5	0.07	0.02	3.2	0.5

RARITAN RIVER BASIN

01400500 RARITAN RIVER AT MANVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 01...	1100	14	<1	<10	50	<1	<1	2
JUN 1996 10...	1330	13	<1	<10	40	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1995 01...	250	<1	50	<0.1	<1	<1	<10
JUN 1996 10...	290	<1	60	<0.1	<1	<1	<10

RARITAN RIVER BASIN

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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 mi².

PERIOD OF RECORD.--Water years 1960-64, 1981 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 1995 TO SEPTEMBER 1996

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 OF WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO-COCCI ME, MF TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)
OCT 1995 31...	1130	6.4	132	7.0	11.0	770	10.1	91	<1.0	50	40	34
JAN 1996 18...	1100	8.6	183	6.4	1.5	768	13.8	98	E1.6	<20	<10	34
MAR 27...	1000	9.8	127	8.1	5.5	772	12.0	94	E1.8	<20	<10	32
MAY 30...	1100	8.6	119	6.8	11.5	760	8.9	82	<1.0	700	120	32
JUL 25...	1100	1.8	120	6.9	19.5	760	8.9	97	<1.0	110	100	29
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)	ALKA-LINITY 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 1995 31...	7.7	3.7	6.4	3.0	7.3	22	13	0.2	11	70	75	5
JAN 1996 18...	7.4	3.8	15	6.1	4.5	19	31	0.1	10	104	101	9
MAR 27...	6.7	3.6	8.5	2.3	4.7	18	17	0.1	7.9	84	74	3
MAY 30...	6.7	3.8	7.3	2.2	8.7	13	15	0.1	9.2	88	68	5
JUL 25...	6.0	3.4	6.8	4.2	13	11	16	0.2	9.6	84	70	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. TOTAL (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 1995 31...	0.004	0.72	<0.03	0.03	0.20	0.13	0.92	0.85	0.04	0.01	2.0	0.7
JAN 1996 18...	0.012	1.30	0.15	0.17	0.30	0.42	1.6	1.7	0.08	0.06	1.5	0.6
MAR 27...	0.006	1.60	<0.03	<0.03	0.18	0.16	1.8	1.8	0.07	0.05	1.0	0.5
MAY 30...	0.014	1.20	0.11	0.09	0.40	0.38	1.6	1.6	0.07	0.02	1.9	1.1
JUL 25...	0.008	1.20	0.08	0.04	0.30	0.45	1.5	1.7	0.09	<0.01	2.2	0.6

RARITAN RIVER BASIN

01400540 MILLSTONE RIVER NEAR MANALAPAN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 31...	1130	<10	<1	<10	20	<1	<1	<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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 31...	1700	1700	<1	140	<0.1	6	<1	20

RARITAN RIVER BASIN

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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 of bridge on U.S. Highway 206, 1.6 mi southwest of Princeton, and 4.0 mi upstream from Carnegie Lake.

DRAINAGE AREA.--44.5 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 21	1830	2,190	7.27	Apr. 16	1330	2,890	6.96
Oct. 28	1000	2,440	7.75	June 17	2130	1,860	5.52
Nov. 12	0530	2,280	7.46	June 23	0130	3,850	8.24
Jan. 19	2330	*7,210	*12.27	July 13	1530	2,200	6.00
Jan. 27	2045	3,490	7.76	July 31	1700	2,210	6.01

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	3.4	36	32	26	81	58	121	274	9.4	181	170	7.0
2	2.8	237	45	59	73	56	773	81	8.3	63	76	6.7
3	2.4	131	32	129	43	56	182	72	8.8	53	44	6.0
4	2.3	66	29	73	e50	40	126	113	13	129	32	5.9
5	33	41	25	37	e42	54	98	69	11	43	25	5.8
6	95	32	34	28	e41	358	80	74	12	25	20	7.0
7	20	46	31	e24	e36	666	80	83	8.8	19	16	7.3
8	10	137	25	e28	e35	354	190	116	7.4	17	14	24
9	6.5	56	33	e26	99	161	140	100	6.7	18	16	78
10	4.9	36	39	e23	193	112	318	86	7.3	14	13	15
11	4.3	54	25	e21	162	111	223	67	6.6	11	11	9.4
12	3.9	909	23	e24	145	130	128	181	6.5	28	11	7.8
13	3.5	147	20	43	61	134	95	85	432	1040	164	12
14	4.2	224	21	45	53	107	77	53	91	440	61	27
15	198	516	29	37	56	86	63	40	213	454	24	11
16	37	139	65	29	31	88	1110	42	39	201	16	8.7
17	15	91	101	30	41	64	278	75	272	91	14	452
18	9.7	70	69	34	43	56	147	50	252	54	12	194
19	7.9	84	53	2700	30	76	114	38	381	70	10	68
20	6.6	64	49	2500	42	516	94	30	259	57	9.2	32
21	881	52	48	242	588	151	79	23	110	27	8.6	21
22	231	42	46	155	464	105	64	19	574	21	8.7	66
23	66	35	39	128	289	78	57	18	865	24	8.4	95
24	34	51	36	446	252	62	66	15	122	23	292	35
25	24	43	35	484	206	54	48	12	71	18	34	26
26	19	34	32	166	129	49	39	11	41	33	17	20
27	16	30	30	1340	94	39	36	11	28	31	12	16
28	919	28	28	538	87	35	28	12	22	18	11	15
29	145	32	23	187	80	415	26	12	17	13	9.9	106
30	64	34	21	145	---	241	54	13	181	13	8.9	39
31	40	---	23	131	---	127	---	11	---	701	7.8	---
TOTAL	2909.4	3497	1141	9878	3546	4639	4934	1886	4075.8	3930	1176.5	1423.6
MEAN	93.9	117	36.8	319	122	150	164	60.8	136	127	38.0	47.5
MAX	919	909	101	2700	588	666	1110	274	865	1040	292	452
MIN	2.3	28	20	21	30	35	26	11	6.5	11	7.8	5.8
CFSM	2.11	2.62	.83	7.16	2.75	3.36	3.70	1.37	3.05	2.85	.85	1.07
IN.	2.43	2.92	.95	8.26	2.96	3.88	4.12	1.58	3.41	3.29	.98	1.19

RARITAN RIVER BASIN

01401000 STONY BROOK AT PRINCETON, NJ--Continued

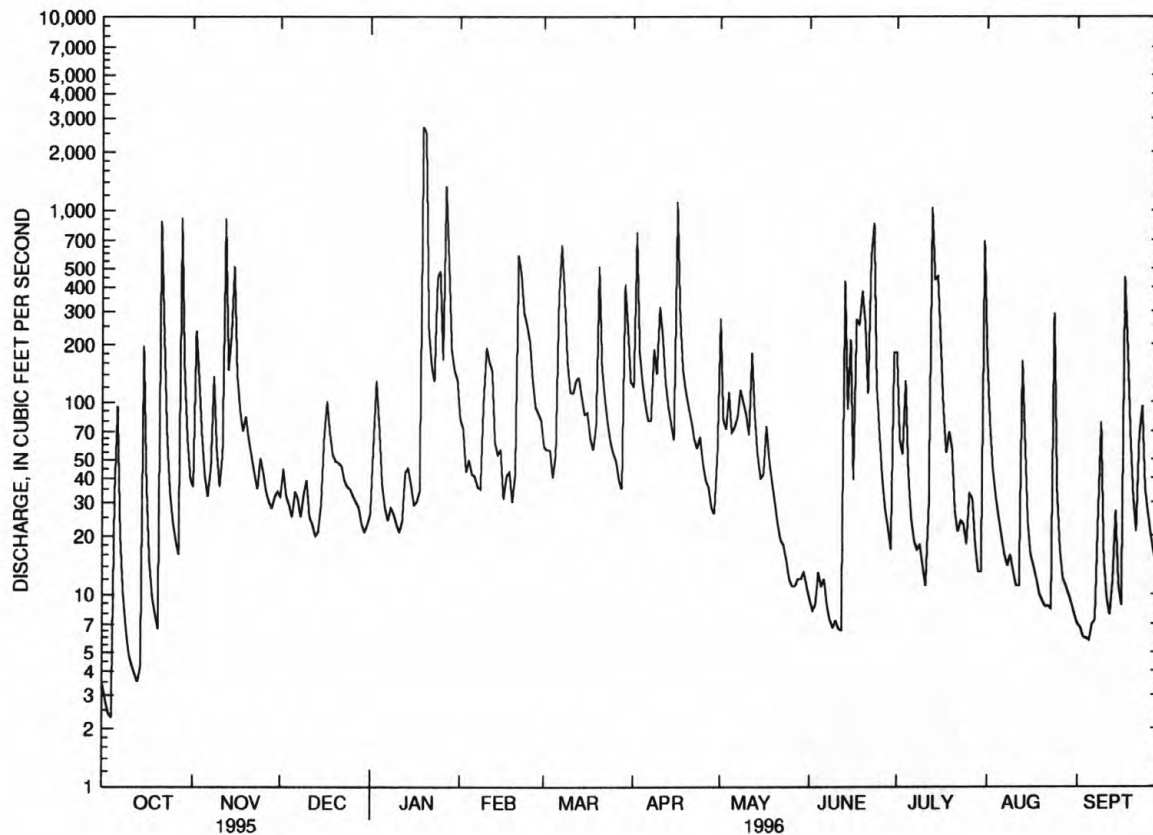
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1996, BY WATER YEAR (WY)

MEAN	26.2	54.0	86.4	97.2	104	133	104	61.1	33.4	32.6	31.4	27.9
MAX	120	212	244	319	203	337	295	216	164	216	240	158
(WY)	1980	1973	1987	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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1954 - 1996
ANNUAL TOTAL	16228.63	43036.3	
ANNUAL MEAN	44.5	118	65.8
HIGHEST ANNUAL MEAN			118
LOWEST ANNUAL MEAN			28.5
HIGHEST DAILY MEAN	919 Oct 28	2700 Jan 19	3410 Aug 27 1971
LOWEST DAILY MEAN	.45 Sep 7	2.3 Oct 4	.00 Aug 5 1966
ANNUAL SEVEN-DAY MINIMUM	.50 Sep 1	5.3 Oct 8	.00 Aug 5 1966
INSTANTANEOUS PEAK FLOW		7210 Jan 19	8960a Aug 28 1971
INSTANTANEOUS PEAK STAGE		12.27 Jan 19	14.26 Aug 28 1971
INSTANTANEOUS LOW FLOW		2.3 Oct 3	.00 Jan 1 1966
ANNUAL RUNOFF (CFSM)	1.00	2.64	1.48
ANNUAL RUNOFF (INCHES)	13.57	35.98	20.09
10 PERCENT EXCEEDS	82	252	141
50 PERCENT EXCEEDS	16	43	22
90 PERCENT EXCEEDS	1.3	9.4	2.1

a From rating extended above 4,000 ft³/s on basis of contracted-opening measurement of peak flow.

e Estimated.



— 01401000 STONY BROOK AT PRINCETON, NJ, DAILY MEAN DISCHARGE

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 TEMPERATURES: October 1956 to September 1962, October 1963 to September 1964, October 1965 to June 1970.

SUSPENDED-SEDIMENT DISCHARGE: January 1956 to June 1970.

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 Long Island-New Jersey Coastal Plain NAWQA study.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	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 1995												
30...	1100	62	174	7.8	--	10.0	767	10.5	92	E1.4	2400	160
JAN 1996												
17...	1330	30	--	7.9	--	0.0	763	13.2	--	<1.0	50	40
MAR												
28...	1330	32	274	9.5	--	6.5	769	17.4	140	E1.6	<20	240
APR												
24...	1030	72	214	8.5	19.0	15.5	756	--	--	--	--	--
MAY												
13...	0950	84	200	7.6	14.0	11.5	756	11.0	102	--	--	--
21...	1240	22	240	8.4	30.0	25.5	750	10.5	130	--	--	--
JUN												
03...	1440	7.9	275	8.0	16.0	17.5	759	10.5	110	--	--	--
04...	1330	13	278	8.5	--	17.5	758	11.0	116	2.8	1300	90
13...	1310	308	175	7.4	29.0	23.0	759	7.0	82	--	--	--
JUL												
08...	1530	16	228	8.5	28.0	26.0	750	10.7	134	--	--	--
13...	1730	1710	94	7.3	--	--	--	--	--	--	--	--
22...	1200	21	226	7.5	--	19.5	760	8.4	92	E1.6	130	40
AUG												
07...	0920	17	237	7.8	25.0	23.0	764	7.5	87	--	--	--
SEP												
03...	1050	5.9	280	7.8	26.0	21.5	760	7.9	90	--	--	--

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 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT 1995											
30...	51	12	5.2	11	2.9	--	32	--	17	16	0.1
JAN 1996											
17...	93	22	9.3	40	3.2	--	41	--	23	75	0.1
MAR											
28...	72	17	7.1	22	1.7	--	38	--	22	40	0.1
APR											
24...	63	15	6.3	16	1.7	45	40	37	20	26	<0.1
MAY											
13...	60	14	6.1	15	1.5	--	40	--	17	22	0.1
21...	68	16	6.8	17	2.2	--	48	--	20	28	<0.1
JUN											
03...	82	19	8.4	22	2.5	--	59	--	22	31	<0.1
04...	76	18	7.5	20	2.2	--	54	--	20	32	0.1
13...	50	12	4.9	12	3.2	39	30	32	14	18	0.2
JUL											
08...	72	17	7.1	16	2.8	--	48	--	19	24	0.1
13...	--	--	--	--	--	29	--	24	--	--	--
22...	65	15	6.7	16	2.6	--	49	--	17	24	0.1
AUG											
07...	69	16	7.0	16	2.5	64	52	52	19	26	<0.1
SEP											
03...	84	20	8.2	18	2.9	77	65	63	22	29	0.1

RARITAN RIVER BASIN

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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- PENDE (MG/L) (00530)	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- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 1995 30...	12	106	101	5	--	--	--	5.9	0.5	--	--
JAN 1996 17...	13	202	217	3	--	--	--	2.3	0.5	--	--
MAR 28...	7.9	160	143	1	--	--	--	2.8	--	--	--
APR 24...	8.1	125	117	--	--	91	14	3.8	0.5	3	0.56
MAY 13...	12	133	114	--	40	310	19	5.9	0.8	5	1.1
21...	3.1	139	122	--	40	83	18	3.8	0.4	4	0.23
JUN 03...	3.6	159	146	--	50	54	26	3.6	0.3	4	0.09
04...	5.3	138	140	6	--	--	--	3.7	--	--	--
13...	6.7	110	95	--	40	150	16	7.5	2.2	65	54
JUL 08...	7.6	140	125	--	50	62	7	3.9	0.5	2	0.09
13...	--	--	--	--	--	--	--	--	--	165	762
22...	12	146	127	4	--	--	--	4.2	0.5	--	--
AUG 07...	11	140	133	--	50	40	8	3.1	0.3	2	0.08
SEP 03...	6.6	156	146	--	60	16	13	2.9	0.3	2	0.04

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 TOTAL RECOV- ERABLE (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 1995 30...	1100	26	<1	<10	50	<1	<1	5

DATE	TIME	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 30...		370	<1	20	<0.1	1	<1	<10

The following analysis is a quality assurance sample processed during the 1996 water year and is defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	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)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)
SEP 1996 03...	0950	FIELD BLANK	<0.02	<0.01	<0.20	<0.10	1.8

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 SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	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)
SEP 1996 03...	<0.10	<0.10	<0.10	0.02	<1	9	<3	<1

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE U.S. GEOLOGICAL SURVEY
NATIONAL WATER QUALITY LABORATORY

DATE	TIME	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, DIS- SOLVED (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)
OCT 1995 30...	1100	--	1.30	--	0.50	0.41	1.8	1.7	0.10	0.08	--
JAN 1996 17...	1330	--	1.50	--	0.30	0.43	1.8	1.9	0.05	0.06	--
MAR 28...	1330	--	0.62	--	0.30	0.20	0.92	0.82	0.05	0.02	--
APR 24...	1030	0.02	0.46	<0.015	0.40	0.30	0.86	0.76	0.01	0.02	0.02
MAY 13...	0950	<0.01	0.39	0.05	0.50	0.40	0.89	0.79	0.06	0.03	0.03
21...	1240	0.06	0.09	0.03	0.40	0.40	0.49	0.49	0.03	0.04	<0.01
JUN 03...	1440	0.01	0.41	0.02	0.50	0.40	0.91	0.81	0.07	0.06	0.04
04...	1330	--	0.64	--	0.50	0.37	1.1	1.0	0.13	0.07	--
13...	1310	0.05	0.94	0.10	1.2	0.80	2.1	1.7	0.25	0.15	0.09
JUL 08...	1530	0.01	0.58	0.02	0.50	0.30	1.1	0.88	0.05	0.06	0.05
13...	1730	--	--	--	1.0	--	--	--	0.26	--	--
22...	1200	--	0.91	--	0.40	0.32	1.3	1.2	0.06	0.04	--
AUG 07...	0920	<0.01	0.73	0.03	0.30	0.30	1.0	1.0	0.03	0.04	0.06
SEP 03...	1050	<0.01	0.34	<0.015	0.30	0.20	0.64	0.54	0.05	0.04	0.05

The following analysis is a quality assurance sample processed during the 1996 water year and is defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	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)	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)
SEP 1996 03...	0950	<0.01	0.08	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01

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 1995 30...	1100	0.008	<0.03	<0.03
JAN 1996 17...	1330	0.016	0.05	0.05
MAR 28...	1330	0.005	<0.03	<0.03
JUN 04...	1330	0.017	<0.03	<0.03
JUL 22...	1200	0.005	0.05	<0.03

RARITAN RIVER BASIN

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels on p. 18). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels on p. 18). 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 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)	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)
APR 1996												
24...	1030	<0.002	<0.002	0.027	E0.013	<0.002	<0.003	<0.003	0.005	<0.004	<0.002	<0.002
MAY												
13...	0950	<0.002	0.031	0.210	E0.015	<0.002	E0.057	<0.003	<0.004	0.014	<0.002	0.008
21...	1240	<0.002	0.008	0.120	E0.014	<0.002	<0.003	<0.003	<0.004	0.004	<0.002	<0.002
JUN												
03...	1440	<0.002	0.010	0.087	E0.017	<0.002	E0.012	<0.003	<0.004	<0.004	<0.002	<0.002
13...	1310	4.70	E4.70	E10.0	E0.250	E0.004	E0.130	<0.003	<0.004	E1.90	E0.004	0.033
JUL												
08...	1530	0.017	0.015	0.540	E0.069	<0.002	<0.003	<0.003	0.004	0.038	<0.002	<0.002
AUG												
07...	0920	<0.002	<0.002	0.100	E0.028	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
SEP												
03...	1050	<0.002	E0.004	0.056	E0.022	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	E0.002

DATE	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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
APR 1996											
24...	<0.001	<0.003	<0.002	<0.005	0.033	<0.004	<0.004	<0.003	<0.004	<0.004	E0.012
MAY											
13...	<0.001	<0.003	<0.002	<0.005	0.064	<0.004	<0.004	<0.003	<0.004	<0.004	E0.017
21...	<0.001	<0.003	<0.002	<0.005	0.038	<0.004	<0.004	<0.003	<0.004	<0.004	E0.015
JUN											
03...	<0.001	<0.003	<0.002	<0.005	0.036	<0.004	<0.004	<0.003	<0.004	<0.004	E0.012
13...	<0.001	<0.003	0.620	<0.005	2.20	0.035	<0.004	0.016	<0.004	0.033	0.029
JUL											
08...	E0.002	<0.003	0.008	<0.005	0.240	0.013	<0.004	<0.003	<0.004	<0.004	0.025
AUG											
07...	<0.001	<0.003	<0.002	<0.005	0.041	<0.004	<0.004	<0.003	<0.004	<0.004	0.020
SEP											
03...	<0.001	<0.003	<0.002	<0.005	0.019	<0.004	<0.004	<0.003	<0.004	<0.004	0.021

RARITAN RIVER BASIN

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01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	2,4-D, DIS- SOLVED REC (UG/L) (39732)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
APR 1996 24...	0.009	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
MAY 13...	0.011	E0.003	<0.013	<0.001	<0.002	0.030	<0.035	<0.035	<0.020	<0.035	<0.018
21...	0.009	E0.002	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
JUN 03...	0.008	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
13...	0.085	<0.010	<0.013	<0.001	0.005	E0.030	<0.035	E1.70	<0.020	<0.035	0.750
JUL 08...	0.025	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
AUG 07...	0.010	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
SEP 03...	0.014	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for volatile organic compounds (VOCs) on custom method schedule 9090 (listed with minimum reporting levels on p. 19). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	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)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
APR 1996 24...	1030	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
MAY 13...	0949	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
21...	1239	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
JUN 03...	1439	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
13...	1309	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
JUL 08...	1529	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
AUG 07...	0919	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
SEP 03...	1049	<0.050	<0.050	<0.050	<0.050	<0.100	E0.010

DATE	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER RECOVER (UG/L) (77424)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- FORM TOTAL (UG/L) (32106)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)
APR 1996 24...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.030	<0.100	<0.100	<0.050
MAY 13...	<0.200	<0.200	E0.040	<0.200	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
21...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
JUN 03...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.030	<0.100	<0.100	<0.050
13...	<0.200	<0.200	<0.400	<1.50	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
JUL 08...	<0.200	<0.200	<0.400	E0.180	<0.10	<0.400	E0.050	<0.200	<0.200	<0.100
AUG 07...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
SEP 03...	<0.100	<0.100	E0.020	<0.100	<0.05	E0.010	E0.030	<0.100	<0.100	<0.050

RARITAN RIVER BASIN

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BENZENE TOTAL (UG/L) (34030)	STYRENE TOTAL (UG/L) (77128)	BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	ETHYL- BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)
APR 1996										
24...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MAY										
13...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
21...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
JUN										
03...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
13...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
JUL										
08...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
AUG										
07...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SEP										
03...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

DATE	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- BENZENE TOTAL (UG/L) (34301)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT- PENTYL METHYL- UNFLTRD RECOVER (UG/L) (50005)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
APR 1996										
24...	<0.050	<0.050	<0.050	<5	2	<0.10	<0.100	<5.00	<0.100	E0
MAY										
13...	<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
21...	<0.050	<0.050	<0.050	<5	<5	<0.10	<0.100	<5.00	<0.100	<0
JUN										
03...	<0.050	<0.050	<0.050	<5	2	<0.10	0.110	<5.00	<0.100	<0
13...	<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
JUL										
08...	<0.100	<0.100	<0.100	<10	E2	<0.20	<0.200	<10.0	<0.200	E0
AUG										
07...	<0.050	<0.050	<0.050	<5	<5	<0.10	<0.100	<5.00	<0.100	<0
SEP										
03...	<0.050	<0.050	<0.050	<5	<5	<0.10	E0.050	<5.00	<0.100	E0

The following analyses are quality assurance samples processed during the 1996 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data."

			QUALITY ASSURANCE SAMPLE (TYPE)	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)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)			
DATE	TIME										
AUG 1996											
07...	0750		CANNISTER BLANK	<0.050	<0.050	<0.050	<0.050	<0.100			
07...	0800		FIELD BLANK	<0.050	<0.050	<0.050	<0.050	<0.100			
DATE	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- FORM TOTAL (UG/L) (32106)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)
AUG 1996											
07...	<0.100	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.040	<0.100	<0.100	<0.050
07...	<0.100	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.040	<0.100	<0.100	<0.050

RARITAN RIVER BASIN

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01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TRI - CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BENZENE TOTAL (UG/L) (34030)	STYRENE TOTAL (UG/L) (77128)	BENZENE 124-TRI METHYL UNFILTR RECOVER (UG/L) (77222)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	ETHYL- BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)
AUG 1996										
07...	<0.050	<0.050	<0.050	E0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
07...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
DATE	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- BENZENE TOTAL (UG/L) (34301)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT- PENTYL METHYL- UNFLTRD RECOVER (UG/L) (50005)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
AUG 1996										
07...	<0.050	<0.050	<0.050	<5	E2	<0.10	<0.100	<5.00	<0.100	<0
07...	<0.050	<0.050	<0.050	<5	<5	<0.10	<0.100	<5.00	<0.100	<0

RARITAN RIVER BASIN

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 mi².

PERIOD OF RECORD.--Water years 1959-63, 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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM 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 1995 30...	1130	58	206	7.5	10.5	764	10.2	91	<10	2200	180	64	
JAN 1996 17...	1030	E25	400	7.5	0.5	762	13.3	92	E1.2	790	90	96	
MAR 28...	1100	E25	234	8.1	6.0	771	12.8	102	E1.4	<20	380	63	
JUN 04...	1015	4.2	282	7.7	17.5	758	8.4	88	2.1	3500	320	83	
JUL 22...	1215	E15	260	7.7	19.0	760	8.8	95	<1.0	2400	210	73	
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)	ALKA-LINITY 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 1995 30...	15	6.4	12		2.3	34	25	15	0.1	14	126	123	4
JAN 1996 17...	23	9.3	40		3.0	36	25	76	0.1	13	216	217	3
MAR 28...	15	6.3	16		1.6	32	23	27	<0.1	11	136	126	3
JUN 04...	20	8.1	20		2.2	52	27	30	0.1	5.6	136	149	6
JUL 22...	17	7.3	15		2.1	48	22	24	0.1	13	160	137	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-SOLVED (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 1995 30...	0.009	2.90	0.03	0.03	0.03	0.40	0.34	3.3	3.2	0.08	0.07	4.2	--
JAN 1996 17...	0.017	1.30	0.04	0.08	0.06	0.10	1.4	1.4	<0.01	<0.01	1.2	0.3	
MAR 28...	0.006	1.50	<0.03	<0.03	0.20	0.18	1.7	1.7	0.04	0.05	2.0	0.3	
JUN 04...	0.038	1.10	0.05	0.05	0.60	0.38	1.7	1.5	0.12	0.04	3.2	0.6	
JUL 22...	0.007	1.80	<0.03	<0.03	0.30	0.23	2.1	2.0	0.04	0.04	3.1	0.4	

RARITAN RIVER BASIN

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01401600 BEDEN BROOK NEAR ROCKY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 30...	1130	12	<1	<10	60	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 30...		150	<1	20	<0.1	1	<1	<10

RARITAN RIVER BASIN

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 of bridge on Township Line Road, 0.7 mi east of Belle Mead, 0.8 mi upstream of Crusier Brook, and 1.0 mi downstream of bridge on U.S. Route 206.

DRAINAGE AREA.--5.36 mi².

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 good. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	0730	675	6.87	Apr. 2	0130	318	5.40
Nov. 12	0300	615	6.65	Apr. 16	1015	388	5.73
Jan. 19	1715	*3,080	*10.85	July 13	1000	366	5.63
Jan. 27	1630	465	6.06	July 15	0100	384	5.71
Mar. 20	0130	358	5.59	July 31	1400	645	6.76

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	.02	9.3	4.5	3.1	11	4.2	21	18	1.0	4.3	12	.32
2	.00	58	4.5	8.0	4.9	4.4	86	5.8	.94	2.0	6.0	.32
3	.00	15	3.2	11	6.2	4.3	13	9.4	1.7	4.5	3.9	.24
4	.00	7.4	3.0	10	5.4	5.5	8.5	8.2	2.0	6.0	3.5	.23
5	24	4.8	2.6	11	6.1	9.1	6.7	5.4	3.3	1.7	2.7	.24
6	24	3.5	3.9	5.3	4.9	51	5.7	14	1.3	.98	2.1	.84
7	3.6	12	3.0	3.4	4.1	86	7.5	8.3	1.0	.75	1.7	1.3
8	1.9	17	2.3	25	4.4	25	18	15	.91	1.5	1.4	4.3
9	.77	6.0	3.1	13	31	21	13	9.2	.74	.97	1.4	2.3
10	.44	4.0	5.6	5.0	17	19	34	7.1	.74	.62	1.5	.82
11	.24	16	2.5	3.6	12	11	12	19	.69	.40	1.0	.56
12	.10	166	1.8	3.8	8.0	11	7.6	37	6.6	3.3	1.0	.49
13	.11	13	1.5	6.5	16	9.2	6.0	8.3	6.6	157	16	.98
14	10	40	1.8	4.9	5.6	7.6	5.2	5.7	2.6	42	3.8	2.5
15	45	56	3.0	4.8	3.9	7.5	4.4	4.6	2.8	70	2.1	.75
16	5.1	12	7.9	4.3	3.9	11	136	9.0	1.0	54	1.6	.46
17	2.2	7.4	11	4.8	5.3	5.8	19	8.2	.98	6.4	1.4	20
18	1.2	5.9	7.0	7.1	4.5	5.1	9.8	5.3	1.1	2.7	1.1	10
19	.80	7.8	6.3	802	4.6	20	7.3	4.6	9.8	5.3	.92	2.9
20	.66	5.5	6.8	59	5.0	84	6.1	3.7	5.4	2.1	.83	1.7
21	55	4.6	5.3	14	64	13	5.3	3.5	2.3	.94	.74	1.2
22	14	3.7	4.5	9.0	31	8.5	4.6	3.1	33	.65	.74	6.4
23	5.0	3.2	4.3	7.8	24	6.3	4.5	2.4	14	1.1	.65	4.9
24	3.0	6.1	4.4	58	28	5.2	5.3	2.1	3.0	.68	.88	2.4
25	2.0	4.0	4.3	31	11	4.7	3.9	1.8	1.9	.46	.64	1.9
26	1.3	3.3	4.3	10	7.6	4.3	3.6	1.6	1.2	8.5	.55	1.4
27	1.2	3.0	7.6	160	6.2	3.6	3.4	2.0	.91	2.0	.49	1.1
28	180	2.6	2.9	29	6.5	3.5	2.8	1.7	.79	.62	.49	1.0
29	14	3.5	2.7	11	5.1	48	4.4	1.7	.68	.41	.49	6.3
30	7.0	4.0	3.1	9.3	---	18	22	1.5	7.9	.49	.41	2.3
31	4.4	---	2.5	7.9	---	8.9	---	1.2	---	120	.38	---
TOTAL	407.04	504.6	131.2	1342.6	347.2	525.7	486.6	228.4	116.88	502.37	72.41	80.15
MEAN	13.1	16.8	4.23	43.3	12.0	17.0	16.2	7.37	3.90	16.2	2.34	2.67
MAX	180	166	11	802	64	86	136	37	33	157	16	20
MIN	.00	2.6	1.5	3.1	3.9	3.5	2.8	1.2	.68	.40	.38	.23
CFSM	2.45	3.14	.79	8.08	2.23	3.16	3.03	1.37	.73	3.02	.44	.50
IN.	2.82	3.50	.91	9.32	2.41	3.65	3.38	1.59	.81	3.49	.50	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1996, BY WATER YEAR (WY)

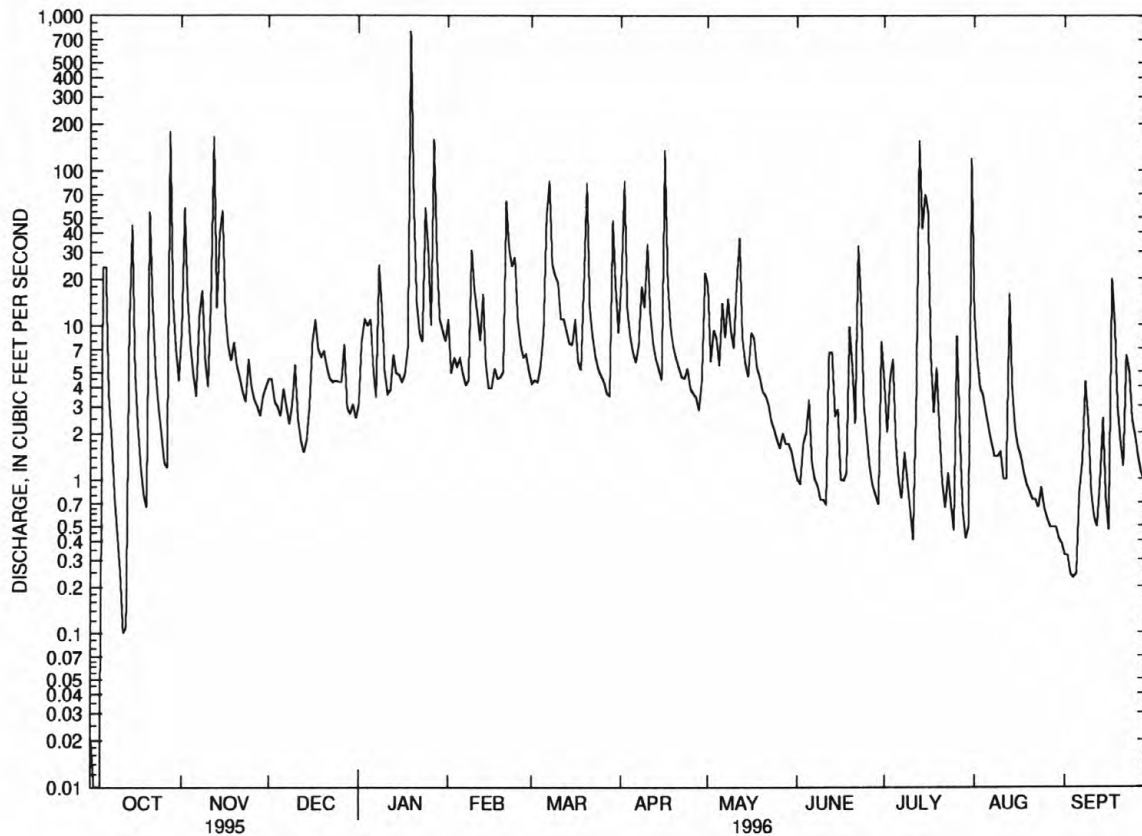
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
MEAN	4.04	9.21	10.6	13.9	12.9	14.3	13.4	8.83	4.94	6.68	3.37	3.09
MAX	13.4	22.3	33.6	43.3	27.5	38.8	43.1	26.2	20.9	26.1	9.94	17.1
(WY)	1990	1989	1984	1996	1994	1994	1983	1989	1989	1984	1990	1989
MIN	.55	2.09	.73	.043	4.74	3.05	2.18	1.89	.37	.36	.17	.51
(WY)	1995	1985	1981	1981	1992	1981	1985	1986	1995	1980	1980	1983

RARITAN RIVER BASIN

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01401650 PIKE RUN AT BELLE MEAD, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1980 - 1996	
ANNUAL TOTAL	2115.18		4745.15			
ANNUAL MEAN	5.80		13.0		8.82	
HIGHEST ANNUAL MEAN					14.3	
LOWEST ANNUAL MEAN					3.79	
HIGHEST DAILY MEAN	180	Oct 28	802	Jan 19	802	Jan 19 1996
LOWEST DAILY MEAN	.00	Aug 22	.00	Oct 2	.00	Aug 20 1980
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 22	.31	Aug 30	.00	Aug 20 1980
INSTANTANEOUS PEAK FLOW			3080	Jan 19	3080	Jan 19 1996
INSTANTANEOUS PEAK STAGE			10.85	Jan 19	11.76	Jul 7 1984
INSTANTANEOUS LOW FLOW			.00	Oct 1	.00	Aug 20 1980
ANNUAL RUNOFF (CFSM)	1.08		2.42		1.65	
ANNUAL RUNOFF (INCHES)	14.68		32.93		22.35	
10 PERCENT EXCEEDS	11		23		16	
50 PERCENT EXCEEDS	2.2		4.5		2.7	
90 PERCENT EXCEEDS	.09		.74		.32	



01401650 PIKE RUN AT BELLE MEAD, NJ, DAILY MEAN DISCHARGE

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 mi².

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 except for estimated daily discharges, which are fair. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1945	3,410	7.91	June 23	2030	3,010	7.41
Jan. 20	0915	*12,600	*15.09	July 15	0815	3,510	8.04
Jan. 28	0800	5,240	9.89	Aug. 1	0400	4,050	8.67
Apr. 17	0315	3,290	7.76				

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	91	269	247	181	564	336	684	926	126	749	3540	93
2	77	838	262	246	458	319	2290	494	115	421	1450	89
3	67	828	248	507	383	325	1940	405	132	336	572	88
4	63	417	224	468	360	286	969	538	205	364	390	86
5	256	296	204	316	317	297	619	408	191	266	289	83
6	729	239	231	234	297	860	480	416	186	199	239	88
7	317	246	225	197	277	1770	437	407	152	166	205	137
8	216	568	200	386	289	2420	749	598	124	162	184	160
9	155	382	212	444	510	1430	704	588	109	163	176	272
10	116	280	319	304	850	768	1190	507	138	142	198	210
11	97	262	265	214	817	638	1360	432	128	131	154	177
12	84	2830	221	203	740	644	1020	958	113	122	138	143
13	79	2490	188	243	452	644	746	644	1250	1750	629	141
14	84	1190	176	255	355	547	535	415	1070	2890	688	208
15	799	2460	199	257	341	466	425	323	987	3260	426	152
16	441	2010	273	248	297	479	1880	310	402	2140	301	121
17	237	1070	460	245	277	405	2860	393	241	805	210	1020
18	175	616	409	265	279	345	1380	326	1020	440	175	1490
19	134	509	364	2760	249	349	773	284	555	376	155	706
20	112	435	325	11200	298	1820	556	248	1260	346	140	399
21	758	367	294	e5670	1300	1150	454	221	868	258	128	245
22	1920	316	281	e2070	1750	696	400	202	634	213	121	276
23	587	272	260	903	1200	492	373	181	2540	202	115	420
24	309	302	246	1150	1100	396	374	166	2110	203	476	280
25	220	285	235	2270	869	361	343	147	716	182	287	217
26	176	256	225	1360	604	318	304	134	387	233	162	179
27	150	236	205	1850	467	283	273	136	253	350	132	157
28	1820	222	199	4620	430	269	258	142	200	226	119	146
29	2050	221	184	2330	396	1010	246	140	172	185	112	411
30	519	248	170	1060	---	1500	367	148	324	168	106	352
31	324	---	169	781	---	900	---	137	---	1610	100	---
TOTAL	13162	20960	7720	43237	16526	22523	24989	11374	16708	19058	12117	8546
MEAN	425	699	249	1395	570	727	833	367	557	615	391	285
MAX	2050	2830	460	11200	1750	2420	2860	958	2540	3260	3540	1490
MIN	63	221	169	181	249	269	246	134	109	122	100	83
CFSM	1.65	2.71	.97	5.41	2.21	2.82	3.23	1.42	2.16	2.38	1.52	1.10
IN.	1.90	3.02	1.11	6.23	2.38	3.25	3.60	1.64	2.41	2.75	1.75	1.23

RARITAN RIVER BASIN

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01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

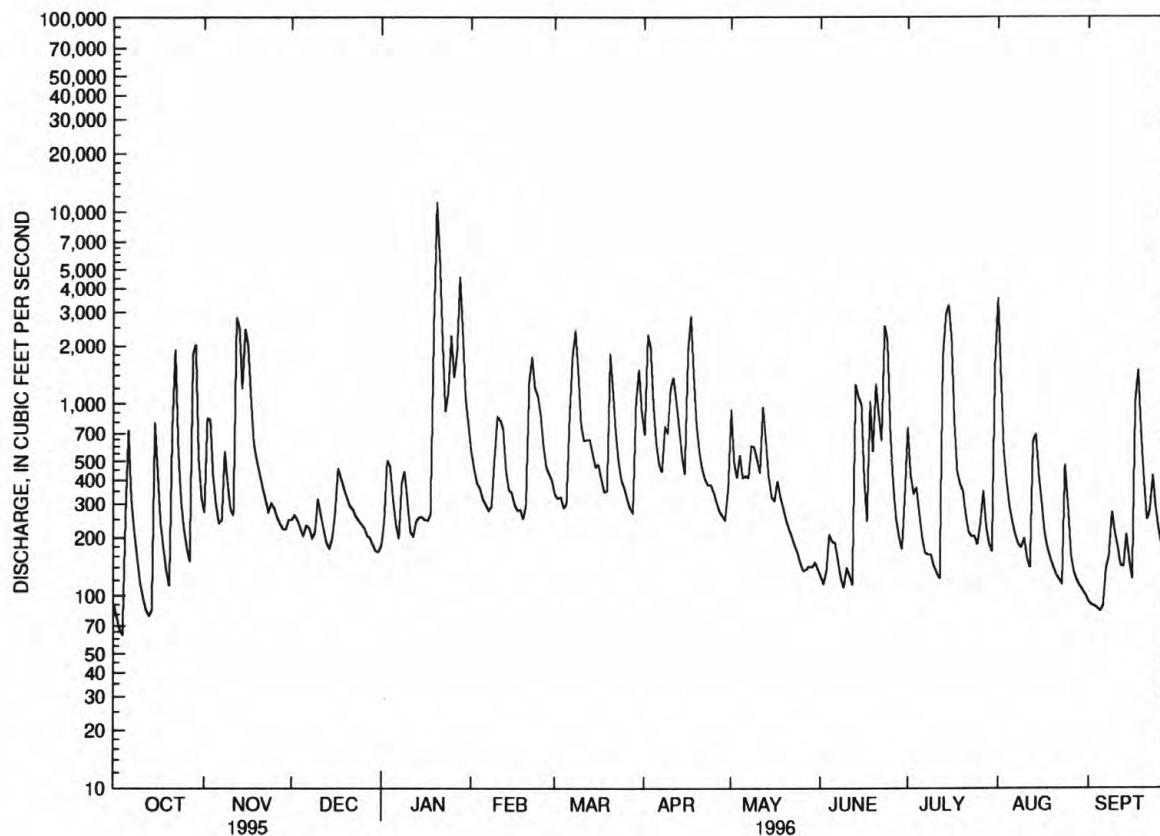
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	190	337	457	514	568	694	538	355	238	247	220	219
MAX	838	1113	1344	1743	1199	1882	1520	1264	823	1808	1267	1277
(WY)	1928	1973	1984	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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1922 - 1996

ANNUAL TOTAL	101555		216920									
ANNUAL MEAN	278		593									
HIGHEST ANNUAL MEAN									381			
LOWEST ANNUAL MEAN									690			1975
HIGHEST DAILY MEAN									165			1985
LOWEST DAILY MEAN	2830	Nov 12		11200	Jan 20				17400	Aug 28	1971	
ANNUAL SEVEN-DAY MINIMUM	28	Sep 2		63	Oct 4				5.0	Sep 16	1923	
INSTANTANEOUS PEAK FLOW	29	Aug 29		90	Aug 31				6.3	Aug 7	1966	
INSTANTANEOUS PEAK STAGE				12600	Jan 20				22200	Aug 28	1971	
INSTANTANEOUS LOW FLOW				15.09	Jan 20				18.68a	Aug 28	1971	
ANNUAL RUNOFF (CFSM)				59	Oct 4				5.0	Sep 16	1923	
ANNUAL RUNOFF (INCHES)	1.08			2.30					1.47			
10 PERCENT EXCEEDS	521			31.28					20.04			
50 PERCENT EXCEEDS	169			1370					820			
90 PERCENT EXCEEDS	53			316					199			
				135					58			

a From high-water mark.
e Estimated.



01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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.

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 1995 TO SEPTEMBER 1996

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, EC BROTH (MPN) (31615)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL AS CACO3 (00900)
OCT 1995 31...	1130	318	188	6.8	12.5	768	8.2	76	2.1	140	140	56
JAN 1996 18...	1030	256	542	8.0	1.5	765	12.6	90	2.5	1300	60	92
MAR 26...	1200	307	262	7.6	10.0	765	10.9	96	<1.0	20	<10	63
MAY 29...	1130	137	284	7.3	16.5	756	6.7	69	2.1	220	30	82
JUL 23...	1130	192	242	7.4	21.0	755	6.4	73	<1.0	1300	100	66
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)	ALKA-LINITY LAB 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 1995 31...	13	5.6	12	3.3	30	21	15	0.1	11	110	108	18
JAN 1996 18...	22	8.9	59	3.7	31	26	110	0.1	11	266	274	6
MAR 26...	15	6.1	22	2.4	25	23	38	0.1	9.9	162	141	12
MAY 29...	19	8.3	22	3.4	44	27	33	0.2	6.3	196	155	9
JUL 23...	15	6.9	17	3.3	41	22	24	0.2	12	156	135	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-SOLVED (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 1995 31...	0.009	2.00	0.04	0.04	0.50	0.47	2.5	2.5	0.18	0.12	5.6	0.6
JAN 1996 18...	0.031	3.20	0.21	0.24	0.60	0.55	3.8	3.8	0.19	0.20	2.3	0.4
MAR 26...	0.008	2.20	<0.03	0.07	0.50	0.26	2.7	2.5	0.12	0.09	3.2	0.7
MAY 29...	0.027	2.10	0.05	<0.03	0.70	0.43	2.8	2.5	0.22	0.15	3.6	0.7
JUL 23...	0.014	2.20	0.08	0.06	0.50	0.35	2.7	2.5	0.15	0.11	4.4	0.6

RARITAN RIVER BASIN

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01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		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) (00611)	NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/L) (01002)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01003)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L) (01022)	CADMIUM TOTAL RECOV- ERABLE (UG/L) (01027)	
OCT 1995												
31...	1130	--	17	--	--	--	1	--	<10	50	<1	
31...	1130	6.8	--	2.8	220	270	--	<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, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01042)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS FE) (01045)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (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 1995												
31...	--	1	--	--	3	--	590	--	1	--	50	
31...	<1	--	9	20	--	20	--	16000	--	200	--	
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 RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (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 MA- TERIAL (G/KG AS C) (00686)	
OCT 1995												
31...	--	<0.1	--	--	2	--	<1	--	<10	--	--	
31...	730	--	0.04	--	--	20	--	<1	--	80	<0.1	
DATE		CARBON, INORG + ORGANIC TOT. IN BOT MA- TERIAL (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 1995												
31...	--	--	--	--	--	--	--	--	--	--	--	
31...	5.8	4	<1	<0.2	4	1.8	12	21	0.3	<0.1	--	
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 BOT MA- TERIAL (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (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 (80157)	BED MAT. SIEVE DIAM. % FINER THAN (80164)	
OCT 1995												
31...	--	--	--	--	--	--	--	--	--	--	--	
31...	<0.1	<0.1	<0.2	<0.1	<5.0	<0.1	<1	<10	4	9	--	

RARITAN RIVER BASIN

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 of bridge on Interstate 287, 1.2 mi downstream from Millstone River, and 1.2 mi southwest of Bound Brook.

DRAINAGE AREA.--785 mi² (includes 11 mi² 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. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1645	12,600	25.66	Jan. 28	0545	18,900	28.39
Jan. 20	0615	*32,700	*33.34	July 14	0215	12,700	25.74

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	169	901	610	515	2290	1230	2200	4870	373	1820	5610	186
2	200	3210	635	609	1950	1200	8420	2310	299	825	2690	176
3	191	2560	579	1050	1710	1200	4290	1810	403	644	1240	167
4	176	1420	545	970	1560	1020	2650	1970	511	764	1050	169
5	738	972	508	632	1080	1050	2110	1580	843	540	737	192
6	3490	775	569	556	1230	2740	1780	1750	614	387	595	204
7	1360	786	566	514	1330	5130	1640	1710	423	308	529	317
8	626	1900	495	513	1450	5280	2660	1850	355	437	426	384
9	405	1120	499	1050	1880	3210	2180	1730	315	1030	393	750
10	296	794	592	1140	2560	2020	3150	1580	336	552	480	367
11	231	767	417	1010	2360	1780	2940	1430	402	367	378	268
12	231	9810	492	860	2210	1940	2280	4620	543	265	304	244
13	182	5180	489	884	1450	2180	1830	2470	1900	6420	957	274
14	177	2890	492	863	1250	2080	1530	1710	1530	8690	998	485
15	2500	7110	559	811	1230	1860	1440	1370	1790	6900	635	301
16	1190	4110	644	807	1020	1960	6520	1340	722	4690	481	211
17	581	2520	923	696	900	1530	7120	1740	439	2140	388	1820
18	402	1760	817	749	909	1300	3540	1310	1130	1260	342	2760
19	314	1550	702	7340	785	1260	2370	1130	1050	1220	294	1250
20	260	1300	540	27100	1000	6030	1930	967	2070	1410	250	658
21	4440	1130	665	10400	4530	3390	1690	816	1290	774	246	436
22	6730	972	745	4640	4580	2260	1450	743	805	575	260	562
23	1860	825	715	2640	3350	1710	1300	645	4360	577	236	1070
24	1030	903	669	4200	3430	1400	1350	572	2980	580	585	578
25	750	797	652	8840	2780	1210	1130	522	1160	482	503	437
26	587	715	596	3800	1990	1120	1000	472	657	1840	288	350
27	469	662	498	6620	1640	961	982	489	422	1740	242	298
28	7200	607	597	14500	1510	885	841	513	325	858	232	279
29	4320	602	523	5820	1430	3230	906	485	306	634	193	751
30	1560	651	443	3400	---	3480	2770	479	751	611	178	689
31	1040	---	486	2810	---	2320	---	429	---	4050	181	---
TOTAL	43705	59299	18262	116339	55394	67966	75999	45412	29104	53390	21921	16633
MEAN	1410	1977	589	3753	1910	2192	2533	1465	970	1722	707	554
MAX	7200	9810	923	27100	4580	6030	8420	4870	4360	8690	5610	2760
MIN	169	602	417	513	785	885	841	429	299	265	178	167

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1996, BY WATER YEAR (WY)

MEAN	654	1059	1451	1614	1695	2167	1776	1258	773	692	671	659
MAX	2953	3684	4172	5825	3232	5093	5326	3862	3883	4624	3576	3158
(WY)	1904	1973	1974	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

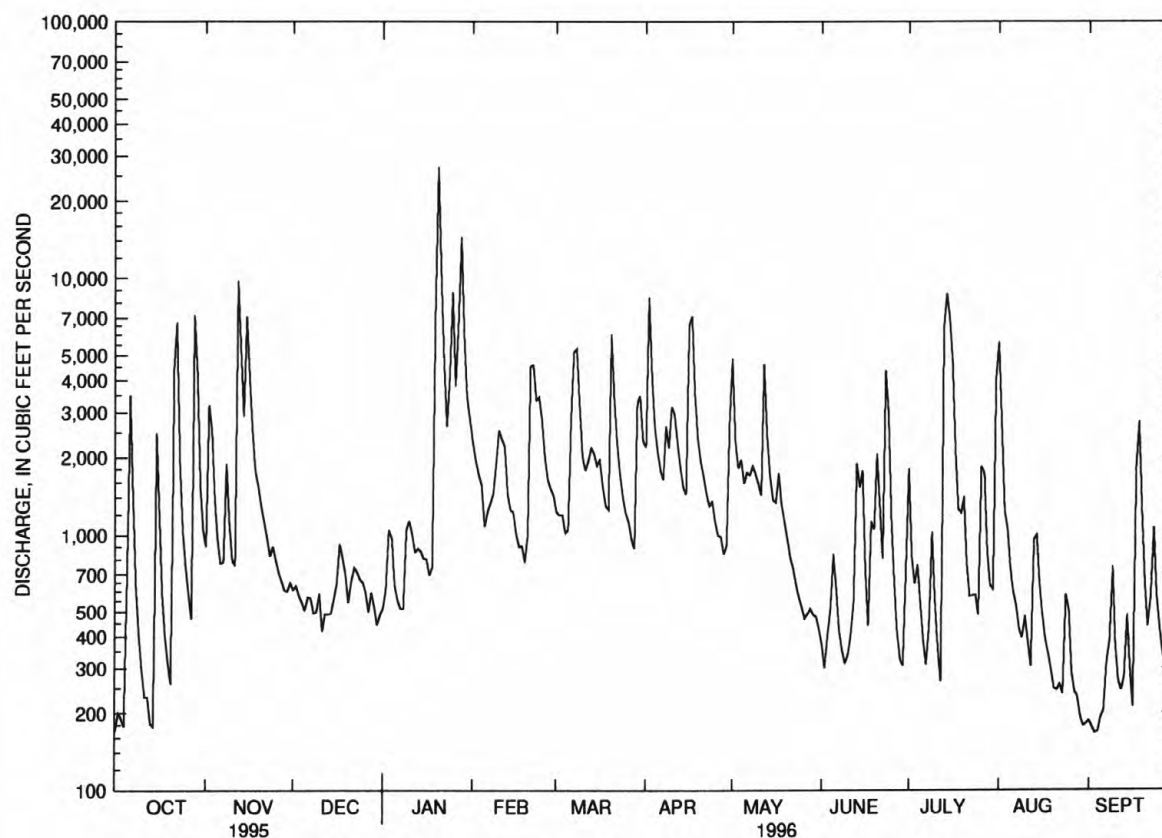
RARITAN RIVER BASIN

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01403060 RARITAN RIVER BELOW CALCO DAM, AT BOUND BROOK, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1903 - 1996	
ANNUAL TOTAL	284347		603424			
ANNUAL MEAN	779		1649		1202	
HIGHEST ANNUAL MEAN					2046	
LOWEST ANNUAL MEAN					480	
HIGHEST DAILY MEAN	9810	Nov 12	27100	Jan 20	34100	Aug 28 1971
LOWEST DAILY MEAN	92	Jun 19	167	Sep 3	37	Sep 6 1964
ANNUAL SEVEN-DAY MINIMUM	136	Aug 17	178	Aug 30	46	Sep 4 1957
INSTANTANEOUS PEAK FLOW			32700	Jan 20	46100	Aug 28 1971
INSTANTANEOUS PEAK STAGE			33.34	Jan 20	37.47a	Aug 28 1971
INSTANTANEOUS LOW FLOW			95	Oct 1		
10 PERCENT EXCEEDS	1480		3620		2600	
50 PERCENT EXCEEDS	460		959		635	
90 PERCENT EXCEEDS	166		303		170	

a From floodmark, highest since 1896.



— 01403060 RARITAN RIVER BELOW CALCO DAM AT BOUND BROOK, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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 mi².

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

REVISED RECORDS.--WDR NJ-91-1: 1990.

GAGE.--Water-stage recorder. Datum of gage is 240.48 ft above sea level (levels by Somerset County).

REMARKS.--Records fair. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	0500	*428	*5.93	Jan. 19	1545	412	5.84
Nov. 11	2400	373	5.61	July 31	0945	308	5.21

REVISIONS.--Some peak discharges and the annual maximum (*) for the water years 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, and 1994 have been revised as shown in the following table. They supersede figures published in the state reports for 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, and 1994.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 11, 1980	2000	114	4.01	June 4, 1987	1915	164	4.37
Mar. 21, 1980	1425	*276	*4.96	June 22, 1987	1400	215	4.68
Apr. 9, 1980	1230	188	4.52	July 2, 1987	2330	191	4.54
Apr. 28, 1980	1250	123	4.08	July 14, 1987	1645	223	4.78
Feb. 24, 1981	0530	91	3.82	July 26, 1987	1245	198	4.58
Feb. 26, 1981	2150	175	4.44	Oct. 28, 1987	-----	*311	*5.23
May 11, 1981	2010	*371	*5.60	July 21, 1988	-----	166	4.38
May 15, 1981	2035	90	3.81	July 23, 1988	-----	172	4.42
Sept. 1, 1981	1725	148	4.26	Nov. 20, 1988	-----	269	4.97
Oct. 27, 1981	2250	141	4.21	Nov. 28, 1988	-----	*370	*5.59
Jan. 4, 1982	0945	*316	*5.26	Feb. 21, 1989	-----	173	4.43
Apr. 3, 1982	1845	175	4.44	May 2, 1989	-----	297	5.14
Apr. 27, 1982	2250	130	4.13	May 6, 1989	-----	368	5.58
July 28, 1982	1535	123	4.08	May 16, 1989	-----	317	5.27
Jan. 10, 1983	2340	142	4.22	June 9, 1989	-----	309	5.22
Mar. 18, 1983	1745	118	4.04	Sept. 19, 1989	-----	166	4.38
Mar. 21, 1983	1130	158	4.33	Oct. 17, 1989	-----	244	4.84
Mar. 27, 1983	2225	189	4.53	Oct. 20, 1989	-----	227	5.39
Apr. 3, 1983	0835	127	4.11	Jan. 29, 1990	-----	259	4.92
Apr. 10, 1983	1205	188	4.52	May 10, 1990	-----	295	5.13
Apr. 16, 1983	0725	*211	*4.66	May 13, 1990	-----	353	5.49
May 22, 1983	2250	188	4.52	May 16, 1990	-----	*470	*6.21
May 26, 1983	1815	156	4.32	May 29, 1990	-----	246	4.85
Dec. 13, 1983	0855	170	4.41	June 9, 1990	-----	343	5.43
Dec. 22, 1983	1150	162	4.36	June 18, 1990	-----	309	5.22
Dec. 28, 1983	1805	173	4.43	July 21, 1990	-----	204	4.62
Apr. 5, 1984	0500	194	4.56	Aug. 7, 1990	-----	255	4.90
May 30, 1984	0445	290	5.10	Aug. 11, 1990	-----	328	5.34
July 7, 1984	0420	*340	*5.41	Oct. 9, 1990	0245	371	5.60
July 21, 1984	1005	269	4.97	Jan. 16, 1991	1430	206	4.63
July 26, 1985	2320	276	5.01	Mar. 3, 1991	2145	322	5.30
Aug. 26, 1985	0250	158	4.33	Apr. 24, 1991	1945	281	5.04
Sept. 10, 1985	1700	286	5.07	July 26, 1991	1800	289	5.09
Sept. 27, 1985	1125	*363	*5.55	Sept. 25, 1991	0815	*397	*5.75
Nov. 16, 1985	2320	222	4.72	June 5, 1992	2045	*271	*4.98
Jan. 25, 1986	2315	173	4.43	July 9, 1992	0230	259	4.92
Apr. 16, 1986	2000	*317	*5.27	Nov. 23, 1992	0430	244	4.84
July 31, 1986	0350	192	4.55	Dec. 11, 1992	0815	259	4.92
Aug. 2, 1986	2205	231	4.77	Apr. 26, 1993	1745	*286	*5.07
Aug. 11, 1986	0015	229	4.76	Nov. 28, 1993	0930	*424	*5.91
Nov. 20, 1986	2330	238	4.81	Dec. 5, 1993	0530	216	4.69
Nov. 26, 1986	1930	*325	*5.32	Jan. 28, 1994	1515	297	5.14
Dec. 3, 1986	0030	194	4.56	Mar. 10, 1994	0945	204	4.62
Dec. 25, 1986	0300	265	4.95	June 29, 1994	1315	201	4.60
Apr. 4, 1987	1245	224	4.73				

01403150 WEST BRANCH MIDDLE BROOK NEAR MARTINSVILLE, NJ--Continued

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	.45	3.8	2.8	2.2	1.7	1.9	24	6.9	.66	1.2	2.7	.44
2	.41	24	2.8	3.5	1.6	2.0	22	3.2	.64	.87	1.5	.43
3	.39	4.2	2.5	4.2	2.2	2.0	4.3	4.4	1.6	.94	1.2	.39
4	.39	2.5	2.5	3.1	1.5	1.7	3.2	3.2	1.1	.88	1.0	.38
5	18	1.8	2.3	2.6	1.5	5.7	2.7	2.3	1.4	.70	.87	.37
6	7.3	1.7	3.3	2.0	1.6	21	2.6	5.6	.83	.63	2.9	.47
7	1.1	11	2.5	2.1	1.5	17	5.6	2.9	.74	.61	1.1	.68
8	.75	5.8	2.2	5.1	1.5	6.5	7.3	5.1	.72	4.9	.80	10
9	.67	2.4	2.6	3.1	5.6	3.7	5.1	2.7	.67	1.0	1.3	.90
10	.66	1.9	2.7	2.5	5.2	3.0	12	2.3	.67	.63	.88	.58
11	.66	28	2.1	2.1	6.4	3.4	4.4	15	.72	e.60	.71	.49
12	.63	51	1.9	2.2	3.3	6.0	3.3	10	1.1	e.50	.70	.49
13	.64	4.3	1.8	2.3	2.1	6.9	2.8	2.8	1.1	e100	2.3	3.2
14	14	22	2.1	2.3	1.9	4.9	2.3	2.2	1.0	4.7	.96	1.1
15	11	19	2.9	2.3	1.9	5.1	2.3	1.9	.73	e7.6	.75	.63
16	1.3	3.8	4.5	2.3	1.7	4.1	60	4.2	.61	e5.7	.67	.55
17	.82	2.6	4.2	2.4	1.6	2.8	5.8	2.7	1.3	e1.9	.65	26
18	.66	2.3	3.3	3.2	1.5	2.6	3.5	2.0	.79	e1.2	.61	4.2
19	.59	2.8	3.0	144	1.2	21	2.9	1.8	18	e4.8	.59	1.1
20	.65	2.1	3.0	18	7.8	15	2.6	1.6	1.8	e2.6	.55	.86
21	31	1.9	2.6	4.1	34	4.1	2.3	1.4	1.1	e1.2	.55	.75
22	3.3	1.8	2.5	2.7	11	3.1	2.3	1.3	1.0	e1.2	.55	4.5
23	1.4	1.8	2.6	2.4	6.4	2.6	2.6	1.1	.85	e1.5	1.1	1.3
24	1.0	2.6	2.6	39	11	2.3	2.3	1.1	.70	e1.0	.82	.93
25	.96	2.0	2.5	11	3.9	2.2	2.1	1.0	.69	1.0	.58	.92
26	.85	1.9	2.5	3.4	2.7	2.0	2.1	.89	.61	6.7	.54	.76
27	1.3	1.9	2.4	78	2.4	1.8	1.9	.99	.61	1.6	.49	.74
28	65	1.9	2.3	8.2	2.5	1.9	1.7	.89	.61	1.2	.49	.79
29	3.2	2.6	2.1	3.0	2.1	19	12	.89	.61	1.1	.49	3.2
30	2.0	2.5	2.0	2.7	---	5.3	24	.84	4.0	1.2	.47	.89
31	1.6	---	2.0	2.3	---	3.4	---	.74	---	31	.44	---
TOTAL	172.68	217.9	81.1	368.3	129.3	184.0	232.0	93.94	46.96	190.66	29.26	68.04
MEAN	5.57	7.26	2.62	11.9	4.46	5.94	7.73	3.03	1.57	6.15	.94	2.27
MAX	65	51	4.5	144	34	21	60	15	18	100	2.9	26
MIN	.39	1.7	1.8	2.0	1.2	1.7	1.7	.74	.61	.50	.44	.37
CFSM	2.80	3.65	1.31	5.97	2.24	2.98	3.89	1.52	.79	3.09	.47	1.14
IN.	3.23	4.07	1.52	6.88	2.42	3.44	4.34	1.76	.88	3.56	.55	1.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1996, BY WATER YEAR (WY)

	MEAN	2.20	3.98	4.40	4.74	4.32	6.67	6.07	4.82	2.32	2.21	1.14	1.67
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	

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1979 - 1996

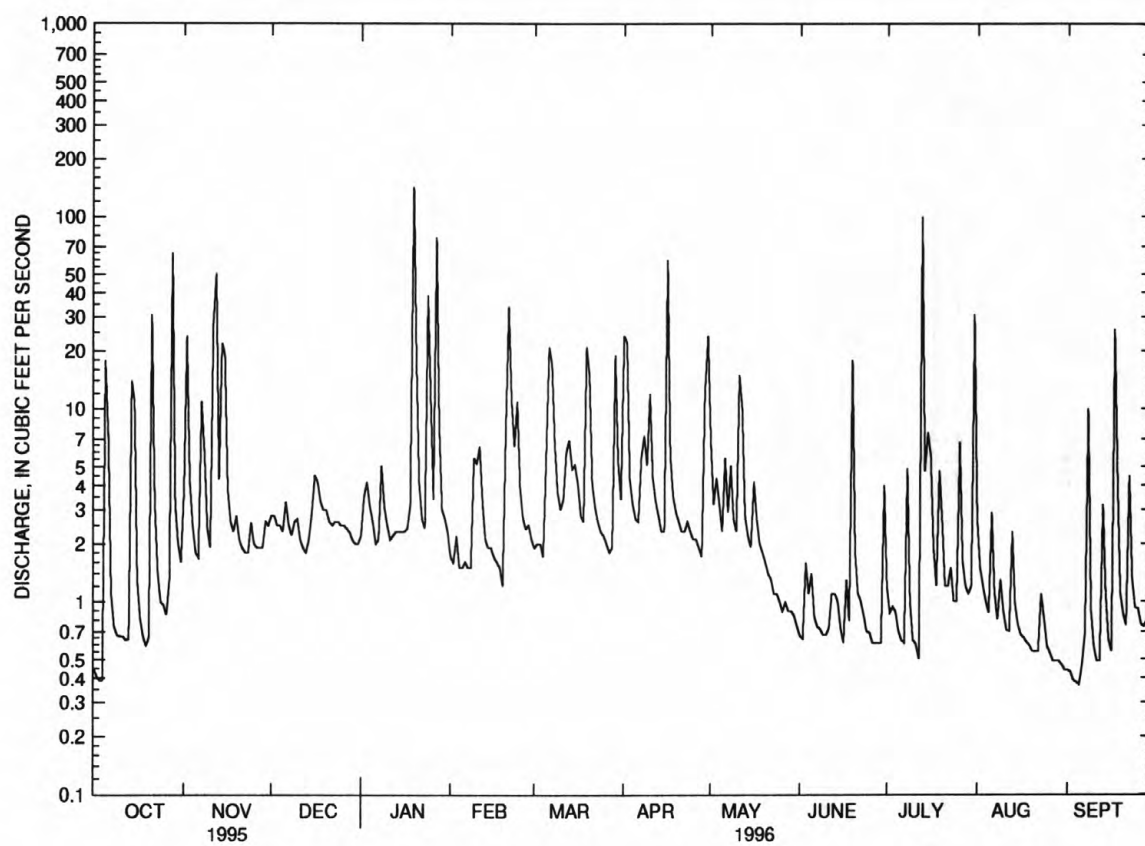
ANNUAL TOTAL	1103.89	1814.14	
ANNUAL MEAN	3.02	4.96	3.72
HIGHEST ANNUAL MEAN			5.48
LOWEST ANNUAL MEAN			1.88
HIGHEST DAILY MEAN	65	Oct 28	181
LOWEST DAILY MEAN	.21	Sep 8	.37
ANNUAL SEVEN-DAY MINIMUM	.23	Sep 2	.42
INSTANTANEOUS PEAK FLOW			428
INSTANTANEOUS PEAK STAGE			5.93
INSTANTANEOUS LOW FLOW			.35
ANNUAL RUNOFF (CFSM)	1.52		2.49
ANNUAL RUNOFF (INCHES)	20.64		33.91
10 PERCENT EXCEEDS	4.2		10
50 PERCENT EXCEEDS	.96		2.1
90 PERCENT EXCEEDS	.36		.63

a Revised.

e Estimated.

RARITAN RIVER BASIN

01403150 WEST BRANCH MIDDLE BROOK NEAR MARTINSVILLE, NJ--Continued



01403150 W B MIDDLE BROOK NEAR MARTINSVILLE, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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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 of Fieldsville Dam.

DRAINAGE AREA.--804 mi².

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.

REMARKS.--Instantaneous discharges are determined at Raritan River below Calco Dam at Bound Brook (station 01403060).

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 Long Island-New Jersey Coastal Plain NAWQA study.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	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)
NOV 1995												
01...	1130	798	233	7.4	--	12.0	767	10.4	96	<1.0	330	100
JAN 1996												
23...	1300	2580	279	7.7	--	2.0	760	13.4	97	<1.0	230	180
MAR												
28...	1230	866	303	--	--	7.5	770	--	--	2.9	<20	20
MAY												
08...	1210	2030	239	7.9	12.0	13.5	766	10.3	98	--	--	--
22...	1040	761	268	7.7	30.0	24.0	755	6.6	79	--	--	--
JUN												
10...	1130	334	350	7.3	--	24.0	764	6.5	77	2.8	220	90
13...	1000	2080	271	7.4	28.0	23.0	757	6.1	72	--	--	--
JUL												
09...	1100	1160	248	7.5	26.0	25.0	750	6.7	83	--	--	--
25...	1130	474	287	7.9	--	22.5	760	9.9	115	11.2	1100	10
AUG												
06...	1110	566	250	7.6	32.0	25.5	766	8.6	104	--	--	--
SEP												
19...	1020	1260	205	7.6	20.0	18.0	756	8.4	90	--	--	--

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 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV 1995											
01...	73	18	6.8	14	2.7	--	41	--	24	21	0.1
JAN 1996											
23...	68	17	6.3	22	2.1	--	32	--	17	43	0.1
MAR											
28...	88	22	8.0	21	1.7	--	49	--	25	39	<0.1
MAY											
08...	69	17	6.5	17	1.9	51	43	42	20	29	0.1
22...	77	19	7.2	18	2.3	59	55	48	24	30	0.1
JUN											
10...	100	26	9.4	25	3.2	--	59	--	36	39	0.2
13...	75	18	7.4	19	3.9	53	42	44	25	30	0.2
JUL											
09...	75	19	6.6	15	3.0	56	46	46	22	25	0.2
25...	88	22	8.1	19	2.6	--	58	--	25	30	0.1
AUG											
06...	73	18	6.9	16	2.6	55	48	45	24	24	0.1
SEP											
19...	63	16	5.7	13	2.9	49	40	40	18	19	0.1

RARITAN RIVER BASIN

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	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)
NOV 1995											
01...	12	136	134	<1	--	--	--	4.1	0.3	--	--
JAN 1996											
23...	11	152	148	12	--	--	--	3.0	0.3	--	--
MAR											
28...	8.0	178	161	4	--	--	--	2.5	0.6	--	--
MAY											
08...	8.9	149	131	--	40	140	45	3.4	1.1	13	71
22...	8.5	173	145	--	60	86	170	3.1	2.7	36	74
JUN											
10...	7.9	--	195	15	--	--	--	3.4	0.4	--	--
13...	6.7	159	148	--	60	25	17	4.4	--	269	1510
JUL											
09...	7.0	142	133	--	70	59	19	4.1	1.4	127	396
25...	12	180	162	3	--	--	--	3.2	0.4	--	--
AUG											
06...	11	147	139	--	60	180	40	3.8	0.6	6	9.3
SEP											
19...	8.8	121	115	--	60	66	32	4.7	1.3	31	104

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 TOTAL RECOV- ERABLE (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 1995								
01...	1130	17	<1	<10	60	<1	<1	2
JUN 1996								
10...	1130	11	1	<10	100	<1	<1	4

DATE	TIME	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1995								
01...		260	<1	50	<0.1	1	<1	<10
JUN 1996								
10...		290	<1	80	<0.1	2	<1	<10

The following analysis is a quality assurance sample processed during the 1996 water year and is defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	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)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)		
AUG 1996 06...	1000	FIELD BLANK	<0.02	<0.01	<0.20	<0.10	1.3		
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 AS B) (70300)	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)
AUG 1996 06...	<0.10	<0.10	<0.10	<0.01	<1	<4	<3	<1	

RARITAN RIVER BASIN

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01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE U.S. GEOLOGICAL SURVEY
NATIONAL WATER QUALITY LABORATORY

DATE	TIME	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)	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)
NOV 1995											
01...	1130	--	2.50	--	0.40	0.41	2.9	2.9	0.13	0.11	--
JAN 1996											
23...	1300	--	2.30	--	0.30	0.15	2.6	2.5	0.07	0.04	--
MAR											
28...	1230	--	1.50	--	0.30	0.21	1.8	1.7	0.08	0.05	--
MAY											
08...	1210	0.01	1.20	0.03	0.50	0.40	1.7	1.6	0.11	0.09	0.06
22...	1040	0.03	1.40	<0.015	0.60	0.40	2.0	1.8	0.17	0.05	0.02
JUN											
10...	1130	--	2.80	--	0.70	0.64	3.5	3.4	0.41	0.35	--
13...	1000	0.06	2.50	0.13	1.5	0.50	4.0	3.0	0.64	0.23	0.21
JUL											
09...	1100	0.03	1.60	0.09	0.90	0.30	2.5	1.9	0.29	0.15	0.14
25...	1130	--	1.80	--	0.40	0.21	2.2	2.0	0.14	0.10	--
AUG											
06...	1110	0.01	1.90	<0.015	0.40	0.20	2.3	2.1	0.15	0.10	0.15
SEP											
19...	1020	<0.01	1.50	0.07	0.60	0.40	2.1	1.9	0.19	0.10	0.13

The following analysis is a quality assurance sample processed during the 1996 water year and is defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	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)	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)
AUG 1996										
06...	1000	FIELD BLANK	<0.01	0.05	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01

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 1995				
01...	1130	0.011	0.05	0.04
JAN 1996				
23...	1300	0.009	0.08	0.06
MAR				
28...	1230	0.018	<0.03	<0.03
JUN				
10...	1130	0.033	0.09	0.09
JUL				
25...	1130	0.011	<0.03	<0.03

RARITAN RIVER BASIN

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels on p. 18). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels on p. 18). 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 (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
MAY 1996												
08...	1210	<0.002	0.008	0.052	E0.013	<0.002	E0.036	<0.003	<0.004	0.008	E0.003	<0.002
22...	1040	<0.002	0.006	0.060	E0.018	<0.002	E0.020	<0.003	<0.004	<0.004	E0.002	<0.002
JUN												
13...	1000	0.540	1.50	E5.70	E0.150	<0.002	E0.130	<0.010	0.035	0.220	0.007	0.015
JUL												
09...	1100	<0.002	0.140	0.670	E0.048	<0.002	E0.074	E0.008	0.012	0.054	0.012	0.100
AUG												
06...	1110	<0.002	0.016	0.098	E0.011	<0.002	E0.036	<0.003	<0.004	<0.004	E0.002	0.037
SEP												
19...	1020	<0.002	0.008	0.034	E0.013	<0.002	E0.158	<0.003	<0.004	<0.004	0.006	0.045
DATE		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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
MAY 1996												
08...		<0.001	<0.003	<0.002	<0.005	0.035	<0.004	<0.004	<0.003	<0.004	<0.004	0.023
22...		<0.001	<0.003	<0.002	<0.005	0.051	<0.004	<0.004	<0.003	<0.004	<0.004	E0.013
JUN												
13...		<0.001	<0.003	0.170	<0.005	E5.20	0.110	<0.004	<0.003	<0.004	0.046	0.043
JUL												
09...		<0.001	<0.003	--	<0.005	0.280	0.010	<0.004	<0.003	<0.004	0.013	0.060
AUG												
06...		<0.001	<0.003	<0.002	<0.005	0.110	<0.004	<0.004	<0.003	<0.004	<0.004	0.025
SEP												
19...		<0.001	<0.003	<0.002	<0.005	0.051	<0.004	<0.004	<0.003	<0.004	<0.004	0.039
DATE		SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD GF 0.7U REC (UG/L) (49310)	CHLORO- THALO- NIL, WAT,FLT 2,4-D, DIS- SOLVED (UG/L) (39732)	DIURON, WATER, FLTRD GF 0.7U REC (UG/L) (49300)	FLURO- METURON WATER, FLTRD GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD GF 0.7U REC (UG/L) (38478)	
MAY 1996												
08...		0.013	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
22...		0.007	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	E0.060	<0.035	<0.018
JUN												
13...		0.097	<0.010	<0.013	<0.001	<0.002	0.040	<0.035	<0.035	E0.007	0.040	0.190
JUL												
09...		0.055	<0.010	<0.013	<0.001	0.006	<0.008	<0.035	0.490	E1.20	<0.035	<0.018
AUG												
06...		0.030	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
SEP												
19...		0.010	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--

01403300 RARITAN RIVER AT QUEENS BRIDGE AT BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for volatile organic compounds (VOCs) on custom method schedule 9090 (listed with minimum reporting levels on p. 19). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

			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)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)				
MAY 1996												
08...			1209	<0.050	<0.050	<0.050	<0.050	<0.100	E0.080			
22...			1039	<0.050	<0.050	<0.050	<0.050	<0.100	0.350			
JUN												
13...			0959	<0.100	<0.100	<0.100	<0.100	<0.200	E0.120			
JUL												
09...			1059	<0.100	<0.100	<0.100	<0.100	<0.200	E0.180			
AUG												
06...			1109	<0.100	<0.100	<0.100	<0.100	<0.200	E0.100			
SEP												
19...			1019	<0.100	<0.100	<0.100	<0.100	<0.200	0.200			
DATE			CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- FORM TOTAL (UG/L) (32106)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	
MAY 1996												
08...			<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	0.230	<0.100	E0.020	
22...			E0.090	<0.100	<0.200	<0.100	<0.05	<0.200	1.00	<0.100	E0.030	
JUN												
13...			<0.200	<0.200	<0.400	<2.10	<0.10	<0.400	0.320	<0.200	<0.100	
JUL												
09...			0.200	<0.200	<0.400	E0.160	<0.10	<0.400	E0.200	<0.200	<0.100	
AUG												
06...			E0.050	<0.200	<0.400	<0.120	<0.10	<0.400	0.300	<0.200	E0.030	
SEP												
19...			E0.060	<0.200	<0.400	<0.200	<0.10	<0.400	0.590	<0.200	<0.100	
DATE			TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BENZENE TOTAL (UG/L) (34030)	STYRENE TOTAL (UG/L) (77128)	BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	ETHYL- BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)
MAY 1996												
08...			E0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	E0.060	<0.050
22...			E0.010	<0.050	0.120	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
JUN												
13...			<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
JUL												
09...			<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
AUG												
06...			<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
SEP												
19...			E0.010	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
DATE			BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- BENZENE TOTAL (UG/L) (34301)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT- PENTYL METHYL- UNFLTRD RECOVER (UG/L) (50005)	CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
MAY 1996												
08...			<0.050	<0.050	E0.010	E0	<5	<0.10	0.330	<5.00	<0.100	E0
22...			<0.050	<0.050	E0.030	<5	<5	<0.10	0.270	<5.00	<0.100	<0
JUN												
13...			<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
JUL												
09...			E0.060	<0.100	<0.100	<10	7	<0.20	E0.200	<10.0	<0.200	E0
AUG												
06...			<0.100	<0.100	E0.020	<10	<10	0.72	0.270	<10.0	<0.200	<0
SEP												
19...			<0.100	<0.100	E0.009	<10	<10	<0.20	0.310	<10.0	<0.200	<0

RARITAN RIVER BASIN

01403400 GREEN BROOK AT SEELEY MILLS, NJ

LOCATION.--Lat 40°39'53", long 74°24'10", 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 mi².

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 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.

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 ft³/s, computed by State Water Policy Commission.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	0500	531	3.72	Apr. 1	2245	257	2.80
Jan. 19	1600	*726	*4.27	Apr. 16	0900	257	2.80
Mar. 19	2245	453	3.48				

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	1.5	4.7	4.6	e2.9	e12	7.8	38	18	3.9	4.2	4.7	2.8
2	1.5	42	5.1	e4.7	e11	8.2	57	e6.7	3.7	3.4	3.7	2.8
3	1.4	9.9	5.1	e5.9	e9.6	8.2	18	e11	17	3.8	3.7	2.8
4	1.5	3.9	4.7	e3.8	e8.5	7.5	e12	e7.9	8.2	3.7	3.6	2.8
5	25	2.6	3.9	e2.9	e6.4	13	e10	e6.0	7.8	3.4	3.5	2.8
6	17	2.2	5.6	e2.4	e8.2	38	e12	14	4.4	3.3	3.3	3.8
7	2.2	e13	4.7	e2.2	e7.3	37	20	e11	3.9	3.2	3.3	3.7
8	1.9	e12	4.0	e2.5	e7.8	21	28	15	3.7	12	3.3	23
9	1.8	e4.1	4.3	e4.1	e16	13	23	13	3.7	5.0	3.4	3.8
10	1.8	e4.0	5.3	e3.7	e13	11	38	e8.8	4.2	3.4	3.2	2.8
11	1.8	e13	5.0	e3.4	e12	11	18	22	11	3.3	3.1	2.8
12	1.8	e107	4.2	e3.9	e9.7	13	14	29	5.9	3.3	3.1	2.8
13	1.8	e15	3.7	e6.4	e6.8	16	13	e7.3	7.3	83	8.2	7.8
14	10	e42	3.5	e4.9	e7.9	16	e10	e5.2	4.2	13	3.3	4.7
15	13	e65	4.0	e5.0	5.7	16	e9.0	e5.2	4.0	11	3.1	2.9
16	2.3	e16	e7.4	e4.1	4.1	14	118	18	3.5	7.4	3.1	2.8
17	1.9	e12	e5.0	e5.1	3.8	11	27	15	3.5	4.6	3.1	64
18	1.8	e7.6	e4.0	e6.2	5.3	10	16	13	3.6	4.1	3.1	42
19	1.8	e10	e3.7	e229	4.5	45	13	e7.3	14	10	2.9	6.6
20	2.0	e5.6	e3.3	e79	8.3	59	e9.5	e6.2	5.5	6.4	2.9	3.6
21	37	e4.8	e3.4	e20	34	20	e8.2	e5.2	4.0	5.4	3.0	2.9
22	5.8	e4.2	e3.6	e15	19	15	e7.6	5.0	3.6	5.5	3.0	6.2
23	2.4	e4.2	e3.4	e11	14	13	e8.1	4.8	3.7	5.7	4.7	4.4
24	2.0	e5.5	e3.3	e58	21	11	e9.2	4.5	3.5	4.4	4.1	3.9
25	2.1	e3.4	e3.1	e32	11	11	e6.4	4.2	3.5	4.0	2.9	3.7
26	2.1	e3.3	e3.3	e15	9.2	9.8	e6.2	4.2	3.3	5.3	2.9	3.1
27	3.5	e3.0	e2.9	e186	8.6	8.7	e5.7	4.5	3.3	3.5	2.9	2.9
28	102	e3.1	e3.0	e62	9.1	8.7	e5.5	4.2	3.1	3.3	2.9	3.2
29	7.0	e4.0	e2.9	e23	8.3	24	14	4.2	3.1	3.3	2.9	10
30	3.7	4.5	e2.8	e20	---	18	28	4.1	11	3.3	2.8	3.5
31	3.3	---	e3.0	e17	---	13	---	4.0	---	21	2.8	---
TOTAL	264.7	431.6	125.8	841.1	302.1	527.9	602.4	288.5	165.1	256.2	106.5	234.9
MEAN	8.54	14.4	4.06	27.1	10.4	17.0	20.1	9.31	5.50	8.26	3.44	7.83
MAX	102	107	7.4	229	34	59	118	29	17	83	8.2	64
MIN	1.4	2.2	2.8	2.2	3.8	7.5	5.5	4.0	3.1	3.2	2.8	2.8
CFSM	1.37	2.31	.65	4.36	1.67	2.73	3.22	1.49	.88	1.33	.55	1.26
IN.	1.58	2.58	.75	5.02	1.80	3.15	3.60	1.72	.99	1.53	.64	1.40

RARITAN RIVER BASIN

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01403400 GREEN BROOK AT SEELEY MILLS, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1996, BY WATER YEAR (WY)

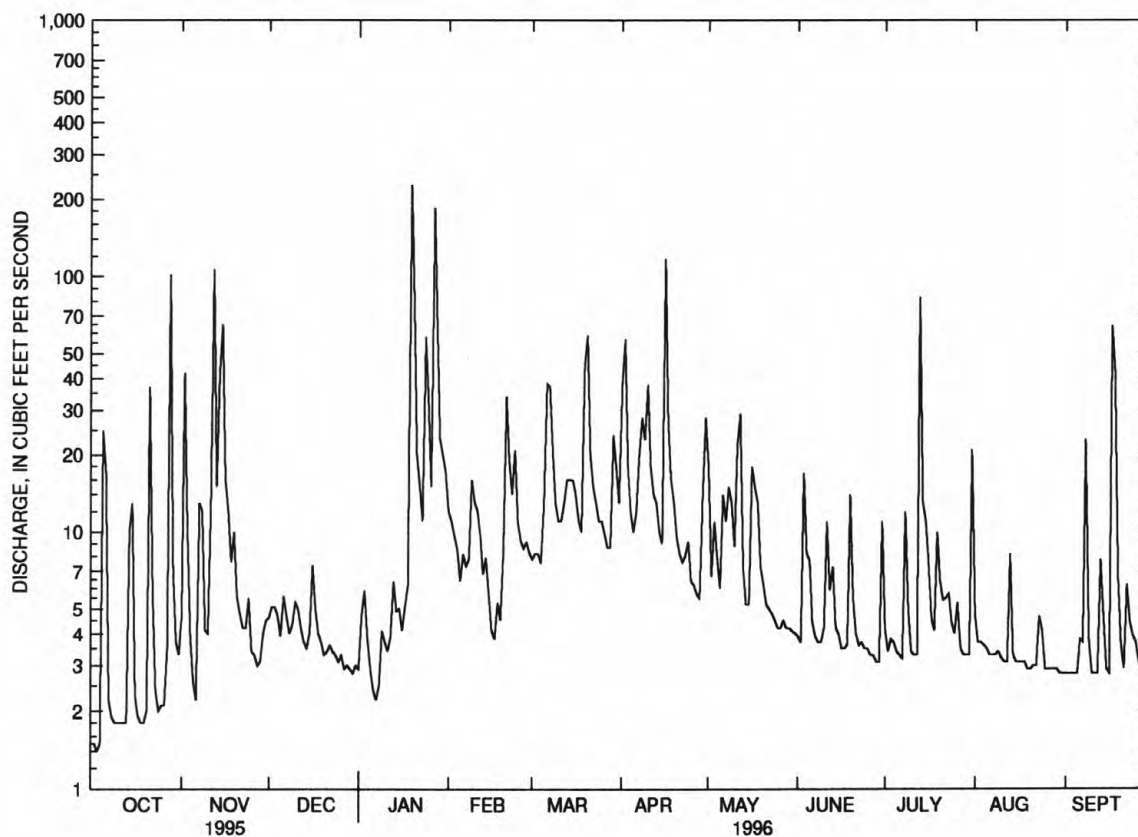
MEAN	6.50	10.4	11.7	12.1	11.4	17.6	18.7	13.1	7.43	6.87	4.84	5.73
MAX	22.8	22.4	46.9	27.1	20.9	40.9	41.1	42.0	23.3	18.9	16.1	24.6
(WY)	1990	1986	1984	1996	1984	1994	1983	1989	1992	1984	1990	1989
MIN	1.21	2.04	2.57	1.67	2.95	5.11	3.50	4.48	2.74	1.68	1.33	1.68
(WY)	1995	1982	1981	1981	1980	1985	1985	1986	1981	1993	1981	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1979 - 1996	
ANNUAL TOTAL	2589.7		4146.8			
ANNUAL MEAN	7.10		11.3		10.5	
HIGHEST ANNUAL MEAN					18.2	
LOWEST ANNUAL MEAN					5.16	
HIGHEST DAILY MEAN	107	Nov 12	229	Jan 19	407	Apr 5 1984
LOWEST DAILY MEAN	1.2	Sep 11	1.4	Oct 3	.00	Sep 11 1981
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 10	1.9	Oct 7	.05	Sep 24 1981
INSTANTANEOUS PEAK FLOW			726	Jan 19	6240a	Aug 2 1973
INSTANTANEOUS PEAK STAGE			4.27	Jan 19	16.10b	Aug 2 1973
INSTANTANEOUS LOW FLOW			1.1	Oct 27	.00	Sep 11 1981
ANNUAL RUNOFF (CFSM)	1.14		1.82		1.69	
ANNUAL RUNOFF (INCHES)	15.46		24.76		22.95	
10 PERCENT EXCEEDS	13		21		20	
50 PERCENT EXCEEDS	3.9		5.0		5.1	
90 PERCENT EXCEEDS	1.8		2.8		1.6	

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

b Site and datum then in use.

c Estimated.



01403400 GREEN BROOK AT SEELEY MILLS, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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 of dam on Best Lake in Watchung, 1,400 ft upstream of mouth, and 0.5 mi northeast of Watchung.

DRAINAGE AREA.--1.57 mi².

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 ft³/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 5.4 ft, present datum, from floodmarks, discharge, 2,840 ft³/s, by computation of flow over dam, embankment, and road.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 28	0515	252	2.08	Mar. 19	2200	322	2.25
Nov. 12	0015	204	1.96	Apr. 16	0830	138	1.79
Jan. 19	1530	*340	*2.28	June 19	1600	188	1.92
Jan. 27	1545	200	1.95	July 13	0700	134	1.77

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	.44	2.6	1.3	.53	3.4	2.9	8.4	6.4	.64	1.2	e1.3	e.35
2	.42	22	1.1	.76	3.0	3.6	7.8	3.5	.60	.68	e.90	e.50
3	.41	3.1	.94	.98	2.6	3.1	5.9	4.8	8.2	.75	e.75	e.30
4	.41	1.3	.98	.63	2.4	2.8	4.9	4.0	3.3	.76	e.70	e.30
5	5.9	.82	.80	.54	2.4	5.7	4.5	3.2	3.0	.58	e.70	e.35
6	4.6	.65	1.7	.48	2.4	15	4.1	5.1	1.0	.52	e.60	e.40
7	.72	5.5	.98	.51	2.4	15	5.5	3.2	.71	.48	e.55	e.45
8	.55	3.4	.79	.55	2.4	8.5	8.9	5.1	.62	5.3	e.55	e3.0
9	.49	1.1	1.2	.48	5.3	5.6	7.5	3.7	.57	2.1	e.55	e.65
10	.46	.86	1.1	.47	4.5	4.8	14	3.5	.58	.71	e.45	e.45
11	.45	12	.66	.46	5.2	5.0	7.9	9.6	3.0	.56	e.45	e.40
12	.43	33	.59	.57	3.4	5.8	6.1	12	1.3	.54	e.45	e.41
13	.43	3.5	.55	.73	2.5	6.8	5.2	4.5	1.9	38	e1.5	e.90
14	2.9	19	.67	.58	e2.0	7.2	4.5	3.6	.69	6.3	e.50	e.75
15	3.8	17	1.0	.59	2.1	7.3	4.0	3.1	.60	6.1	e.45	e.45
16	.65	3.6	1.8	.57	2.0	5.8	46	6.1	.56	4.6	e.45	e.40
17	.49	2.0	1.7	.67	1.8	4.6	10	4.6	.56	2.1	e.45	e6.5
18	.46	1.7	1.2	1.1	1.7	4.0	7.7	3.2	.58	1.4	e.50	e3.5
19	.44	2.7	1.3	87	1.6	24	6.3	2.7	14	3.6	e.40	e1.2
20	.46	1.7	1.3	15	5.2	16	5.5	2.2	3.3	1.6	e.40	e.65
21	8.1	1.4	.99	6.3	20	5.9	5.1	2.0	1.7	.89	e.40	e.55
22	2.1	1.0	.94	4.7	11	4.5	4.5	1.8	1.0	.78	e.40	e1.5
23	.79	.97	.93	4.0	6.2	3.9	4.6	1.4	.84	1.0	e.50	e.85
24	.59	1.7	.93	20	8.3	3.5	3.9	1.3	.65	.83	e.45	e.65
25	.54	.99	.79	10	4.7	3.8	2.8	1.1	.62	e.74	e.40	e.55
26	.59	.88	.79	5.2	3.5	3.2	2.7	.94	.56	e1.2	e.39	e.50
27	.75	.79	.67	55	3.8	2.9	2.3	1.2	.52	e.65	e.38	e.50
28	39	.73	.63	12	4.2	3.3	1.9	.96	.48	e.65	e.35	e.45
29	1.9	1.1	.61	5.7	2.9	8.4	5.3	.91	.47	e.60	e.36	e1.6
30	.86	1.1	.60	4.7	---	7.2	12	.72	5.0	e.55	e.35	e.55
31	.73	---	.58	4.1	---	8.4	---	.67	---	e5.5	e.35	---
TOTAL	80.86	148.19	30.12	244.90	122.9	208.5	219.8	107.10	57.55	91.27	16.93	29.61
MEAN	2.61	4.94	.97	7.90	4.24	6.73	7.33	3.45	1.92	2.94	.55	.99
MAX	39	33	1.8	87	20	24	46	12	14	38	1.5	6.5
MIN	.41	.65	.55	.46	1.6	2.8	1.9	.67	.47	.48	.35	.30
CFM	1.66	3.15	.62	5.03	2.70	4.28	4.67	2.20	1.22	1.88	.35	.63
IN.	1.92	3.51	.71	5.80	2.91	4.94	5.21	2.54	1.36	2.16	.40	.70

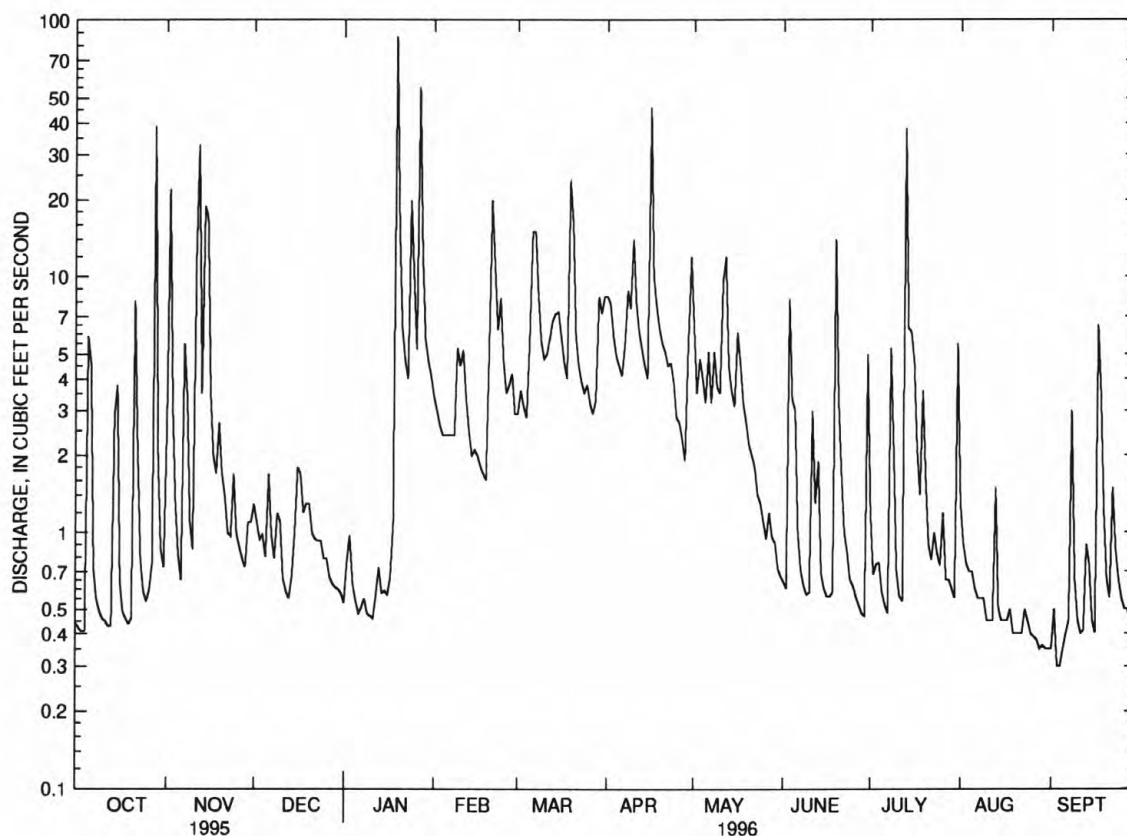
01403535 EAST BRANCH STONY BROOK AT BEST LAKE, AT WATCHUNG, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1996, BY WATER YEAR (WY)

MEAN	1.39	2.85	3.04	3.14	3.22	4.54	4.68	3.53	1.83	1.57	.88	.97
MAX	4.91	5.73	10.1	7.90	5.75	10.7	10.2	10.9	4.97	4.53	2.19	4.65
(WY)	1990	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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1980 - 1996	
ANNUAL TOTAL	746.63		1357.73			
ANNUAL MEAN	2.05		3.71		2.65	
HIGHEST ANNUAL MEAN					4.47	
LOWEST ANNUAL MEAN					1.48	
HIGHEST DAILY MEAN	39	Oct 28	87	Jan 19	91	Jun 5 1992
LOWEST DAILY MEAN	.16	Aug 27	.30e	Sep 3	.00	Aug 30 1980
ANNUAL SEVEN-DAY MINIMUM	.18	Aug 21	.36	Aug 30	.00	Sep 3 1980
INSTANTANEOUS PEAK FLOW			340	Jan 19	640	Nov 28 1993
INSTANTANEOUS PEAK STAGE			2.28	Jan 19	2.81	Nov 28 1993
INSTANTANEOUS LOW FLOW			---		.00	Aug 30 1980
ANNUAL RUNOFF (CFSM)	1.30		2.36		1.69	
ANNUAL RUNOFF (INCHES)	17.69		32.17		22.91	
10 PERCENT EXCEEDS	3.6		7.7		5.4	
50 PERCENT EXCEEDS	.97		1.3		1.1	
90 PERCENT EXCEEDS	.40		.45		.27	

e Estimated.



— 01403535 E B 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 mi².

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 172.24 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges and those below 1.0 ft³/s, which are 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 2, 1973, reached a stage of 14.5 ft, from floodmark, discharge, 10,500 ft³/s, from slope-area measurements of peak flow.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0015	547	3.12	June 19	1600	472	2.92
Jan. 19	1445	*701	*3.48	July 13	0715	355	2.55
Jan. 27	1400	375	2.62	July 13	1100	331	2.47
Mar. 19	2215	547	3.12				

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	e3.0	e20	12	e7.0	12	8.4	39	20	e2.0	2.8	7.2	1.8
2	e3.0	e45	12	12	11	8.5	49	11	e2.0	e2.0	4.2	1.8
3	e3.5	e20	11	13	10	7.9	18	15	19	e2.0	3.5	1.8
4	e3.5	e9.0	11	11	9.1	8.1	15	12	8.7	e1.5	3.3	1.8
5	e10	e7.5	10	10	8.1	15	13	9.3	11	e1.5	3.0	1.8
6	e40	e7.5	15	9.9	8.1	41	12	14	3.6	e1.0	2.5	2.2
7	e5.0	27	e10	19	7.7	39	15	10	2.9	e1.5	2.4	2.7
8	e4.0	24	10	52	7.4	29	24	16	2.3	15	2.3	23
9	e3.5	16	11	44	12	16	19	10	1.8	5.8	2.3	4.0
10	e3.5	13	11	26	13	13	36	9.2	2.1	e1.5	2.2	2.3
11	e4.0	39	9.8	9.5	13	13	19	24	11	e1.5	2.2	2.1
12	e4.0	119	9.4	10	12	14	15	35	5.4	e1.5	2.2	2.0
13	e4.5	25	8.8	11	10	20	13	12	7.6	117	9.8	2.9
14	e15	65	9.6	10	8.6	18	12	9.9	2.9	20	2.9	3.9
15	e35	69	11	10	7.2	11	11	8.9	2.1	26	2.3	2.1
16	e4.5	25	14	10	6.4	5.8	117	18	e3.0	16	2.2	2.0
17	e4.0	20	14	11	6.3	5.3	27	13	e3.0	7.7	2.2	37
18	e3.5	18	e9.0	14	6.4	7.5	18	10	e3.5	5.5	2.2	17
19	e4.0	20	e9.0	207	5.2	53	16	8.4	45	12	2.2	4.6
20	e5.0	47	e9.0	74	9.5	51	14	7.2	8.9	7.4	2.2	2.9
21	e30	15	e8.0	22	43	19	12	6.4	4.2	4.3	2.0	2.5
22	e8.0	14	e8.0	16	34	15	11	5.6	2.6	4.2	2.0	6.1
23	e4.5	13	e8.0	14	20	12	11	4.7	2.3	5.3	2.1	3.9
24	e4.0	16	e8.0	50	24	11	11	4.4	e2.0	4.1	2.1	2.4
25	e3.5	13	e8.0	53	16	11	8.5	4.0	e2.0	3.5	2.0	2.3
26	e3.0	13	e8.0	16	18	10	7.7	3.5	e1.5	5.8	2.0	2.2
27	e3.5	12	e7.5	126	15	8.7	7.2	3.5	e2.5	3.5	2.0	2.1
28	e75	12	e7.5	56	11	8.3	6.1	3.4	e3.0	2.7	2.0	2.1
29	e15	13	e7.5	23	9.0	27	15	3.3	e2.0	2.5	1.9	8.7
30	e7.5	12	e7.5	17	---	18	34	2.9	10	2.4	1.8	2.8
31	e6.0	---	e7.5	15	---	13	---	2.1	---	32	1.8	---
TOTAL	322.5	769.0	302.1	978.4	373.0	537.5	625.5	316.7	179.9	319.5	85.0	154.8
MEAN	10.4	25.6	9.75	31.6	12.9	17.3	20.8	10.2	6.00	10.3	2.74	5.16
MAX	75	119	15	207	43	53	117	35	45	117	9.8	37
MIN	3.0	7.5	7.5	7.0	5.2	5.3	6.1	2.1	1.5	1.0	1.8	1.8
CFSM	1.89	4.65	1.77	5.73	2.33	3.15	3.78	1.85	1.09	1.87	.50	.94
IN.	2.18	5.19	2.04	6.61	2.52	3.63	4.22	2.14	1.21	2.16	.57	1.05

RARITAN RIVER BASIN

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01403540 STONY BROOK AT WATCHUNG, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, BY WATER YEAR (WY)

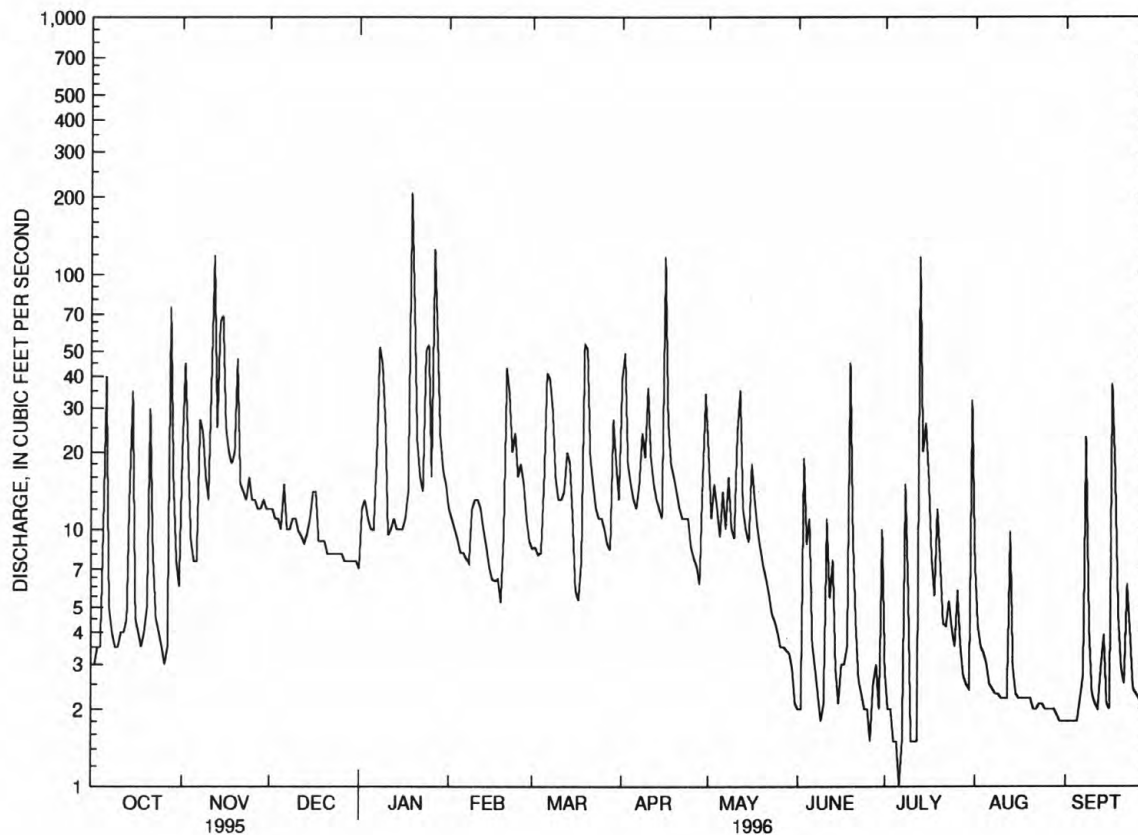
MEAN	5.49	9.87	12.0	14.2	12.0	17.9	16.5	12.0	6.71	6.39	3.77	4.78
MAX	17.9	25.6	37.1	37.5	20.1	45.0	38.3	37.8	20.1	32.1	11.0	18.6
(WY)	1990	1996	1984	1979	1988	1994	1983	1989	1992	1975	1990	1975
MIN	.81	1.94	1.79	1.08	3.60	5.60	3.89	3.42	2.27	1.27	.81	.87
(WY)	1995	1977	1981	1981	1980	1985	1985	1986	1980	1977	1981	1983

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1975 - 1996

ANNUAL TOTAL	3056.73	4963.9	
ANNUAL MEAN	8.37	13.6	10.1
HIGHEST ANNUAL MEAN			16.0
LOWEST ANNUAL MEAN			5.43
HIGHEST DAILY MEAN	119 Nov 12	207 Jan 19	375 Nov 28 1993
LOWEST DAILY MEAN	.34 Sep 15	1.0 Jul 6	.00 Sep 18 1982
ANNUAL SEVEN-DAY MINIMUM	.43 Sep 1	1.8 Jul 1	.06 Sep 13 1982
INSTANTANEOUS PEAK FLOW		701a Jan 19	4420a Jul 14 1975
INSTANTANEOUS PEAK STAGE		3.48 Jan 19	10.40 Jul 14 1975
INSTANTANEOUS LOW FLOW		---	.00 Sep 13 1982
ANNUAL RUNOFF (CFSM)	1.52	2.46	1.84
ANNUAL RUNOFF (INCHES)	20.64	33.51	24.95
10 PERCENT EXCEEDS	15	27	20
50 PERCENT EXCEEDS	4.7	9.0	4.7
90 PERCENT EXCEEDS	1.6	2.1	1.1

a From rating curve extended above 500 ft³/s on basis of slope-area measurement of peak flow.

e Estimated.



01403540 STONY BROOK AT WATCHUNG, NJ, DAILY MEAN DISCHARGE

RARITAN RIVER BASIN

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 of mouth of Green Brook, and 2.3 mi upstream of mouth.

DRAINAGE AREA.--48.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to October 1977, April 1996 to September 1996. 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.

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	---	---	---	---	---	---	---	130	19	63	296	14
2	---	---	---	---	---	---	---	50	18	22	73	13
3	---	---	---	---	---	---	---	74	119	22	33	13
4	---	---	---	---	---	---	---	86	e155	29	25	12
5	---	---	---	---	---	---	---	48	e44	19	48	12
6	---	---	---	---	---	---	---	86	e25	17	24	21
7	---	---	---	---	---	---	---	59	21	15	22	40
8	---	---	---	---	---	---	---	e104	20	96	21	189
9	---	---	---	---	---	---	92	e62	19	227	26	330
10	---	---	---	---	---	---	201	44	18	35	56	127
11	---	---	---	---	---	---	120	62	39	23	22	72
12	---	---	---	---	---	---	74	252	78	20	20	41
13	---	---	---	---	---	---	64	74	72	e597	145	64
14	---	---	---	---	---	---	57	54	24	e270	65	113
15	---	---	---	---	---	---	53	46	20	e191	27	21
16	---	---	---	---	---	---	684	82	18	224	22	13
17	---	---	---	---	---	---	250	87	16	82	21	249
18	---	---	---	---	---	---	104	56	17	41	19	417
19	---	---	---	---	---	---	76	47	160	98	18	126
20	---	---	---	---	---	---	67	44	93	121	18	42
21	---	---	---	---	---	---	61	36	29	40	19	26
22	---	---	---	---	---	---	54	33	23	32	20	62
23	---	---	---	---	---	---	54	29	24	31	18	56
24	---	---	---	---	---	---	72	29	19	30	25	34
25	---	---	---	---	---	---	42	26	19	27	19	33
26	---	---	---	---	---	---	37	23	17	50	17	26
27	---	---	---	---	---	---	39	27	16	32	16	22
28	---	---	---	---	---	---	29	25	15	25	16	25
29	---	---	---	---	---	---	49	23	15	24	15	119
30	---	---	---	---	---	---	148	22	117	24	15	44
31	---	---	---	---	---	---	---	21	---	377	14	---
TOTAL	---	---	---	---	---	---	---	1841	1289	2904	1195	2376
MEAN	---	---	---	---	---	---	---	59.4	43.0	93.7	38.5	79.2
MAX	---	---	---	---	---	---	---	252	160	597	296	417
MIN	---	---	---	---	---	---	---	21	15	15	14	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1996, BY WATER YEAR (WY)

	54.8	58.6	102	80.3	91.8	91.3	98.8	71.8	54.0	76.5	63.0	60.4
MEAN	54.8	58.6	102	80.3	91.8	91.3	98.8	71.8	54.0	76.5	63.0	60.4
MAX	94.5	125	164	112	170	110	178	146	128	263	258	198
(WY)	1976	1973	1974	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

RARITAN RIVER BASIN

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

SUMMARY STATISTICS

WATER YEARS 1972 - 1996

ANNUAL MEAN	77.1c	
HIGHEST ANNUAL MEAN	112c	1973
LOWEST ANNUAL MEAN	40.3c	1977
HIGHEST DAILY MEAN	2990c	Aug 3 1973
LOWEST DAILY MEAN	2.5c	Jul 21 1974
INSTANTANEOUS PEAK FLOW	7000b	Aug 2 1973
INSTANTANEOUS PEAK STAGE	41.18ab	Aug 2 1973
INSTANTANEOUS LOW FLOW	2.5c	Jul 21 1974

a Gage height (NGVD 1929) from previous site location approximately 150 ft upstream from current site.

b Water years 1972-77, 1992-96.

c Water years 1972-77.

e Estimated.

WATER-QUALITY RECORDS

LOCATION.--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, 2.3 mi upstream from mouth.

DRAINAGE AREA.--48.4 mi².

PERIOD OF RECORD.--April to September, 1996.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 24 to September 17, 1996.

WATER TEMPERATURES: July 24 to September 30, 1996.

INSTRUMENTATION.--Minimonitor probe records specific conductance and water temperature. Minimonitor probe is located at the downstream side of bridge.

REMARKS.--Specific conductance record is not published from Sept. 17-30 because of error in the probe readings.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 HG) (00025)	OXYGEN, DIS- SOLVED OF (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
APR 1996										
23...	1100	52	472	7.8	36.0	20.5	752	14.7	165	150
30...	1030	96	445	8.0	20.0	14.5	753	7.9	79	140
MAY										
07...	1030	58	407	7.6	18.5	11.5	773	10.1	92	120
14...	1050	54	373	7.5	16.0	11.5	769	9.2	84	110
21...	1050	35	450	7.7	31.0	22.5	747	--	--	140
29...	0940	22	511	7.6	15.0	14.0	756	7.6	75	170
JUN										
05...	1020	77	239	7.8	--	18.5	762	6.5	70	71
11...	1050	20	461	7.9	24.5	22.0	761	5.5	63	160
13...	0920	92	268	7.4	--	21.5	761	5.8	66	76
25...	0950	19	416	7.5	24.0	21.5	754	6.2	71	130
JUL										
09...	1050	205	183	7.0	30.0	22.5	--	--	--	56
13...	1040	804	184	7.6	21.0	20.5	751	7.3	83	53
13...	1410	987	153	7.3	23.0	21.0	746	7.2	83	42
AUG										
05...	1030	58	412	7.6	25.0	21.5	766	--	--	140
19...	1030	18	442	7.4	22.0	20.5	767	6.5	72	150
SEP										
05...	1140	12	542	7.6	28.0	22.0	763	6.8	78	200
17...	1100	518	226	7.8	17.5	18.0	752	8.5	91	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)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY 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)
APR 1996										
23...	41	11	34	1.8	94	77	78	37	69	<0.1
30...	40	9.5	29	1.9	99	81	84	42	55	<0.1
MAY										
07...	35	9.0	31	1.6	--	--	72	31	57	0.1
14...	29	8.4	28	1.5	72	59	63	28	55	<0.1
21...	38	11	29	1.9	96	79	84	37	61	<0.1
29...	48	13	29	2.0	123	101	96	54	64	<0.1
JUN										
05...	20	5.0	18	1.7	49	40	40	19	30	<0.1
11...	45	12	28	2.1	106	87	88	46	58	0.1
13...	22	5.2	19	2.1	--	--	49	23	33	0.2
25...	37	9.8	25	2.0	93	76	80	35	50	0.1
JUL										
09...	17	3.4	10	2.1	39	32	31	18	17	<0.1
13...	15	3.7	12	1.7	--	--	32	16	19	<0.1
13...	12	2.9	10	1.8	--	--	29	12	16	<0.1
AUG										
05...	41	8.6	22	2.4	107	88	88	42	38	0.1
19...	43	11	23	2.3	107	88	93	49	45	<0.1
SEP										
05...	56	14	26	2.3	134	110	112	72	51	<0.1
17...	21	4.5	14	1.9	59	48	48	20	22	<0.1

RARITAN RIVER BASIN

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01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
APR 1996										
23...	12	268	256	0.020	0.80	0.040	0.30	0.20	1.1	1.0
30...	10	270	239	0.020	0.66	0.030	0.60	0.30	1.3	0.96
MAY										
07...	14	245	226	0.020	0.70	0.120	0.40	0.30	1.1	1.0
14...	13	221	202	0.020	0.72	0.060	0.40	0.30	1.1	1.0
21...	13	275	241	0.030	0.56	0.020	0.30	0.30	0.86	0.86
29...	11	304	286	0.030	0.80	0.080	0.50	0.50	1.3	1.3
JUN										
05...	7.9	166	128	0.030	0.41	0.110	0.60	0.50	1.0	0.91
11...	14	274	262	0.050	0.81	0.120	0.50	0.50	1.3	1.3
13...	9.1	167	146	0.070	0.56	<0.015	0.80	0.40	1.4	0.96
25...	15	254	224	0.030	0.88	0.110	0.40	0.30	1.3	1.2
JUL										
09...	6.1	112	98	0.050	1.10	0.240	1.4	0.50	2.5	1.6
13...	7.1	112	97	0.030	0.55	0.100	1.3	0.30	1.8	0.85
13...	6.6	102	82	0.020	0.58	0.060	0.90	0.30	1.5	0.88
AUG										
05...	15	246	228	0.040	1.20	0.160	0.60	0.50	1.8	1.7
19...	12	256	243	0.030	0.94	0.090	0.30	0.30	1.2	1.2
SEP										
05...	13	313	305	0.020	0.98	0.070	0.30	0.30	1.3	1.3
17...	8.1	132	124	0.030	0.66	0.100	0.70	0.30	1.4	0.96
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)
APR 1996										
23...	0.02	<0.01	<0.01	--	160	110	3.0	0.4	3	0.40
30...	0.06	0.02	<0.01	--	53	120	3.9	1.0	15	4.0
MAY										
07...	0.02	<0.01	0.02	90	160	120	4.0	0.6	6	0.86
14...	0.03	0.02	<0.01	80	150	110	4.3	0.4	6	0.86
21...	0.03	0.04	<0.01	130	100	140	3.3	0.4	7	0.67
29...	0.04	0.02	<0.01	140	140	160	3.0	0.5	4	0.26
JUN										
05...	0.07	0.04	0.03	70	100	65	6.4	2.4	27	5.6
11...	0.07	0.04	0.03	130	140	160	3.4	0.2	6	0.35
13...	0.15	0.07	0.01	90	120	61	6.1	1.5	28	6.9
25...	0.04	0.02	0.03	120	100	140	3.7	0.3	3	0.16
JUL										
09...	0.17	0.05	0.06	70	110	73	5.5	1.8	56	31
13...	0.26	0.04	0.04	70	79	39	5.1	4.3	281	610
13...	0.18	0.04	0.05	70	200	39	5.8	2.7	92	245
AUG										
05...	0.06	0.05	0.04	130	160	97	5.1	0.7	13	2.1
19...	0.04	0.02	0.04	140	140	92	3.6	0.3	3	0.12
SEP										
05...	0.04	0.02	0.02	170	44	86	2.7	0.4	3	0.09
17...	0.13	0.05	0.06	90	79	35	3.9	2.7	61	85

RARITAN RIVER BASIN

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

The following analyses are quality assurance samples processed during the 1996 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data."

		QUALITY ASSURANCE SAMPLE (TYPE)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)			
APR 1996 30...	1038	FIELD BLANK	<0.02	<0.01	<0.20	<0.10	1.4			
SEP 05...	1040	FIELD BLANK	--	--	--	--	--			
DATE	TIME	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, 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)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	
APR 1996 30...		<0.10	<0.10	<0.10	0.05	8	<3	<1	--	
SEP 05...		--	--	--	--	--	--	--	<0.10	
DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
APR 1996 30...	1038	FIELD BLANK	<0.01	<0.05	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels on p. 18). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels on p. 18). 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-ZINE, WAT FLD GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD (UG/L) (82680)	CARBO-FURAN WATER FLTRD (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD GF, REC (UG/L) (82682)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
APR 1996 23...	1100	<0.002	<0.002	0.011	E0.005	0.007	<0.010	<0.003	0.031	<0.004	<0.002	0.008
30...	1030	<0.002	0.006	0.070	E0.011	0.006	E0.082	<0.003	0.021	<0.004	E0.003	0.049
MAY 07...	1030	<0.002	<0.002	0.028	E0.008	<0.002	E0.064	<0.003	0.011	<0.004	E0.003	0.042
14...	1050	<0.002	<0.002	0.025	E0.006	<0.002	E0.360	<0.003	0.021	<0.004	E0.002	0.058
21...	1050	<0.002	<0.002	0.016	E0.007	<0.002	E0.160	<0.003	0.008	<0.004	<0.002	0.020
29...	0940	<0.002	<0.002	0.023	E0.006	<0.002	E0.058	<0.003	0.010	0.009	<0.002	<0.014
JUN 05...	1020	0.038	0.042	0.078	E0.018	0.005	E1.50	<0.003	0.044	<0.004	0.006	0.160
11...	1050	<0.002	0.004	0.025	E0.007	<0.002	E0.082	<0.003	0.013	<0.004	E0.002	0.034
13...	0920	<0.002	0.019	0.058	E0.014	E0.003	E0.650	<0.003	0.022	0.009	E0.003	0.110
25...	0950	<0.002	0.005	0.057	E0.011	<0.002	E0.060	<0.003	0.014	0.009	E0.002	0.041
JUL 09...	1050	<0.002	0.025	0.043	E0.013	0.007	E0.260	<0.003	0.020	<0.004	0.007	0.300
13...	1040	<0.002	0.010	0.073	E0.006	0.007	E0.230	<0.003	0.022	<0.004	E0.004	0.120
13...	1410	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	1030	<0.002	0.006	0.032	E0.012	<0.002	E0.247	<0.003	0.015	<0.004	<0.002	0.078
19...	1030	<0.002	<0.002	0.016	E0.007	<0.002	E0.031	<0.003	0.006	<0.004	<0.002	0.032
SEP 05...	1140	<0.002	<0.002	0.012	E0.005	<0.002	E0.009	<0.003	<0.004	<0.004	<0.002	<0.002
17...	1100	<0.002	<0.002	0.016	E0.006	<0.002	E0.128	<0.003	0.017	<0.004	E0.002	0.116

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	DI-ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LIN- URON WATER FLTRD GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENSOR DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
APR 1996											
23...	<0.001	<0.003	<0.002	<0.005	0.006	<0.004	<0.004	<0.003	0.018	0.019	0.039
30...	<0.001	<0.003	<0.002	<0.005	0.018	<0.004	<0.004	<0.003	<0.004	0.032	0.036
MAY											
07...	<0.001	<0.003	<0.002	<0.005	0.013	<0.004	<0.004	<0.003	<0.004	<0.004	0.051
14...	<0.001	<0.003	<0.002	<0.005	0.017	<0.004	<0.004	<0.003	<0.004	0.016	0.059
21...	<0.001	<0.003	<0.002	<0.005	0.026	<0.004	<0.004	<0.003	<0.004	<0.004	0.046
29...	<0.001	<0.003	<0.002	<0.005	0.012	<0.004	<0.004	<0.003	<0.004	<0.004	0.024
JUN											
05...	<0.001	0.054	<0.002	0.026	0.160	<0.004	<0.004	<0.003	<0.004	0.028	0.096
11...	<0.001	0.013	<0.002	<0.005	0.035	<0.004	<0.004	<0.003	<0.004	<0.004	0.045
13...	<0.001	0.044	<0.002	0.015	0.071	<0.004	<0.004	<0.003	<0.004	0.015	0.091
25...	<0.001	0.007	<0.002	<0.005	0.110	<0.004	<0.004	<0.003	<0.004	0.008	0.063
JUL											
09...	<0.001	<0.003	<0.002	<0.005	0.250	<0.004	<0.004	<0.003	<0.004	0.014	0.099
13...	<0.001	0.005	<0.002	0.078	0.050	<0.004	<0.004	<0.003	<0.004	0.014	0.099
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	<0.001	<0.003	<0.002	0.022	0.020	<0.004	<0.004	<0.003	<0.004	<0.008	0.059
19...	<0.001	<0.003	<0.002	<0.005	0.015	<0.004	<0.004	<0.003	<0.004	<0.004	0.047
SEP											
05...	<0.001	<0.003	<0.002	<0.005	0.004	<0.004	<0.004	<0.003	<0.004	<0.004	0.024
17...	<0.001	<0.003	<0.002	0.013	0.016	<0.004	<0.004	<0.003	<0.004	<0.004	0.061

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CHLORO- THALO- NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	2,4-D, DIS- SOLVED REC (UG/L) (39732)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	FLURO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
APR 1996											
23...	0.009	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
30...	0.016	0.013	0.033	<0.001	0.005	<0.008	<0.035	0.380	0.030	<0.035	<0.018
MAY											
07...	0.022	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	0.240	<0.020	<0.035	<0.018
14...	0.008	<0.010	<0.013	<0.001	<0.002	0.200	<0.035	0.160	0.130	<0.035	<0.018
21...	0.007	<0.010	<0.013	<0.001	<0.002	0.070	<0.035	<0.035	0.240	<0.035	<0.018
29...	0.006	0.008	<0.013	<0.001	<0.002	0.008	<0.035	<0.035	0.080	<0.035	<0.018
JUN											
05...	0.010	<0.010	<0.013	<0.001	0.004	0.510	<0.035	0.440	0.220	<0.035	<0.018
11...	0.007	0.007	<0.013	<0.001	<0.002	0.020	<0.035	<0.035	0.080	<0.035	<0.018
13...	0.007	<0.010	<0.013	<0.001	0.002	0.250	<0.035	0.400	0.200	<0.035	<0.018
25...	0.008	0.007	<0.013	<0.001	<0.002	0.020	<0.035	<0.035	0.110	<0.035	<0.018
JUL											
09...	<0.005	<0.010	<0.013	<0.001	0.007	0.090	<0.035	0.740	0.300	<0.035	<0.018
13...	0.010	<0.010	<0.018	<0.001	0.008	0.020	<0.035	<0.035	<0.020	<0.035	<0.018
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	0.011	0.022	<0.013	<0.001	0.005	0.050	<0.035	<0.035	0.080	<0.035	<0.018
19...	0.011	0.011	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
SEP											
05...	0.005	0.006	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
17...	0.005	0.012	<0.013	<0.001	0.005	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018

The following analyses are quality assurance samples processed during the 1996 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	QUALITY ASSURANCE 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)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)
APR 1996											
30...	1038	FIELD BLANK	<0.002	<0.002	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004
SEP											
05...	1100	FIELD BLANK	<0.002	<0.002	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004

RARITAN RIVER BASIN

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
APR 1996												
30...	<0.002	<0.002	<0.001	<0.003	<0.002	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004
SEP												
05...	<0.002	<0.002	<0.001	<0.003	<0.002	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004
DATE	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- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	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)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
APR 1996												
30...	<0.018	<0.005	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
SEP												
05...	<0.018	<0.005	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for volatile organic compounds (VOCs) on custom method schedule 9090 (listed with minimum reporting levels on p. 19). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	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)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
APR 1996							
23...	1100	E0.020	E0.010	<0.050	<0.050	<0.100	<0.100
30...	1029	E0.010	<0.050	<0.050	<0.050	<0.100	<0.100
MAY							
07...	1029	E0.020	E0.010	<0.050	<0.050	<0.100	<0.100
14...	1049	E0.020	<0.100	<0.100	<0.100	<0.200	<0.200
21...	1049	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
JUN							
05...	1019	E0.010	<0.050	<0.050	<0.050	<0.100	<0.100
11...	1049	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
13...	0919	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
25...	0949	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
JUL							
09...	1049	1.30	<0.100	<0.100	<0.100	<0.200	<0.200
13...	1039	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
13...	1409	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
AUG							
05...	1029	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
19...	1029	E0.010	<0.100	<0.100	<0.100	<0.200	<0.200
SEP							
05...	1139	E0.010	<0.100	<0.100	<0.100	<0.200	<0.200
17...	1059	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)	METHYL-CHLORIDE TOTAL (UG/L) (34418)	METHYL-ENE-CHLORIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-FORM TOTAL (UG/L) (32106)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	VINYL-CHLORIDE TOTAL (UG/L) (39175)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)
APR 1996										
23...	<0.100	<0.100	E0.030	<0.100	<0.05	<0.200	E0.030	<0.100	<0.100	E0.080
30...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.030	<0.100	<0.100	E0.040
MAY										
07...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.040	<0.100	<0.100	0.100
14...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	E0.030	<0.200	<0.200	E0.060
21...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	E0.040	<0.200	<0.200	E0.050
JUN										
05...	<0.100	<0.100	E0.020	<0.100	<0.05	<0.200	E0.030	<0.100	<0.100	E0.080
11...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	<0.100	<0.200	<0.200	E0.040
13...	<0.200	<0.200	<0.400	E0.310	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
25...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	E0.050	<0.200	<0.200	E0.060
JUL										
09...	<0.200	<0.200	<0.400	E0.250	<0.10	<0.400	E0.040	<0.200	<0.200	<0.100
13...	<0.200	<0.200	E0.080	E0.120	<0.10	<0.400	E0.040	<0.200	<0.200	E0.020
13...	<0.200	<0.200	<0.400	E0.260	<0.10	<0.400	E0.040	<0.200	<0.200	<0.100
AUG										
05...	<0.200	<0.200	E0.060	<0.150	<0.10	<0.400	E0.050	<0.200	<0.200	E0.030
19...	<0.200	<0.200	E0.060	1.00	<0.10	<0.400	E0.050	<0.200	<0.200	<0.100
SEP										
05...	<0.200	<0.200	E0.040	<0.200	<0.10	<0.400	E0.050	<0.200	<0.200	<0.100
17...	<0.200	<0.200	E0.080	<0.200	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100

[illegible]

RARITAN RIVER BASIN

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- BENZENE TOTAL (UG/L) (34301)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT- PENTYL METHYL- UNFLTRD RECOVER (UG/L) (50005)	CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
APR 1996										
23...	<0.050	<0.050	0.200	<5	<5	<0.10	0.880	<5.00	<0.100	<0
30...	<0.050	<0.050	0.040	<5	<5	<0.10	0.470	<5.00	<0.100	<0
MAY										
07...	<0.050	<0.050	0.200	<5	<5	<0.10	1.00	<5.00	<0.100	0
14...	<0.100	<0.100	0.190	<10	<10	<0.20	0.670	<10.0	<0.200	<0
21...	<0.100	<0.100	0.130	<10	<10	<0.20	0.500	<10.0	<0.200	<0
JUN										
05...	<0.050	<0.050	0.110	<5	3	<0.10	0.500	<5.00	<0.100	<0
11...	<0.100	<0.100	0.140	<10	<10	<0.20	0.240	<10.0	<0.200	0
13...	<0.100	<0.100	0.060	<10	<10	<0.20	0.720	<10.0	<0.200	<0
25...	<0.100	<0.100	0.230	<10	<10	<0.20	0.220	<10.0	<0.200	<0
JUL										
09...	<0.100	<0.100	<0.100	<10	10	<0.20	0.660	<10.0	<0.200	0
13...	<0.100	<0.100	<0.100	<10	4	<0.20	0.410	<10.0	<0.200	<0
13...	<0.100	<0.100	<0.100	<10	5	<0.20	0.700	<10.0	<0.200	<0
AUG										
05...	<0.100	<0.100	0.100	<10	3	0.43	0.760	<10.0	<0.200	<0
19...	<0.100	<0.100	0.330	<10	<10	<0.20	0.490	<10.0	<0.200	0
SEP										
05...	<0.100	<0.100	0.230	<10	<10	<0.20	0.580	<10.0	0.020	<0
17...	<0.100	<0.100	<0.100	<10	<10	<0.20	0.520	<10.0	<0.200	0

The following analyses are quality assurance samples processed during the 1996 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data."

					QUALITY ASSURANCE SAMPLE (TYPE)	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)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	METHANE BROMO-CHLORO-WAT UNFLTRD REC (UG/L) (77297)	
DATE	STATION	NUMBER	DATE	TIME							
AUG 1996											
05...	01403900		960805	0915	CANNISTER BLANK	<0.050	<0.050	<0.050	0.020	<0.100	
05...	01403900		960805	0920	FIELD BLANK	<0.050	<0.050	<0.050	<0.050	<0.100	
DATE	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CHLORO-DI-BROMO-ETHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-FORM TOTAL (UG/L) (32106)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)
AUG 1996											
05...	<0.100	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	0.050	<0.100	<0.100	<0.050
05...	<0.100	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	0.050	<0.100	<0.100	<0.050
DATE	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BENZENE TOTAL (UG/L) (34030)	STYRENE TOTAL (UG/L) (77128)	BENZENE 124-TRI METHYL WATER UNFLT RECOVER (UG/L) (77222)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	ETHYL-BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	
AUG 1996											
05...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
05...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
DATE	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	CHLORO-BENZENE TOTAL (UG/L) (34301)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT-PENTYL METHYL-UNFLTRD RECOVER (UG/L) (50005)	CARBON DI-SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	
AUG 1996											
05...	<0.050	<0.050	<0.050	<5	<5	<0.10	<0.100	<5.00	<0.100	<0	
05...	<0.050	<0.050	<0.050	<5	<5	<0.10	<0.100	<5.00	<0.100	<0	

RARITAN RIVER BASIN

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01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	235	158	181	483	473	479
2	---	---	---	---	---	---	327	235	285	483	473	477
3	---	---	---	---	---	---	380	327	357	582	473	517
4	---	---	---	---	---	---	416	380	398	595	553	580
5	---	---	---	---	---	---	427	406	416	553	493	522
6	---	---	---	---	---	---	431	405	414	493	440	472
7	---	---	---	---	---	---	441	431	433	440	401	410
8	---	---	---	---	---	---	466	438	450	412	324	392
9	---	---	---	---	---	---	494	465	479	324	196	244
10	---	---	---	---	---	---	506	461	489	223	196	204
11	---	---	---	---	---	---	461	442	452	243	223	236
12	---	---	---	---	---	---	443	422	430	262	243	256
13	---	---	---	---	---	---	424	287	364	272	261	265
14	---	---	---	---	---	---	287	260	270	268	206	238
15	---	---	---	---	---	---	329	286	309	206	181	187
16	---	---	---	---	---	---	371	329	349	197	182	189
17	---	---	---	---	---	---	406	371	392	---	---	---
18	---	---	---	---	---	---	431	406	419	---	---	---
19	---	---	---	---	---	---	475	431	453	---	---	---
20	---	---	---	---	---	---	486	473	480	---	---	---
21	---	---	---	---	---	---	491	482	486	---	---	---
22	---	---	---	---	---	---	503	484	491	---	---	---
23	---	---	---	---	---	---	507	494	500	---	---	---
24	---	---	---	---	---	---	506	495	501	---	---	---
25	---	---	---	487	458	472	502	480	489	---	---	---
26	---	---	---	488	401	434	491	480	486	---	---	---
27	---	---	---	478	414	450	495	487	491	---	---	---
28	---	---	---	499	474	488	491	487	489	---	---	---
29	---	---	---	499	484	490	491	486	488	---	---	---
30	---	---	---	512	490	497	497	486	491	---	---	---
31	---	---	---	506	166	344	491	483	488	---	---	---
MONTH	---	---	---	512	166	454	507	158	426	---	---	---

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	21.5	20.5	21.0	21.5	19.0	20.5
2	---	---	---	---	---	---	23.0	20.5	21.5	23.0	19.0	21.0
3	---	---	---	---	---	---	22.0	21.5	22.0	23.5	20.0	21.5
4	---	---	---	---	---	---	23.0	21.0	22.0	22.5	20.5	21.5
5	---	---	---	---	---	---	24.0	22.0	23.0	23.5	21.0	22.0
6	---	---	---	---	---	---	24.5	21.5	23.0	22.5	21.0	21.5
7	---	---	---	---	---	---	24.5	22.5	23.5	24.5	22.5	23.5
8	---	---	---	---	---	---	24.5	21.5	23.0	24.5	22.5	23.0
9	---	---	---	---	---	---	23.5	21.5	22.5	23.0	22.0	22.5
10	---	---	---	---	---	---	24.5	22.5	23.5	24.5	22.5	23.0
11	---	---	---	---	---	---	22.5	20.5	21.5	23.0	21.5	22.0
12	---	---	---	---	---	---	21.0	19.5	20.5	21.5	20.5	20.5
13	---	---	---	---	---	---	19.5	19.0	19.0	21.5	19.5	20.0
14	---	---	---	---	---	---	20.5	18.0	19.5	20.5	19.0	19.5
15	---	---	---	---	---	---	21.5	19.5	21.0	19.0	17.5	18.5
16	---	---	---	---	---	---	21.5	20.5	21.0	18.5	17.5	18.0
17	---	---	---	---	---	---	23.0	20.0	21.5	18.0	17.0	18.0
18	---	---	---	---	---	---	23.0	20.5	22.0	17.5	17.0	17.0
19	---	---	---	---	---	---	23.2	20.4	21.8	18.0	16.5	17.0
20	---	---	---	---	---	---	23.0	20.5	22.0	18.0	16.5	17.5
21	---	---	---	---	---	---	22.0	20.5	21.5	18.0	16.0	17.5
22	---	---	---	---	---	---	23.5	20.5	22.0	18.0	17.0	17.5
23	---	---	---	---	---	---	24.5	21.5	23.0	17.5	16.0	17.0
24	---	---	---	---	---	---	24.5	23.0	23.5	16.0	14.5	15.0
25	---	---	---	23.5	20.5	22.0	24.5	21.5	22.5	16.0	14.5	15.5
26	---	---	---	23.0	21.5	22.5	24.0	20.5	22.0	16.0	14.5	15.5
27	---	---	---	23.0	21.0	22.0	22.5	20.5	21.5	17.0	15.5	16.0
28	---	---	---	23.0	20.0	21.5	23.0	21.0	22.0	18.0	16.0	17.0
29	---	---	---	21.5	20.0	20.5	23.0	20.5	21.5	18.0	17.5	17.5
30	---	---	---	20.5	19.5	20.0	23.0	19.5	21.0	17.5	16.0	16.5
31	---	---	---	20.5	19.5	20.0	23.0	19.0	21.0	---	---	---
MONTH	---	---	---	23.5	19.5	21.2	24.5	18.0	21.8	24.5	14.5	19.1

RARITAN RIVER BASIN

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 mi².

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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	29	41	28	44	37	79	86	23	52	1320	21
2	16	92	43	44	37	41	368	51	22	22	318	22
3	15	59	42	69	38	43	118	68	89	23	91	19
4	14	31	34	50	31	35	78	73	83	25	51	16
5	110	26	33	34	27	39	63	53	37	23	39	18
6	143	27	53	26	25	137	54	62	29	21	30	26
7	40	43	42	33	24	265	59	52	25	19	24	40
8	28	71	33	41	32	232	109	117	22	25	19	57
9	22	34	57	28	71	93	82	72	25	29	64	57
10	19	29	67	28	86	69	221	50	31	19	59	28
11	12	41	35	26	72	56	182	60	28	16	34	22
12	15	443	25	32	59	57	93	122	33	17	31	24
13	15	101	22	42	44	56	71	53	91	250	221	38
14	24	156	26	42	41	50	62	44	64	187	114	52
15	125	355	36	37	39	48	53	43	76	303	53	30
16	36	91	52	35	39	52	408	49	34	330	46	24
17	22	53	61	36	39	41	184	51	26	200	49	260
18	21	44	43	40	34	38	79	41	34	58	33	234
19	18	50	45	891	32	63	63	39	51	35	28	74
20	18	39	45	526	54	244	60	30	82	44	27	46
21	99	34	35	95	148	87	54	22	35	29	27	38
22	83	24	31	71	97	59	46	20	28	18	25	56
23	33	23	31	55	82	47	49	17	43	12	26	54
24	26	42	31	114	93	41	54	19	24	15	34	38
25	23	29	29	148	68	40	43	26	15	13	27	33
26	22	24	29	54	49	35	39	24	10	22	19	29
27	20	22	26	338	44	32	41	32	7.6	51	22	26
28	180	29	25	334	48	33	36	30	1.5	43	18	29
29	69	42	25	103	42	182	40	28	5.1	30	21	120
30	33	45	23	70	---	125	65	27	52	27	19	51
31	27	---	22	57	---	62	---	25	---	29	20	---
TOTAL	1345	2128	1142	3527	1539	2439	2953	1486	1126.2	1987	2909	1582
MEAN	43.4	70.9	36.8	114	53.1	78.7	98.4	47.9	37.5	64.1	93.8	52.7
MAX	180	443	67	891	148	265	408	122	91	330	1320	260
MIN	12	22	22	26	24	32	36	17	1.5	12	18	16
(†)	.26	3.31	.88	6.47	4.14	.12	2.10	5.05	6.86	6.88	4.39	4.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1996, BY WATER YEAR (WY)

MEAN	34.9	42.1	62.5	64.8	45.6	80.5	72.1	63.8	45.9	43.2	52.7	47.9
MAX	89.4	70.9	174	114	62.6	179	116	169	98.9	92.7	103	184
(WY)	1990	1996	1993	1996	1990	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	17.0
(WY)	1993	1992	1990	1992	1992	1992	1995	1995	1995	1993	1995	1991

RARITAN RIVER BASIN

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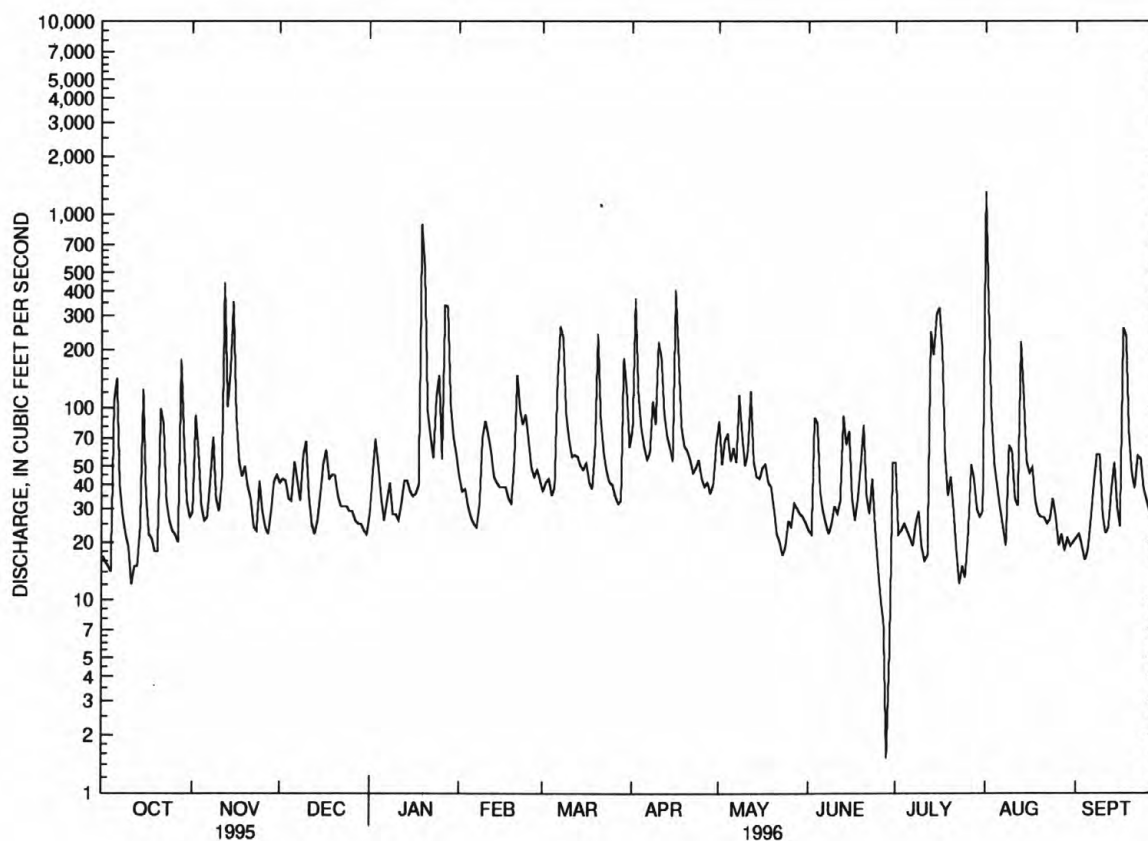
01405030 LAWRENCE BROOK AT WESTONS MILLS, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1989 - 1996	
ANNUAL TOTAL	12858.38		24163.2			
ANNUAL MEAN	35.2		66.0		51.2	
HIGHEST ANNUAL MEAN					68.7	
LOWEST ANNUAL MEAN					30.6	
HIGHEST DAILY MEAN	443	Nov 12	1320	Aug 1	2200	Sep 21 1989
LOWEST DAILY MEAN	.00	Aug 19	1.5	Jun 28	.00	Aug 19 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 19	15	Jun 23	.00	Aug 19 1995
INSTANTANEOUS PEAK FLOW			2420a	Aug 1	4850a	Sep 21 1989
INSTANTANEOUS PEAK STAGE			18.17	Aug 1	19.20	Sep 21 1989
INSTANTANEOUS LOW FLOW			.05	Oct 11	.00	Sep 29 1989
10 PERCENT EXCEEDS	63		117		101	
50 PERCENT EXCEEDS	25		40		31	
90 PERCENT EXCEEDS	4.1		21		8.5	

a From rating curve extended above 1,000 ft³/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

RARITAN RIVER BASIN

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 mi².

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 1995 TO SEPTEMBER 1996

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, EC BROTH (MPN) (31615)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	
OCT 1995													
19...	1100	E20	376	6.9	11.5	770	9.3	84	E1.2	110	20	95	
JAN 1996													
16...	1300	E35	560	6.2	1.0	768	12.7	89	E1.4	<20	10	84	
MAR													
26...	1100	E30	314	7.0	10.0	767	10.0	88	<1.0	<20	<10	78	
MAY													
30...	1145	E35	281	7.0	13.5	760	8.6	83	<1.0	50	<10	74	
JUL													
23...	1100	E20	359	6.9	19.5	758	7.9	87	E1.7	460	180	92	
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)	ALKA-LINITY 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 1995													
19...	30	4.9	26		6.4	12	70	35	<0.1	12	234	192	<1
JAN 1996													
16...	25	5.2	68		5.5	2.1	53	130	0.1	10	306	315	11
MAR													
26...	24	4.3	23		3.7	7.8	52	38	0.1	9.4	184	175	9
MAY													
30...	23	4.1	21		3.9	13	49	32	0.1	11	202	172	5
JUL													
23...	30	4.1	26		5.4	28	49	35	0.2	12	254	212	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-SOLVED (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 1995													
19...	0.009	0.094	0.10	0.11	0.40	0.38	0.49	0.47	0.01	0.02	2.8	0.2	
JAN 1996													
16...	0.012	3.70	0.30	0.27	0.60	0.47	4.3	4.2	0.08	0.02	2.0	0.6	
MAR													
26...	0.013	3.60	0.17	0.13	0.40	0.31	4.0	3.9	0.02	0.01	1.7	0.6	
MAY													
30...	0.011	4.50	0.16	0.14	0.40	0.45	4.9	5.0	0.04	0.03	2.2	0.7	
JUL													
23...	0.028	7.60	0.10	0.10	0.50	0.59	8.1	8.2	0.02	<0.01	3.2	0.4	

RARITAN RIVER BASIN

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01405302 MATCHAPONIX BROOK AT MUNDY AVENUE AT SPOTSWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 19...	1100	16	<1	<10	140	<1	<1	<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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 19...	180	<1	250	<0.1	10	<1	30

RARITAN RIVER BASIN

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 of Still House Brook, and 4.1 mi northeast of Applegarth.

DRAINAGE AREA.--20.9 mi².

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 1995 TO SEPTEMBER 1996

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, EC BROTH (MPN) (31615)	ENTERO-COCCI ME, MF TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	
OCT 1995													
30...	1100	E10	150	6.9	10.5	766	10.3	92	<1.5	490	40	38	
JAN 1996													
16...	1000	E25	202	5.8	0.0	771	12.8	87	E1.3	<20	<10	40	
MAR													
27...	1300	E20	147	6.8	8.5	772	11.8	100	2.5	<20	<10	35	
MAY													
30...	1130	E20	162	7.2	13.0	760	9.9	94	<1.0	230	60	36	
JUL													
24...	1100	E15	153	7.0	19.0	760	8.6	93	<1.0	130	80	35	
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)	ALKA-LINITY 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 1995													
30...	9.2	3.7	10	3.9	5.8	24	21	0.2	11	92	89	6	
JAN 1996													
16...	9.4	4.0	17	4.2	2.0	27	36	0.2	11	116	114	8	
MAR													
27...	8.2	3.5	11	2.4	3.2	22	23	0.2	9.0	96	86	3	
MAY													
30...	8.3	3.8	12	2.2	7.1	17	25	0.2	9.4	118	86	10	
JUL													
24...	8.0	3.6	12	3.1	12	14	23	0.2	7.7	104	82	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-SOLVED (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 1995													
30...	0.004	0.59	0.05	0.05	0.30	0.32	0.89	0.91	0.07	0.07	3.2	0.9	
JAN 1996													
16...	0.009	0.96	0.11	0.14	0.30	0.34	1.3	1.3	0.05	--	1.9	0.6	
MAR													
27...	0.005	1.00	0.06	<0.03	0.18	0.16	1.2	1.2	0.04	0.02	1.2	0.6	
MAY													
30...	0.015	0.73	0.12	0.12	0.50	0.43	1.2	1.2	0.11	0.06	2.6	1.3	
JUL													
24...	0.031	0.65	0.07	0.08	0.40	0.33	1.0	0.98	0.06	<0.01	3.9	1.0	

RARITAN RIVER BASIN

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01405340 MANALAPAN BROOK AT FEDERAL ROAD NEAR MANALAPAN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 30...	1100	<10	<1	<10	30	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 30...	1700	<1	110	<0.1	5	<1	20

RARITAN RIVER BASIN

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 mi².

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 Nov. 15-17, Jan. 19-22, Mar. 29-Apr. 3, Apr. 16-20, and June 3-4. 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	29	50	36	83	34	e62	40	31	62	111	27
2	26	40	49	e44	73	36	e174	39	28	78	130	38
3	25	53	45	e72	40	36	e163	75	e47	64	105	18
4	16	34	43	e80	38	54	107	64	e69	74	39	17
5	21	34	41	e65	45	77	65	25	80	41	28	15
6	51	32	44	e54	49	86	47	25	66	39	26	26
7	60	35	41	e51	52	170	49	47	33	36	26	67
8	39	40	41	e67	58	209	74	65	29	36	29	20
9	29	35	47	e74	69	114	95	84	30	36	30	40
10	25	34	57	e64	114	63	136	73	37	28	43	104
11	24	45	54	e52	106	71	233	78	36	24	42	52
12	25	155	44	e48	96	76	185	109	37	26	24	47
13	23	205	41	e55	81	74	108	64	119	70	42	57
14	24	114	42	e60	30	70	85	58	93	109	94	48
15	43	e177	43	e59	36	70	80	56	45	117	101	24
16	45	e232	45	e56	50	67	e153	55	61	94	72	21
17	37	57	51	e54	46	65	e220	55	47	67	63	80
18	27	64	58	e56	50	63	e230	55	48	31	52	196
19	24	70	53	e245	44	65	e41	54	55	37	27	153
20	23	65	50	e779	79	92	e37	51	128	67	23	101
21	35	54	46	e591	138	91	47	30	172	25	23	42
22	53	47	45	e173	167	76	60	27	47	21	23	35
23	28	43	42	102	105	68	42	27	50	21	22	56
24	25	45	41	121	100	66	73	27	68	21	24	57
25	24	45	41	207	71	56	36	27	72	22	23	36
26	23	42	41	179	30	32	52	27	37	34	22	31
27	21	39	40	188	48	29	76	28	31	46	23	30
28	40	41	39	315	90	40	38	31	29	43	23	29
29	51	45	39	234	67	e115	49	32	29	41	23	45
30	48	51	36	111	---	e153	67	34	35	39	23	53
31	46	---	36	91	---	e83	---	33	---	58	22	---
TOTAL	1008	2002	1385	4383	2055	2401	2884	1495	1689	1507	1358	1565
MEAN	32.5	66.7	44.7	141	70.9	77.5	96.1	48.2	56.3	48.6	43.8	52.2
MAX	60	232	58	779	167	209	233	109	172	117	130	196
MIN	16	29	36	36	30	29	36	25	28	21	22	15
CFSM	.80	1.64	1.10	3.47	1.74	1.90	2.36	1.18	1.38	1.19	1.08	1.28
IN.	.92	1.83	1.27	4.01	1.88	2.19	2.64	1.37	1.54	1.38	1.24	1.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1996, BY WATER YEAR (WY)

MEAN	40.1	58.0	74.6	79.1	78.6	92.0	85.1	66.8	46.9	44.5	44.2	41.7
MAX	95.2	154	156	186	139	164	154	148	109	141	128	137
(WY)	1990	1978	1984	1978	1979	1958	1983	1984	1968	1975	1990	1989
MIN	13.7	21.7	27.4	21.1	29.8	37.0	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

RARITAN RIVER BASIN

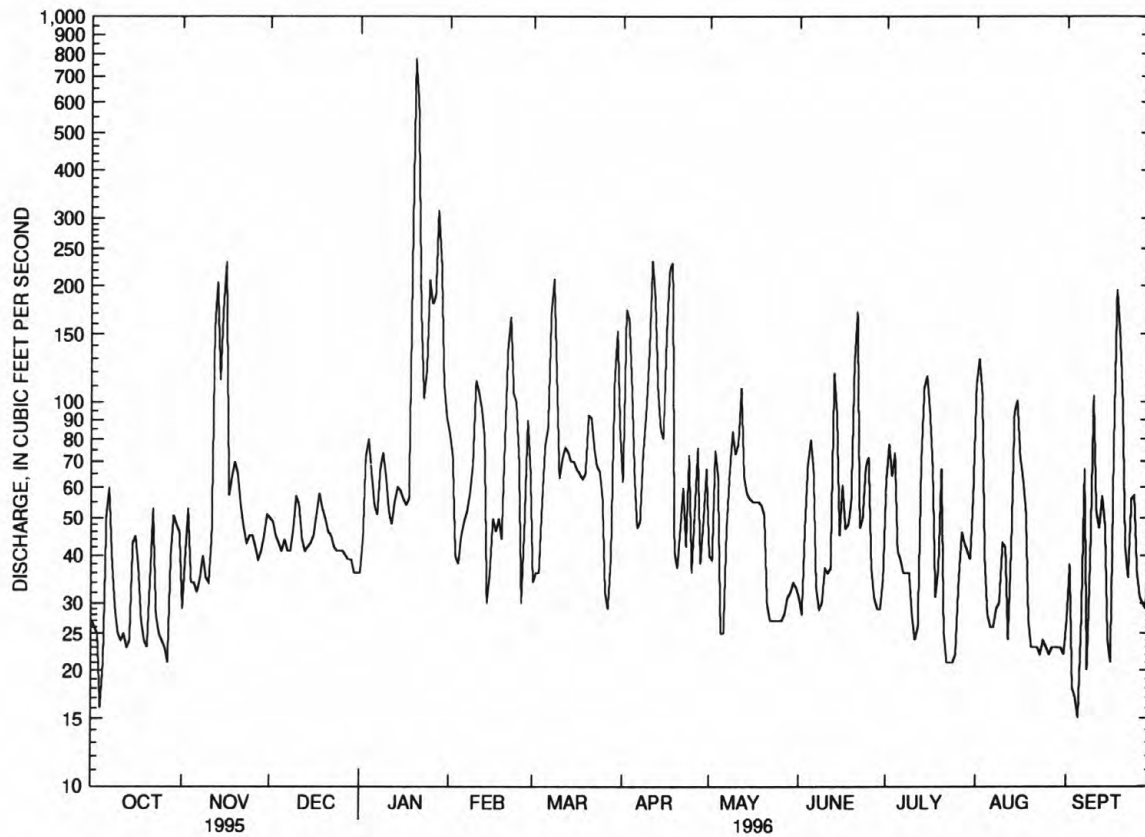
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01405400 MANALAPAN BROOK AT SPOTSWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1957 - 1996	
ANNUAL TOTAL	14065.3		23732			
ANNUAL MEAN	38.5		64.8		62.9	
HIGHEST ANNUAL MEAN					101	
LOWEST ANNUAL MEAN					34.3	
HIGHEST DAILY MEAN	232	Nov 16	779	Jan 20	1390	May 30 1968
LOWEST DAILY MEAN	7.7	Aug 28	15	Sep 5	.00	Jun 16 1957
ANNUAL SEVEN-DAY MINIMUM	8.1	Aug 24	23	Aug 25	2.0	Jul 22 1966
INSTANTANEOUS PEAK FLOW			1160	Jan 20	1700a	Sep 20 1989
INSTANTANEOUS PEAK STAGE			19.54	Jan 20	20.50	Sep 20 1989
INSTANTANEOUS LOW FLOW			14	Sep 5	.00	Jan 15 1991
ANNUAL RUNOFF (CFSM)	.95		1.59		1.55	
ANNUAL RUNOFF (INCHES)	12.86		21.69		20.99	
10 PERCENT EXCEEDS	60		114		118	
50 PERCENT EXCEEDS	34		47		45	
90 PERCENT EXCEEDS	14		25		19	

a Sluice gate open.

e Estimated.



01405400 MANALAPAN BROOK AT SPOTSWOOD, NJ, DAILY MEAN DISCHARGE

REVISED RECORDS.--WDR NJ-85-1: 1984.

MONTHLY ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996						
Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)
01396790 SPRUCE RUN RESERVOIR				01397050 ROUND VALLEY RESERVOIR		
Sept. 30.....	252.84	4,490	--	379.51	50,910	--
Oct. 31.....	261.43	6,830	+116.8	380.07	51,240	+16.5
Nov. 30.....	267.77	8,970	+111.9	380.19	51,300	+3.1
Dec. 31.....	267.64	8,870	-6.5	380.15	51,280	-1.0
CAL YR 1995			-1.0	+8.1		
Jan. 31.....	273.08	11,050	+108.8	380.78	51,740	+23.0
Feb. 29.....	272.40	10,750	-16.0	381.02	51,910	+9.1
Mar. 31.....	273.11	11,070	+16.0	381.40	52,100	+9.5
Apr. 30.....	273.16	11,090	+1.0	382.04	52,620	+26.8
May 31.....	272.96	10,990	-5.0	382.34	52,840	+11.0
June 30.....	272.70	10,880	-5.7	382.56	53,060	+11.3
July 31.....	273.01	11,000	+6.0	382.98	53,380	+16.0
Aug. 31.....	271.59	10,380	-30.9	382.84	53,240	-7.0
Sept. 30.....	270.26	9,870	-26.3	382.86	53,260	+1.0
WTR YR 1996			+22.7	+9.9		

† Elevation at 0900 of the last day of each month.

RARITAN RIVER BASIN

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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 ft³/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 1995 TO SEPTEMBER 1996

MONTH	<u>01396920</u> Hamden pumping station	<u>01400509</u> Raritan and Millstone Rivers	<u>01400836</u> Carnegie Lake	<u>01402910</u> Ten Mile Lock diversion	<u>01460570</u> Delaware and Raritan Canal
October.....	0	143	0	-8.4	26.7
November.....	0	164	0	-29.9	1.15
December.....	0	157	0	-29.0	11.94
CAL YR 1995	-9.4	160	0	-19.1	20.1
January	0	160	-4.9	-39.4	16.6
February	0	170	0	-43.5	.97
March	0	168	0	-34.6	0
April	0	171	0	-37.9	0
May	0	176	0	-40.5	1.18
June	0	181	0	-31.7	7.69
July	0	180	0	-39.7	.54
August	0	187	0	-40.0	2.61
September	0	185	0	-39.1	0
WTR YR 1996	0	170	-.4	-34.4	5.85

SHREWSBURY RIVER BASIN

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 mi².

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 ft³/s, and fair below 200 ft³/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 ft³/s.

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	.00	.00	27	16	67	41	75	67	17	63	394	.00
2	.00	.00	23	19	63	53	242	49	13	16	72	.00
3	.00	.00	21	55	66	50	100	63	139	14	18	.00
4	.00	.00	19	40	60	30	71	77	286	38	15	.00
5	.00	.00	18	23	47	34	65	59	41	13	12	.00
6	.00	.00	22	19	49	106	62	63	15	7.7	10	.00
7	.00	.00	21	25	49	186	72	55	11	4.6	8.5	.00
8	.00	.00	19	37	55	189	137	95	8.0	3.5	7.5	65
9	.00	.00	36	28	84	82	114	74	6.5	5.1	6.0	371
10	.00	.00	61	22	100	64	276	61	6.2	6.0	5.0	22
11	.00	.00	21	20	85	62	307	58	6.7	3.2	2.7	11
12	.00	32	17	44	71	63	138	133	6.0	1.7	1.5	11
13	.00	65	16	133	51	63	94	64	6.8	91	190	13
14	.00	162	17	78	53	58	84	45	6.4	74	61	15
15	.00	756	25	46	55	63	73	39	7.1	16	15	9.2
16	.00	117	33	35	57	65	319	48	3.7	17	11	7.0
17	.00	57	40	39	53	53	182	61	2.6	11	12	329
18	.00	41	33	49	50	50	93	46	3.6	7.9	9.0	262
19	.00	58	40	962	44	57	81	43	21	7.6	6.2	34
20	.00	39	40	678	66	245	75	37	78	7.4	3.7	15
21	.00	34	29	140	152	107	66	27	15	3.6	2.3	13
22	.00	25	22	89	105	73	58	23	9.2	1.6	1.7	14
23	.00	20	21	77	82	57	56	21	6.4	2.4	1.2	16
24	.00	25	21	145	76	47	51	19	3.5	3.2	8.5	13
25	.00	25	20	211	49	45	43	17	2.1	2.4	8.8	12
26	.00	21	19	89	43	42	40	16	.66	13	6.1	11
27	.00	19	17	268	48	39	54	19	.07	40	4.1	9.2
28	.00	18	16	382	58	43	44	22	.00	12	2.6	8.6
29	.00	34	16	113	44	181	43	27	.00	6.7	1.6	25
30	.00	38	15	90	---	136	53	30	5.8	5.3	.62	16
31	.00	---	15	80	---	75	---	23	---	112	.09	---
TOTAL	0.00	1586.00	760	4052	1882	2459	3168	1481	727.33	609.9	897.71	1302.00
MEAN	.000	52.9	24.5	131	64.9	79.3	106	47.8	24.2	19.7	29.0	43.4
MAX	.00	756	61	962	152	245	319	133	286	112	394	371
MIN	.00	.00	15	16	43	30	40	16	.00	1.6	.09	.00
(†)	42.6	57.5	30.7	34.3	28.8	31.9	31.9	32.2	41.3	35.4	28.5	39.4
MEAN*	42.6	110	55.2	165	93.7	111	138	80	65.5	55.1	57.5	82.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	38.7	55.2	67.4	79.7	90.2	103	91.3	68.8	47.0	40.4	38.8	38.3
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

SHREWSBURY RIVER BASIN

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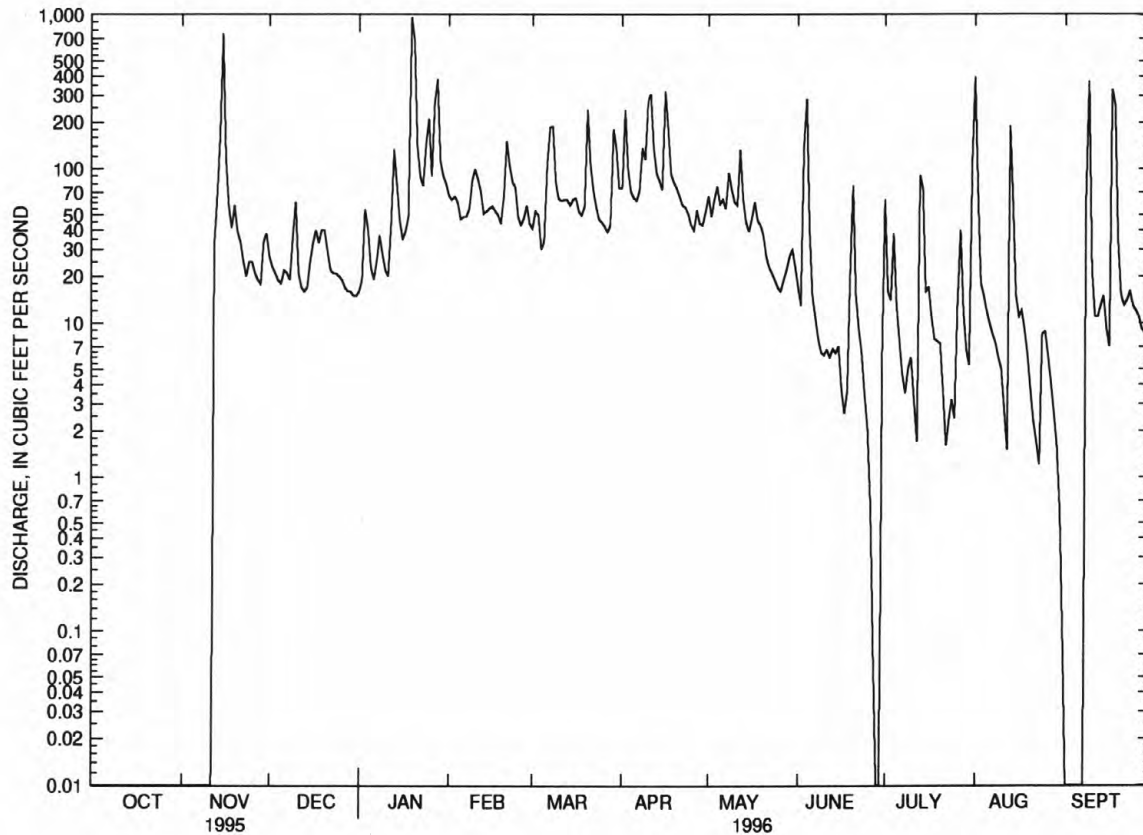
01407500 SWIMMING RIVER NEAR RED BANK, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1922 - 1996	
ANNUAL TOTAL	7052.40		18924.94		63.1	
ANNUAL MEAN	19.3		51.7		123	
HIGHEST ANNUAL MEAN					9.76	
LOWEST ANNUAL MEAN					1928	
HIGHEST DAILY MEAN	756	Nov 15	962	Jan 19	3050	Oct 27 1943
LOWEST DAILY MEAN	.00	Jun 20	.00	Oct 1	.00	Jun 22 1923
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 14	.00	Oct 1	.00	Jul 16 1955
INSTANTANEOUS PEAK FLOW			2570	Jan 19	8910a	Oct 27 1943
INSTANTANEOUS PEAK STAGE			6.55	Jan 19	8.96	Oct 27 1943
ANNUAL RUNOFF (CFSM)	.39		1.05		1.28	
ANNUAL RUNOFF (INCHES)	5.33		14.31		17.42	
10 PERCENT EXCEEDS	39		106		121	
50 PERCENT EXCEEDS	12		24		45	
90 PERCENT EXCEEDS	.00		.00		.42	

a From rating curve extended above 1,000 ft³/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 mi².

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 mi² 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	3.0	4.0	5.5	14	3.1	18	13	10	7.7	110	2.9
2	1.2	7.0	2.3	9.6	13	3.2	63	11	9.5	2.6	49	3.1
3	1.5	1.8	1.3	29	13	4.3	18	15	47	3.8	14	3.9
4	1.5	1.1	1.0	13	12	4.4	14	15	35	5.5	10	4.1
5	15	.99	1.9	9.2	13	4.6	11	13	15	2.1	6.3	5.0
6	2.9	2.1	2.5	5.1	e11	24	10	14	12	2.2	5.0	5.6
7	1.1	3.6	1.4	2.6	e8.8	35	12	9.8	9.7	1.8	3.9	7.4
8	1.2	4.7	1.5	7.2	15	33	19	14	10	2.7	2.9	9.0
9	1.1	1.2	22	7.2	20	13	16	12	9.4	2.6	2.4	14
10	1.5	1.2	9.6	6.8	19	9.7	59	10	9.4	1.8	3.1	4.6
11	1.5	5.8	1.6	5.2	18	8.2	56	10	5.5	3.0	2.5	3.9
12	1.6	120	1.5	29	16	9.1	23	21	3.5	3.5	3.3	5.3
13	1.2	13	2.1	38	12	8.9	17	12	4.1	28	86	6.3
14	2.6	43	4.0	12	10	7.3	13	9.7	3.9	11	26	3.1
15	19	124	7.3	10	10	7.6	11	8.1	1.6	35	9.1	2.9
16	2.4	18	13	8.4	9.8	9.0	119	10	4.0	25	7.5	3.0
17	1.8	5.1	14	8.2	10	6.1	46	12	4.9	6.8	11	96
18	1.3	2.2	11	11	9.4	5.7	20	9.8	5.3	5.1	9.4	52
19	1.6	3.6	9.5	147	8.2	6.6	17	8.5	17	9.8	7.7	19
20	1.3	1.5	9.2	119	15	23	16	6.9	18	7.7	7.0	13
21	9.3	1.9	8.3	27	28	12	15	4.8	7.1	4.9	7.3	11
22	1.2	1.6	7.7	17	17	8.6	14	3.4	3.0	2.9	5.0	28
23	1.6	1.3	6.9	16	14	6.6	13	6.3	2.3	3.8	4.5	17
24	2.3	2.5	6.8	32	13	5.4	13	9.8	1.8	3.1	19	12
25	2.2	1.6	6.4	40	8.2	4.5	12	7.5	3.4	2.3	4.7	12
26	2.0	1.3	6.2	17	6.9	4.1	12	8.4	3.9	14	2.7	e10
27	1.9	2.5	5.4	65	6.4	7.2	14	11	3.1	16	2.9	e9.2
28	32	4.5	5.2	81	7.2	12	12	11	3.0	8.1	3.3	e8.8
29	1.9	29	5.2	21	6.1	40	11	11	3.0	4.9	3.7	e16
30	1.5	3.6	5.1	17	---	21	12	11	10	2.8	3.3	e11
31	2.2	---	5.2	16	---	13	---	10	---	5.0	2.3	---
TOTAL	120.7	412.69	189.1	832.0	364.0	360.2	706	329.0	275.4	235.5	434.8	399.1
MEAN	3.89	13.8	6.10	26.8	12.6	11.6	23.5	10.6	9.18	7.60	14.0	13.3
MAX	32	124	22	147	28	40	119	21	47	35	110	96
MIN	1.1	.99	1.0	2.6	6.1	3.1	10	3.4	1.6	1.8	2.3	2.9
(t)	7.5	15.4	10.6	9.9	9.5	11.6	7.2	6.0	3.8	8.6	9.3	6.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1996, BY WATER YEAR (WY)

MEAN	9.81	13.2	16.8	17.7	15.5	21.9	20.0	16.2	9.22	9.89	11.4	8.87
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

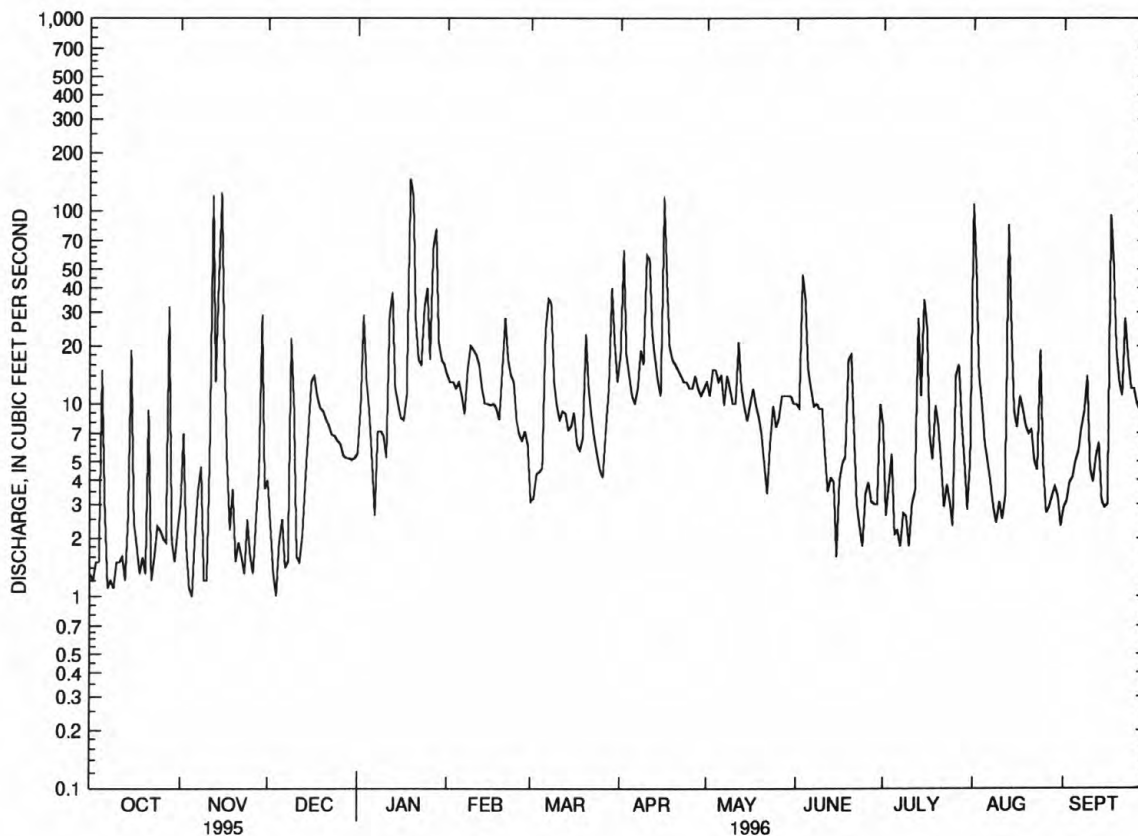
SHARK RIVER BASIN

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01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1967 - 1996	
ANNUAL TOTAL	2652.29		4658.49			
ANNUAL MEAN	7.27		12.7		14.2	
HIGHEST ANNUAL MEAN					24.9	1984
LOWEST ANNUAL MEAN					6.80	1995
HIGHEST DAILY MEAN	124	Nov 15	147	Jan 19	560	Dec 26 1969
LOWEST DAILY MEAN	.99	Nov 5	.99	Nov 5	.00	Sep 20 1981
ANNUAL SEVEN-DAY MINIMUM	1.3	Oct 7	1.3	Oct 7	.70	Sep 26 1988
INSTANTANEOUS PEAK FLOW			270	Jan 19	1170	Aug 18 1992
INSTANTANEOUS PEAK STAGE			5.03	Jan 19	6.59	Aug 18 1992
INSTANTANEOUS LOW FLOW			.00	Oct 21	.00	Oct 22 1995
10 PERCENT EXCEEDS	13		24		28	
50 PERCENT EXCEEDS	3.9		8.2		8.2	
90 PERCENT EXCEEDS	1.3		1.8		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

SHARK RIVER BASIN

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 mi².

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 ft³/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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.6	6.0	3.6	6.5	4.8	16	7.9	3.4	9.8	81	1.9
2	1.7	14	5.8	7.1	6.1	6.1	46	5.8	3.2	3.7	20	1.7
3	1.1	6.4	4.6	18	6.1	6.1	11	11	41	5.6	6.4	1.3
4	.88	3.7	4.1	7.6	5.8	5.0	8.0	8.9	22	10	4.9	1.1
5	15	2.9	3.7	4.5	6.6	6.1	6.8	6.5	7.0	3.6	3.8	1.1
6	9.8	2.6	5.4	3.5	6.1	21	6.1	9.5	4.5	2.2	3.3	2.6
7	3.2	5.1	4.1	2.8	5.1	26	9.8	6.8	2.9	2.0	3.0	3.0
8	2.6	8.1	3.6	3.9	5.7	23	20	13	3.0	2.5	2.4	6.6
9	2.1	3.8	18	4.2	13	9.3	14	7.8	2.8	1.7	1.9	21
10	1.6	2.9	13	3.9	12	7.3	47	6.7	2.5	1.6	2.1	4.5
11	1.2	7.1	5.1	3.6	9.6	7.1	29	8.7	2.9	1.2	1.8	3.6
12	1.1	103	3.8	10	8.1	7.4	12	19	2.6	1.5	1.5	7.2
13	1.0	8.9	3.4	21	5.9	7.2	9.2	7.4	2.7	29	77	10
14	3.2	31	5.8	11	6.0	6.5	7.8	6.0	3.5	13	13	6.7
15	24	67	6.7	7.9	5.8	7.8	6.9	5.5	3.2	29	5.4	4.1
16	4.4	8.7	7.6	6.1	5.5	6.8	96	9.3	2.1	26	5.6	3.7
17	2.0	6.6	7.3	6.9	5.4	5.6	19	9.3	2.9	4.8	6.7	84
18	2.1	5.3	5.1	9.0	5.0	5.4	11	6.3	6.6	3.2	3.6	25
19	1.8	6.8	5.2	135	4.7	7.7	9.0	5.8	17	8.2	2.6	8.9
20	2.0	4.9	5.0	41	12	16	8.2	5.3	20	4.5	2.1	5.8
21	13	4.3	4.3	12	20	7.6	7.6	4.7	5.6	2.7	3.4	4.7
22	11	3.8	3.9	9.2	10	6.1	7.1	3.7	3.3	1.9	2.5	26
23	3.6	3.6	3.8	8.1	8.0	5.3	6.8	4.0	2.6	2.5	3.3	17
24	2.7	6.3	3.7	15	7.6	4.9	7.0	3.8	2.1	2.3	31	6.9
25	2.4	4.3	3.7	17	6.3	4.9	5.4	3.6	1.7	2.3	6.1	5.7
26	2.2	3.8	3.5	9.0	5.8	4.7	6.9	3.2	1.3	11	3.8	4.9
27	2.0	3.5	3.3	48	5.4	4.6	8.0	5.3	1.0	7.9	2.6	4.5
28	24	3.3	3.2	40	6.5	5.3	5.8	4.4	.94	3.1	2.2	4.3
29	7.8	18	3.1	12	5.3	34	5.9	5.0	1.3	2.3	2.5	13
30	3.6	7.9	3.1	9.1	---	14	6.4	4.4	9.7	2.3	1.7	5.9
31	2.8	---	3.2	7.8	---	7.5	---	3.1	---	3.4	1.9	---
TOTAL	157.68	360.2	162.1	497.8	215.9	291.1	459.7	211.7	185.34	204.8	309.1	296.7
MEAN	5.09	12.0	5.23	16.1	7.44	9.39	15.3	6.83	6.18	6.61	9.97	9.89
MAX	24	103	18	135	20	34	96	19	41	29	81	84
MIN	.88	2.6	3.1	2.8	4.7	4.6	5.4	3.1	.94	1.2	1.5	1.1
(†)	0.3	0	0	0	0	0	0	0	0.5	0.6	0.2	0.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1996, BY WATER YEAR (WY)

	MEAN	6.84	9.03	10.5	12.5	11.3	14.0	14.1	12.2	7.00	6.82	7.68	6.66
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	

SHARK RIVER BASIN

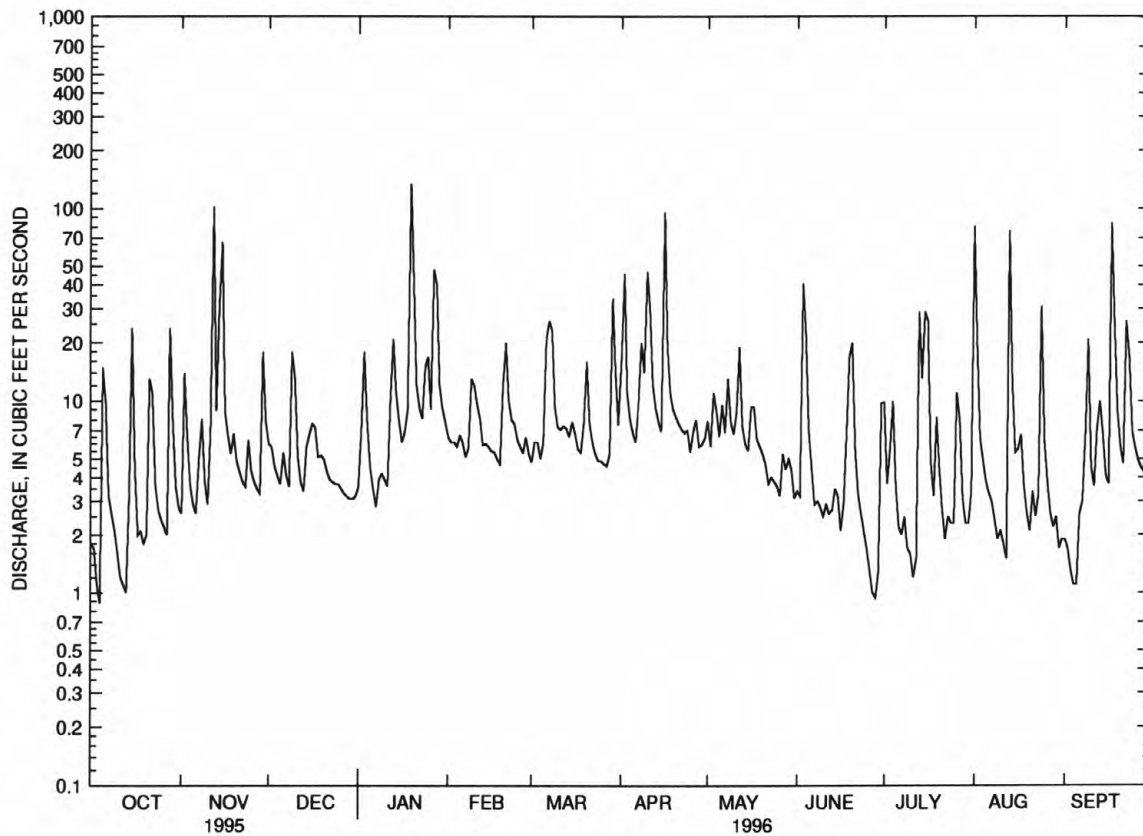
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01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1967 - 1996	
ANNUAL TOTAL	1944.47		3352.12			
ANNUAL MEAN	5.33		9.16		9.88	
HIGHEST ANNUAL MEAN					20.4	1979
LOWEST ANNUAL MEAN					4.05	1981
HIGHEST DAILY MEAN	103	Nov 12	135	Jan 19	954	Jan 21 1979
LOWEST DAILY MEAN	.34	Aug 15	.88	Oct 4	.12	Sep 15 1981
ANNUAL SEVEN-DAY MINIMUM	.65	Aug 13	1.5	Aug 30	.51	Oct 7 1966
INSTANTANEOUS PEAK FLOW			269	Jan 19	1830a	Sep 12 1971
INSTANTANEOUS PEAK STAGE			3.99	Jan 19	7.43	Aug 18 1992
INSTANTANEOUS LOW FLOW			.54	Jun 27	.00	Jun 7 1971
10 PERCENT EXCEEDS	8.9		18		18	
50 PERCENT EXCEEDS	3.7		5.6		4.9	
90 PERCENT EXCEEDS	1.2		2.1		1.9	

a From rating curve extended above 150 ft³/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

MANASQUAN RIVER BASIN

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 mi².

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 ft³/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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 15	1415	659	5.88	Jan. 28	0315	657	5.87
Jan. 20	0245	*1,420	*8.60	Sept. 9	0900	812	6.53

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	21	30	60	41	96	64	87	85	42	111	360	34
2	20	68	63	52	92	68	218	68	40	62	156	33
3	20	47	54	112	88	71	111	79	114	58	88	32
4	20	34	52	70	87	63	93	84	182	62	74	31
5	71	30	49	52	81	67	84	72	94	50	64	32
6	81	30	55	44	79	144	79	90	65	44	56	32
7	31	33	50	34	78	191	78	77	55	41	52	48
8	26	68	46	40	83	189	116	98	50	42	49	61
9	24	37	72	51	125	108	97	83	54	41	47	437
10	23	34	94	50	132	90	189	78	67	38	46	95
11	22	40	55	46	116	88	287	74	53	34	42	66
12	22	436	47	66	108	91	158	135	48	34	41	68
13	21	112	44	137	80	90	115	81	66	151	243	70
14	21	199	48	88	76	83	100	70	59	134	131	68
15	83	562	64	76	77	87	90	64	127	86	75	54
16	31	162	67	67	71	84	306	68	54	142	66	48
17	25	106	78	68	69	74	175	80	48	68	85	289
18	24	86	59	83	67	71	117	66	65	54	60	177
19	23	87	59	566	67	72	102	63	78	64	52	97
20	22	72	58	808	100	157	95	59	199	57	48	73
21	63	65	51	170	163	95	89	56	83	45	45	63
22	67	60	49	130	112	82	83	52	63	42	45	71
23	31	56	47	118	97	74	81	51	74	46	42	71
24	27	63	47	153	93	69	83	49	54	45	61	62
25	26	55	45	187	81	67	74	46	48	41	45	57
26	24	52	44	115	75	65	74	45	43	80	41	52
27	24	50	43	212	73	62	80	49	40	90	38	49
28	139	49	41	357	78	62	69	51	39	50	38	48
29	58	100	40	140	72	170	68	49	37	44	37	89
30	35	74	40	121	---	123	70	53	96	42	35	58
31	31	---	40	110	---	89	---	45	---	60	34	---
TOTAL	1156	2897	1661	4364	2616	2910	3468	2120	2137	1958	2296	2465
MEAN	37.3	96.6	53.6	141	90.2	93.9	116	68.4	71.2	63.2	74.1	82.2
MAX	139	562	94	808	163	191	306	135	199	151	360	437
MIN	20	30	40	34	67	62	68	45	37	34	34	31
CFSM	.85	2.19	1.22	3.20	2.05	2.13	2.63	1.55	1.62	1.44	1.68	1.87
IN.	.98	2.45	1.40	3.69	2.21	2.46	2.93	1.79	1.81	1.66	1.94	2.08

MANASQUAN RIVER BASIN

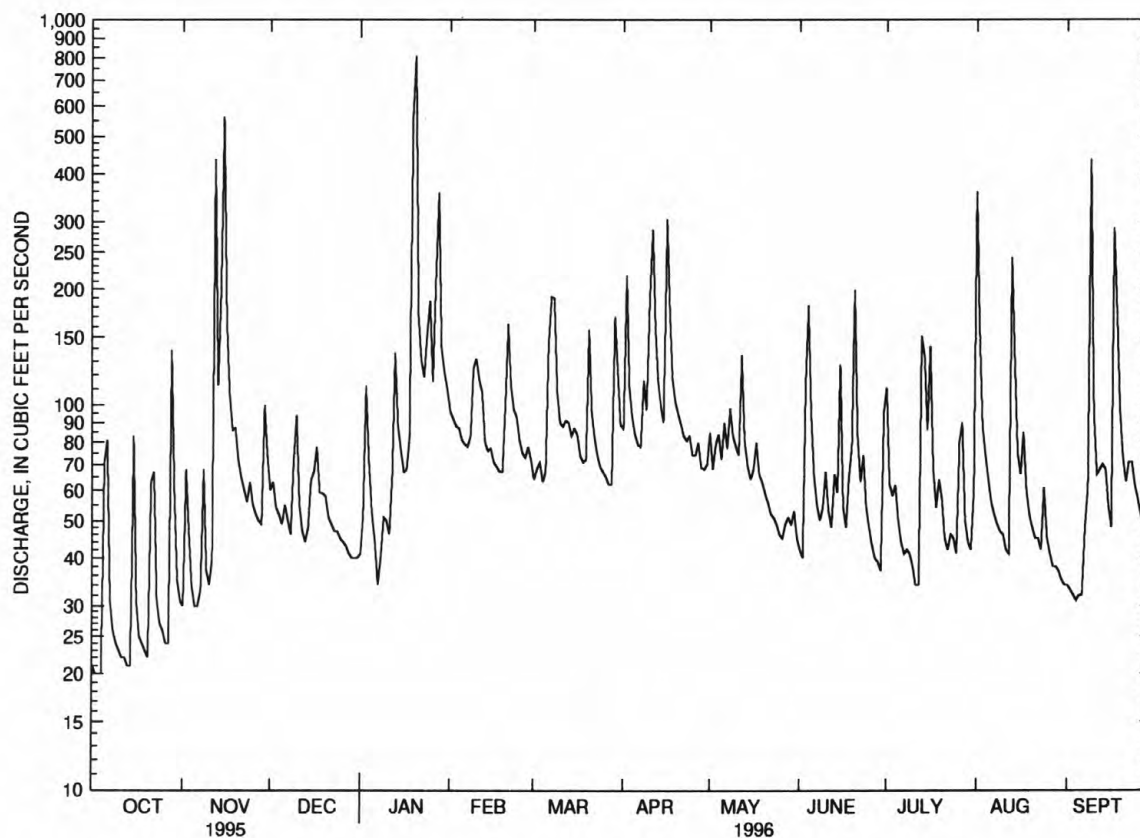
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01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1996, BY WATER YEAR (WY)

MEAN	50.6	70.2	81.3	90.1	96.0	113	100	78.6	57.4	52.7	51.8	51.9
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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1932 - 1996	
ANNUAL TOTAL	16765		30048			
ANNUAL MEAN	45.9		82.1		74.3	
HIGHEST ANNUAL MEAN					131	
LOWEST ANNUAL MEAN					40.2	
HIGHEST DAILY MEAN	562	Nov 15	808	Jan 20	1720	Nov 8 1977
LOWEST DAILY MEAN	12	Sep 11	20	Oct 2	12	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	13	Sep 7	23	Oct 8	13	Sep 7 1995
INSTANTANEOUS PEAK FLOW			1420	Jan 20	2940	Sep 21 1938
INSTANTANEOUS PEAK STAGE			8.60	Jan 20	12.45	Sep 21 1938
INSTANTANEOUS LOW FLOW			19	Oct 4	8.1	Aug 6 1981
ANNUAL RUNOFF (CFSM)	1.04		1.87		1.69	
ANNUAL RUNOFF (INCHES)	14.17		25.40		22.96	
10 PERCENT EXCEEDS	69		136		130	
50 PERCENT EXCEEDS	37		66		54	
90 PERCENT EXCEEDS	20		34		26	



01408000 MANASQUAN RIVER AT SQUANKUM, NJ, DAILY MEAN DISCHARGE

MANASQUAN RIVER BASIN

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 February 15, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 AS CACO3 (00900)	
OCT 1995													
19...	1015	23	222	7.6	10.0	769	9.8	86	E1.7	230	<10	86	
FEB 1996													
15...	1130	77	545	7.2	4.5	756	11.9	93	--	--	--	69	
MAR													
27...	1200	62	201	7.1	9.5	774	11.4	98	<1.0	170	<10	66	
JUN													
06...	1200	65	179	7.2	17.5	763	8.8	92	<1.0	940	130	56	
JUL													
23...	1230	44	237	7.4	17.0	756	8.5	89	<1.0	330	230	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)	ALKA-LINITY LAB 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 1995													
19...	29	3.3	6.7	3.4	45	36	15	0.1	15	130	138	<1	
FEB 1996													
15...	21	3.9	71	3.0	20	31	120	0.1	14	296	279	4	
MAR													
27...	21	3.3	11	2.7	24	33	22	0.1	14	130	124	4	
JUN													
06...	18	2.8	8.9	2.7	22	28	18	0.2	14	110	108	12	
JUL													
23...	23	3.2	8.8	3.1	35	29	20	0.2	16	152	126	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-SOLVED (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (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 SUB-PENDED TOTAL (MG/L AS C) (00689)
OCT 1995													
19...	<0.003	0.50	0.04	<0.03	0.08	0.04	0.58	0.54	0.01	<0.01	<0.01	1.6	0.2
FEB 1996													
15...	--	0.79	--	--	0.20	0.31	0.99	1.1	0.04	<0.01	<0.01	1.3	0.5
MAR													
27...	0.004	0.61	<0.03	<0.03	0.14	0.11	0.75	0.72	0.03	0.02	0.02	1.4	0.5
JUN													
06...	0.007	0.39	0.05	0.05	0.40	0.27	0.79	0.66	0.08	<0.01	<0.01	2.9	0.4
JUL													
23...	0.007	0.47	0.12	0.06	0.18	0.23	0.65	0.70	0.04	<0.01	<0.01	2.2	0.7

MANASQUAN RIVER BASIN

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01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 19...	1015	<10	<1	<10	40	<1	<1	<1
JUN 1996 06...	1200	12	<1	<10	30	<1	1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
OCT 1995 19...	1100	<1	50	<0.1	4	<1	<10
JUN 1996 06...	3000	1	10	<0.1	6	<1	30

MANASQUAN RIVER BASIN

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 of 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 mi².

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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	43	58	40	106	62	104	91	30	132	472	19
2	13	93	40	59	96	67	372	70	27	59	349	18
3	13	81	26	163	97	73	174	85	128	51	115	15
4	16	57	40	101	111	61	118	102	330	64	81	17
5	38	47	33	61	106	68	98	80	131	45	64	20
6	72	35	44	60	111	178	87	105	71	32	64	19
7	19	26	35	51	111	319	86	86	52	27	66	34
8	17	69	34	59	110	341	152	114	44	29	50	35
9	14	28	41	78	138	160	126	100	42	36	35	574
10	14	29	107	75	164	110	301	88	62	24	34	132
11	13	31	85	71	141	101	494	80	46	19	28	72
12	13	700	74	97	124	108	259	187	38	17	26	59
13	13	196	67	296	90	107	158	102	56	165	341	60
14	14	187	72	159	80	97	122	75	45	198	270	29
15	65	1260	74	122	76	103	105	66	140	118	110	44
16	24	264	36	88	56	99	507	70	44	251	80	37
17	17	100	67	75	34	81	373	87	37	76	99	403
18	14	22	70	96	31	75	179	52	74	37	61	284
19	14	21	71	712	48	75	127	65	85	59	45	107
20	13	55	69	1550	84	229	97	58	282	56	36	65
21	33	54	58	301	237	127	104	51	83	35	32	60
22	50	46	53	179	175	96	94	45	60	29	31	75
23	27	39	49	148	124	81	88	45	82	33	27	91
24	19	54	48	196	111	72	89	39	55	35	47	67
25	15	24	45	317	92	67	77	36	36	29	37	56
26	14	17	43	162	78	65	78	33	29	81	25	47
27	13	33	40	262	74	59	94	41	25	115	21	42
28	151	35	38	668	80	59	75	41	23	51	22	39
29	60	129	37	230	73	241	69	41	22	36	21	90
30	44	86	36	161	---	204	72	45	93	34	20	53
31	47	---	36	132	---	115	---	33	---	45	20	---
TOTAL	902	3861	1626	6769	2958	3700	4879	2213	2272	2018	2729	2663
MEAN	29.1	129	52.5	218	102	119	163	71.4	75.7	65.1	88.0	88.8
MAX	151	1260	107	1550	237	341	507	187	330	251	472	574
MIN	13	17	26	40	31	59	69	33	22	17	20	15
α	29.6	43.4	33.4	23.2	26.8	23.2	23.9	23.8	23.7	23.1	22.9	25.5
(t)	18.3	16.8	17.7	18.4	17.7	18.3	18.2	18.0	17.6	17.6	17.9	18.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1996, BY WATER YEAR (WY)

MEAN	39.9	61.0	92.2	135	82.8	168	105	57.5	42.2	40.6	72.7	45.6
MAX	74.3	129	201	218	143	319	163	79.6	81.0	66.4	131	88.8
(WY)	1994	1996	1993	1996	1994	1993	1996	1994	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

MANASQUAN RIVER BASIN

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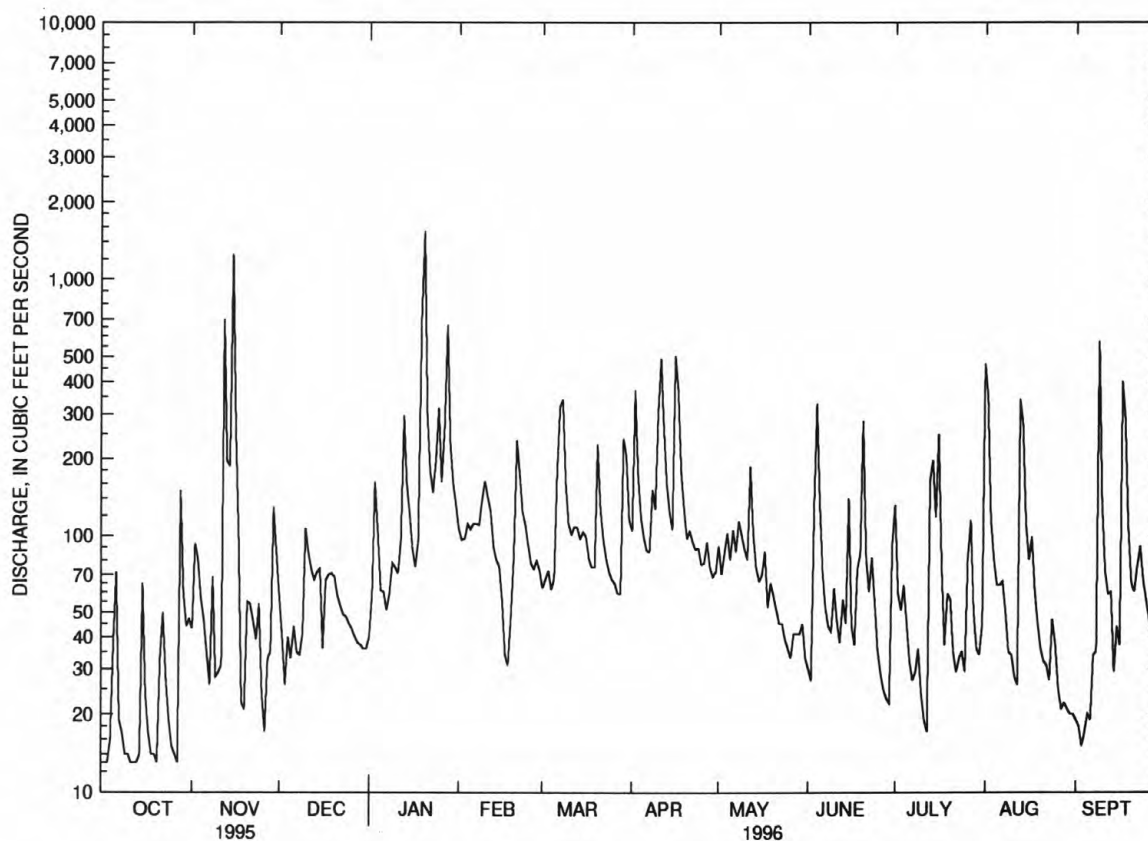
01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1990 - 1996	
ANNUAL TOTAL	16654		36590			
ANNUAL MEAN	45.6		100		77.6	
HIGHEST ANNUAL MEAN					100	
LOWEST ANNUAL MEAN					39.4	
HIGHEST DAILY MEAN	1260	Nov 15	1550	Jan 20	1930	Dec 12 1992
LOWEST DAILY MEAN	13	Jun 12	13	Oct 1	12	Jun 23 1990
ANNUAL SEVEN-DAY MINIMUM	14	Oct 8	14	Oct 8	14	Oct 8 1995
INSTANTANEOUS PEAK FLOW			2400	Jan 20	2560	Dec 12 1992
INSTANTANEOUS PEAK STAGE			15.58	Jan 20	15.84	Dec 12 1992
INSTANTANEOUS LOW FLOW			7.0	Oct 4	.00a	Jun 24 1993
10 PERCENT EXCEEDS	69		190		152	
50 PERCENT EXCEEDS	33		66		43	
90 PERCENT EXCEEDS	15		22		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.



01408029 MANASQUAN RIVER NEAR ALLENWOOD, NJ, DAILY MEAN DISCHARGE

MANASQUAN RIVER BASIN

RESERVOIR DATA

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 mi² (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 4,600,000,000 gal, May 20, elevation, 102.7 ft; minimum, 3,700,000,000 gal, Sept. 21, elevation, 98.5 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)
01407965 MANASQUAN RESERVOIR			
Sept. 30.....	99.80	3,966	--
Oct. 31.....	98.95	3,790	-8.8
Nov. 30.....	99.88	3,980	+9.8
Dec. 31.....	101.85	4,400	+21.0
CAL YR 1995			+2.6
Jan. 31.....	101.82	4,400	0
Feb. 29.....	101.78	4,390	-.5
Mar. 31.....	102.10	4,460	+3.5
Apr. 30.....	102.45	4,540	+4.1
May 31.....	102.58	4,570	+1.5
June 30.....	102.50	4,550	-1.0
July 31.....	102.39	4,530	-1.0
Aug. 31.....	102.32	4,510	-1.0
Sept. 30.....	102.08	4,460	-2.6
WTR YR 1996			+2.1

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

METEDECONK RIVER BASIN

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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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0530	276	6.32	Jan. 20	0915	460	7.15
Nov. 14	2045	468	*7.18	Apr. 16	2100	289	6.40

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	32	61	35	67	46	75	58	34	77	79	24
2	16	59	56	44	60	48	134	54	32	71	154	23
3	15	51	52	90	57	52	114	59	64	55	158	22
4	15	37	49	77	e60	47	85	67	152	60	100	22
5	44	32	48	62	e57	49	63	59	110	50	55	22
6	71	29	51	e41	e55	74	54	71	57	40	43	23
7	50	42	46	e31	e53	118	53	68	42	34	38	26
8	31	50	43	e48	e54	153	71	73	37	35	36	36
9	23	39	78	e62	72	e117	72	73	35	44	34	106
10	20	33	e66	e41	86	e79	120	67	45	40	33	92
11	19	104	e52	e35	81	e64	186	62	60	31	32	81
12	18	235	e44	e48	72	e63	162	107	42	30	31	60
13	17	133	e37	e86	66	e66	129	87	38	79	128	47
14	18	267	e37	e80	59	58	92	64	38	153	194	45
15	75	373	e48	e67	53	59	67	52	43	136	108	39
16	56	191	e57	e57	51	61	185	54	46	212	85	34
17	30	118	e68	e54	49	54	232	64	57	122	118	118
18	24	80	e61	70	50	51	139	56	85	63	73	145
19	21	60	e56	166	48	51	95	50	68	55	48	106
20	20	55	e52	411	57	80	71	46	127	68	38	78
21	42	51	e46	264	84	74	64	42	103	55	34	49
22	61	47	e42	161	82	63	59	40	76	41	34	49
23	36	48	39	105	77	53	57	38	84	39	31	61
24	28	53	38	86	67	48	57	36	64	41	31	46
25	24	48	37	106	59	46	54	35	54	38	34	41
26	22	45	36	99	52	45	53	34	40	63	30	37
27	29	43	34	116	49	43	67	37	35	85	28	34
28	88	56	33	218	50	43	56	39	33	65	27	33
29	58	94	33	162	49	88	51	39	31	44	27	50
30	41	76	32	122	---	110	52	41	43	39	26	48
31	32	---	32	87	---	90	---	37	---	39	24	---
TOTAL	1061	2581	1464	3131	1776	2093	2769	1709	1775	2004	1911	1597
MEAN	34.2	86.0	47.2	101	61.2	67.5	92.3	55.1	59.2	64.6	61.6	53.2
MAX	88	373	78	411	86	153	232	107	152	212	194	145
MIN	15	29	32	31	48	43	51	34	31	30	24	22
CFSM	.98	2.47	1.35	2.89	1.75	1.93	2.64	1.58	1.70	1.85	1.77	1.53
IN.	1.13	2.75	1.56	3.34	1.89	2.23	2.95	1.82	1.89	2.14	2.04	1.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1996, BY WATER YEAR (WY)

MEAN	43.6	60.1	70.9	75.9	69.2	82.9	82.1	64.1	47.5	44.3	43.2	39.2
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

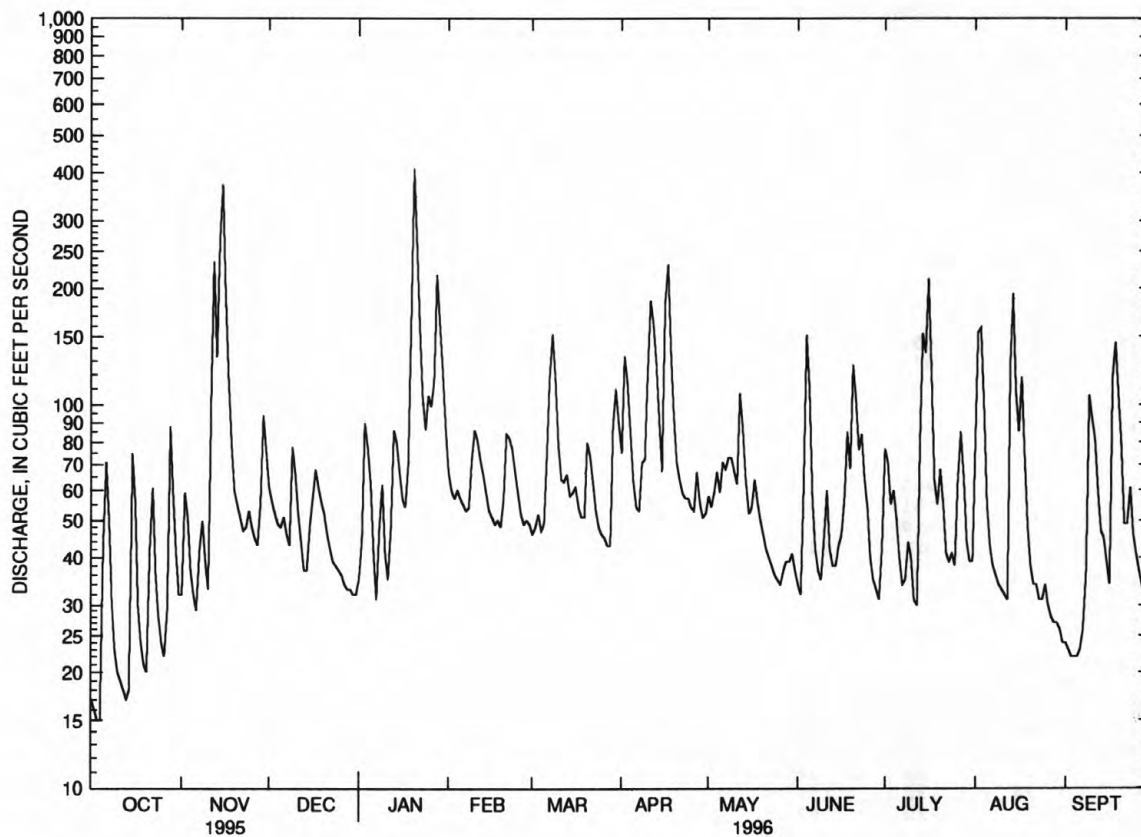
METEDECONK RIVER BASIN

01408120 NORTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1973 - 1996	
ANNUAL TOTAL	14917		23871			
ANNUAL MEAN	40.9		65.2		60.2	
HIGHEST ANNUAL MEAN					91.5	
LOWEST ANNUAL MEAN					34.7	
HIGHEST DAILY MEAN	373	Nov 15	411	Jan 20	838	Feb 25 1979
LOWEST DAILY MEAN	10	Sep 12	15	Oct 3	10	Sep 12 1995
ANNUAL SEVEN-DAY MINIMUM	11	Sep 2	21	Oct 8	11	Sep 2 1995
INSTANTANEOUS PEAK FLOW			468	Nov 14	1370a	Nov 8 1977
INSTANTANEOUS PEAK STAGE			7.18	Nov 14	9.28	Nov 8 1977
INSTANTANEOUS LOW FLOW			15	Oct 3	10	Sep 8 1995
ANNUAL RUNOFF (CFSM)	1.17		1.87		1.73	
ANNUAL RUNOFF (INCHES)	15.90		25.44		23.44	
10 PERCENT EXCEEDS	65		117		110	
50 PERCENT EXCEEDS	35		53		45	
90 PERCENT EXCEEDS	16		31		22	

a From rating curve extended above 600 ft³/s.

e Estimated.



01408120 N B 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 Carasajlo, 0.8 mi east of Lakewood, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--27.5 mi².

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 Carasajlo, Manetta, and Shenandoah.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 15	1730	307	2.77	Jan. 27	1800	265	2.67
Jan. 20	1915	*460	*3.08				

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	27	37	89	27	118	e46	84	68	18	89	68	26
2	25	39	30	34	e98	e48	84	64	10	87	99	27
3	23	37	30	68	e82	e51	76	40	48	84	136	20
4	30	33	34	e70	e77	e50	80	44	94	77	154	5.2
5	60	16	34	e65	e74	e51	70	54	95	70	73	8.8
6	60	23	33	e50	e70	e60	59	70	76	62	36	36
7	60	39	e28	e40	e69	e80	36	81	32	37	19	35
8	57	38	e27	e40	e69	e108	36	79	32	35	20	21
9	43	38	e28	e55	70	e93	50	78	35	41	23	86
10	9.9	37	e29	e45	66	e71	85	76	54	42	24	149
11	7.3	40	e29	e40	70	e61	110	76	100	38	24	81
12	9.5	103	e32	56	71	e55	106	82	92	36	23	31
13	12	160	e32	47	70	e52	103	82	25	84	87	35
14	25	193	e34	56	69	e54	83	81	30	114	130	39
15	66	262	e37	65	e54	e56	40	75	48	117	114	38
16	58	264	32	78	e52	e53	72	75	56	127	121	36
17	50	150	74	44	e49	e52	125	64	61	112	167	87
18	28	60	69	28	e49	e52	102	24	80	70	110	149
19	27	65	67	93	e49	63	84	39	99	33	20	130
20	35	58	62	304	e53	77	66	46	68	85	24	54
21	57	54	58	359	e67	43	65	45	103	86	32	46
22	37	50	58	173	e71	47	63	41	104	73	53	63
23	45	44	43	67	e74	45	62	38	112	48	27	79
24	36	31	23	70	e70	41	52	37	119	46	26	54
25	19	33	25	80	e63	39	33	35	144	47	28	10
26	16	36	26	105	e62	37	40	34	100	65	28	14
27	21	36	27	178	e50	36	49	37	22	83	28	39
28	39	36	27	224	e50	37	51	40	17	88	28	37
29	38	71	27	235	e45	44	62	69	29	78	28	43
30	44	105	28	146	---	55	74	60	47	54	28	44
31	42	---	27	139	---	77	---	56	---	23	27	---
TOTAL	1106.7	2188	1199	3081	1931	1734	2102	1790	1950	2131	1805	1523.0
MEAN	35.7	72.9	38.7	99.4	66.6	55.9	70.1	57.7	65.0	68.7	58.2	50.8
MAX	66	264	89	359	118	108	125	82	144	127	167	149
MIN	7.3	16	23	27	45	36	33	24	10	23	19	5.2
CFSM	1.30	2.65	1.41	3.61	2.42	2.03	2.55	2.10	2.36	2.50	2.12	1.85
IN.	1.50	2.96	1.62	4.17	2.61	2.35	2.84	2.42	2.64	2.88	2.44	2.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

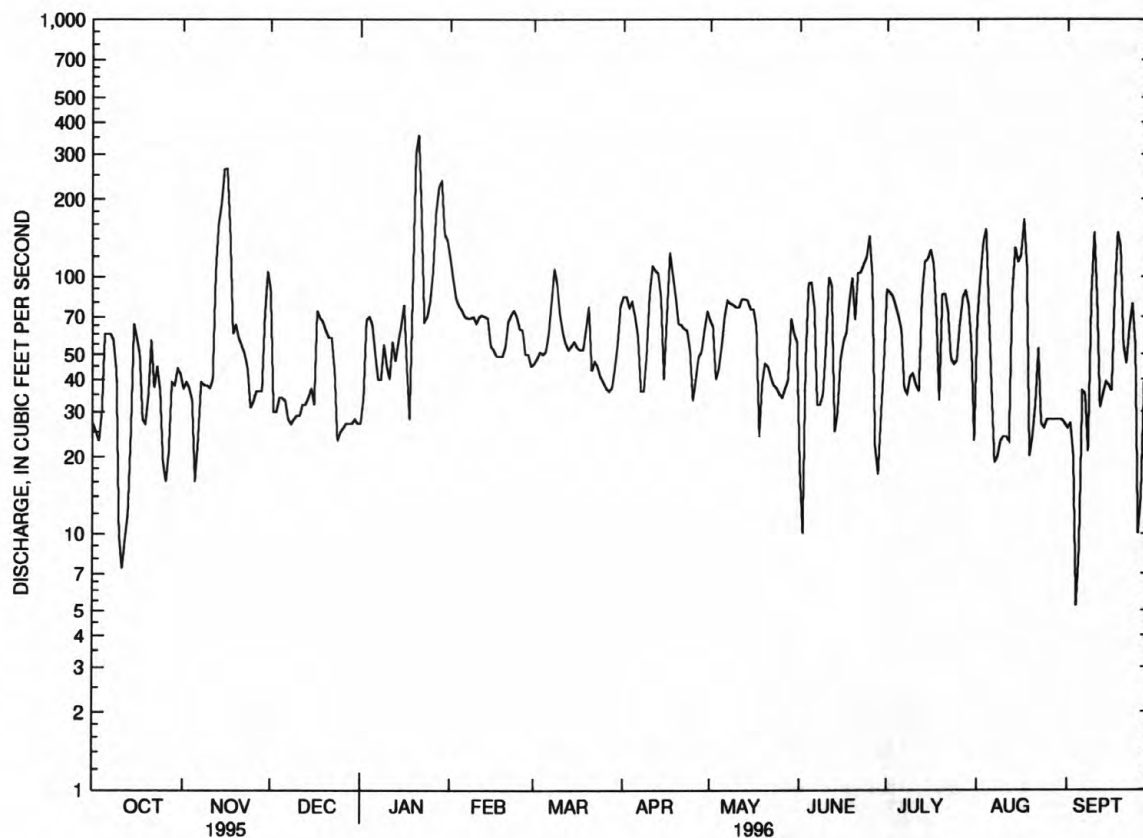
	1992	1993	1994	1995	1996
MEAN	38.2	49.9	55.3	68.3	60.2
MAX	59.8	72.9	87.2	99.4	72.8
(WY)	1994	1996	1993	1996	1994
MIN	28.5	37.8	38.7	50.5	43.7
(WY)	1995	1995	1996	1995	1995

METEDECONK RIVER BASIN

01408150 SOUTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1992 - 1996	
ANNUAL TOTAL	14393.7		22540.7			
ANNUAL MEAN	39.4		61.6		53.9	
HIGHEST ANNUAL MEAN					61.6	
LOWEST ANNUAL MEAN					36.4	
HIGHEST DAILY MEAN	264	Nov 16	359	Jan 21	514	Dec 12 1992
LOWEST DAILY MEAN	7.3	Oct 11	5.2	Sep 4	5.2	Sep 4 1996
ANNUAL SEVEN-DAY MINIMUM	13	Aug 29	20	Aug 30	13	Aug 29 1995
INSTANTANEOUS PEAK FLOW			460		652	
INSTANTANEOUS PEAK STAGE			3.08		3.38	
INSTANTANEOUS LOW FLOW			4.5		4.5	
ANNUAL RUNOFF (CFSM)	1.43		2.24		1.96	
ANNUAL RUNOFF (INCHES)	19.47		30.49		26.62	
10 PERCENT EXCEEDS	62		105		94	
50 PERCENT EXCEEDS	35		52		42	
90 PERCENT EXCEEDS	15		26		23	

e Estimated.



— 01408150 S B METEDECONK RIVER NEAR LAKEWOOD, NJ, DAILY MEAN DISCHARGE

BARNEGAT BAY

315

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, Nov. 12 to Dec. 6, 11-12, Jan. 5-31, Feb. 4-7, Mar. 4-5, and June 19 to July 2. 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, 4.93 ft, Oct. 11, 1992, from crest-stage gage; minimum recorded, e-0.20 ft, Feb. 4, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 4.04 ft, Nov. 15; minimum recorded, -0.54 ft, Mar. 29.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	2.88	4.04	2.69	3.59	1.97	3.29	3.11	2.14	e2.1	2.68	2.45	2.86
high tide	Date	6	15	20	19	21	20	16	1	22	13	1	24
Minimum	Elevation	-.07	-.20	-.34	-.10	.02	-.54	.48	.42	e.65	.61	.60	.97
low tide	Date	17	14	12	29	26	29	11	13	3	12	11	1
Mean high tide		1.72	---	---	---	1.25	1.29	1.68	1.51	---	1.68	1.68	2.14
Mean water level		1.47	---	---	---	.98	1.00	1.42	1.27	---	1.45	1.42	1.86
Mean low tide		1.30	---	---	---	.77	.72	.48	1.02	---	1.19	1.15	1.56

e Estimated.

BARNEGAT BAY

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, Dec. 11-14, 20-31, Jan. 5-12, and Feb. 3-26. 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, 3.81 ft, Nov. 15; minimum recorded, -0.10 ft, Mar. 29, 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 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	2.58	3.81	e2.30	2.96	e1.6	3.17	2.98	1.92	2.33	2.42	2.32	2.80
high tide	Date	6	15	20	19	21	20	16	30	22	31	1	24
Minimum	Elevation	.26	.47	e.10	.30	e.0	-.10	.36	.43	.68	.60	.68	.98
low tide	Date	17	29	12	29	26	29	11	13	28	12	11	30
Mean high tide		1.60	1.52	---	---	---	1.26	1.64	1.50	1.66	1.69	1.71	2.19
Mean water level		1.46	1.32	---	---	---	1.02	1.37	1.24	1.40	1.41	1.44	1.88
Mean low tide		1.32	1.15	---	---	---	.76	1.11	.97	1.12	1.12	1.13	1.57

e Estimated.

TOMS RIVER BASIN

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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 of 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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 16	1900	701	7.56	Apr. 18	1400	455	6.11
Jan. 21	1830	*838	*8.25	June 25	0930	512	6.47
Jan. 30	0515	499	6.39	July 16	1930	524	6.54
Apr. 13	0415	464	6.17	Aug. 17	1430	461	6.15

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	71	116	248	145	366	191	349	215	153	212	172	122
2	68	118	227	154	318	189	366	217	145	242	198	119
3	64	129	210	198	281	191	354	228	164	276	295	116
4	62	131	218	219	266	189	375	236	209	273	297	113
5	86	121	206	222	251	167	344	241	222	248	233	112
6	119	111	184	201	247	187	283	258	215	234	184	113
7	120	109	175	174	230	238	249	257	184	202	157	120
8	108	124	166	235	221	341	247	274	163	172	145	123
9	92	127	170	253	235	420	257	282	149	162	138	128
10	83	122	189	184	256	389	326	294	149	157	132	160
11	78	121	178	172	275	344	399	292	170	144	127	188
12	74	227	187	180	282	282	441	315	161	134	121	169
13	71	233	167	218	276	255	459	305	151	191	220	153
14	70	311	161	227	260	242	418	308	149	275	299	147
15	126	552	168	238	244	242	350	276	141	325	360	140
16	127	669	185	230	231	243	404	244	131	474	401	132
17	114	652	209	216	217	239	438	238	141	503	454	239
18	104	530	221	212	218	231	449	236	259	452	376	276
19	94	402	224	262	209	221	429	230	290	354	314	349
20	87	297	216	418	210	247	371	217	391	281	251	368
21	98	245	203	774	229	258	316	202	428	253	202	291
22	127	216	190	720	251	280	286	188	453	232	178	219
23	131	197	179	552	278	265	264	175	469	201	164	204
24	119	193	170	440	284	234	246	165	430	190	158	193
25	105	190	163	379	270	214	230	158	491	181	158	180
26	96	184	158	360	252	202	223	152	390	183	154	164
27	92	177	154	389	235	191	222	155	276	187	142	149
28	129	169	150	445	173	186	219	158	201	178	137	138
29	134	202	147	470	183	224	217	161	174	163	139	154
30	140	222	144	492	---	265	214	166	173	155	133	163
31	132	---	143	445	---	323	---	163	---	157	127	---
TOTAL	3121	7197	5710	9824	7248	7690	9745	7006	7222	7391	6566	5242
MEAN	101	240	184	317	250	248	325	226	241	238	212	175
MAX	140	669	248	774	366	420	459	315	491	503	454	368
MIN	62	109	143	145	173	167	214	152	131	134	121	112
CFSM	.82	1.95	1.50	2.58	2.03	2.02	2.64	1.84	1.96	1.94	1.72	1.42
IN.	.94	2.18	1.73	2.97	2.19	2.33	2.95	2.12	2.18	2.24	1.99	1.59

TOMS RIVER BASIN

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

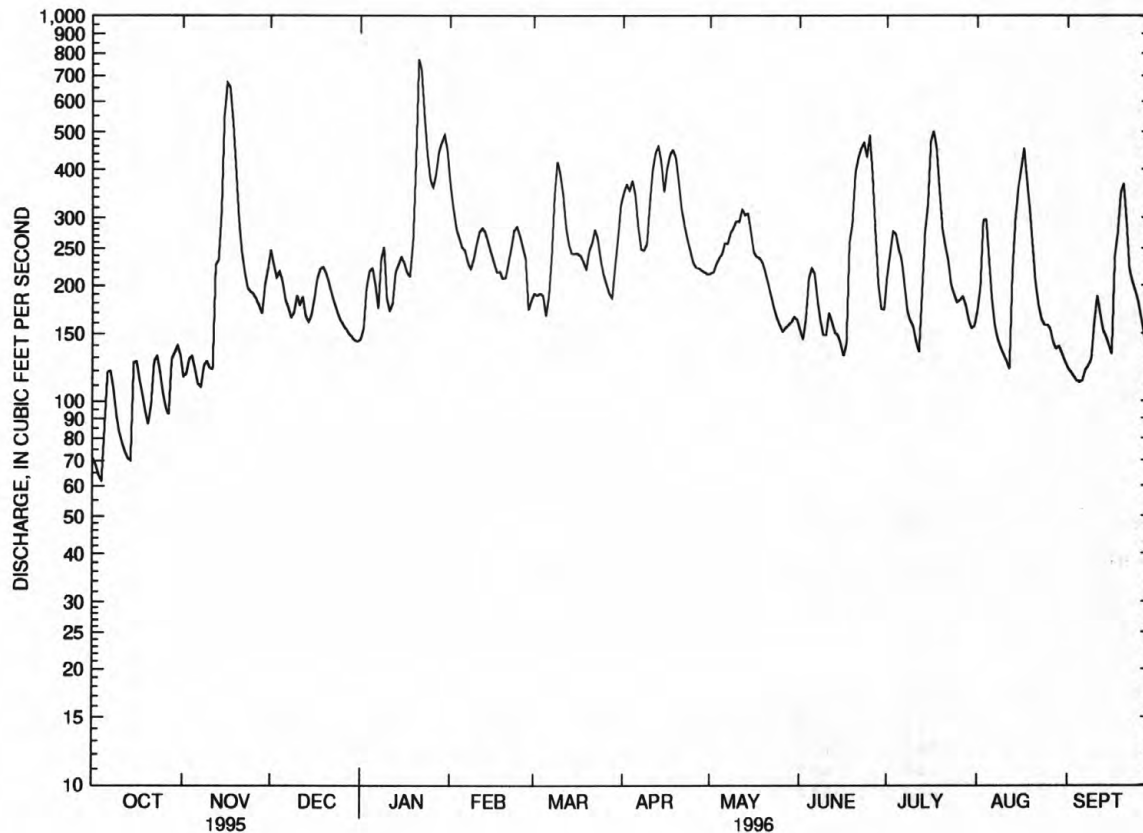
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1996, BY WATER YEAR (WY)

MEAN	155	199	223	244	250	291	281	242	186	158	162	152
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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1929 - 1996	
ANNUAL TOTAL	49499		83962			
ANNUAL MEAN	136		229		212	
HIGHEST ANNUAL MEAN					335	
LOWEST ANNUAL MEAN					128	
HIGHEST DAILY MEAN	669	Nov 16	774	Jan 21	1910	Sep 23 1938
LOWEST DAILY MEAN	43	Sep 11	62	Oct 4	43	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	44	Sep 10	82	Oct 8	44	Sep 10 1995
INSTANTANEOUS PEAK FLOW			838	Jan 21	2000a	Sep 23 1938
INSTANTANEOUS PEAK STAGE			8.25	Jan 21	12.50b	Sep 23 1938
INSTANTANEOUS LOW FLOW			62	Oct 4	42	Sep 11 1995
ANNUAL RUNOFF (CFSM)	1.10		1.87		1.72	
ANNUAL RUNOFF (INCHES)	14.97		25.39		23.37	
10 PERCENT EXCEEDS	208		389		353	
50 PERCENT EXCEEDS	125		210		184	
90 PERCENT EXCEEDS	64		122		97	

a From rating curve extended above 1,500 ft³/s.

b From floodmark.



01408500 TOMS RIVER NEAR TOMS RIVER, NJ, DAILY MEAN DISCHARGE

TOMS RIVER BASIN

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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.

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 1995 TO SEPTEMBER 1996

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 1995													
30...	1020	141	90	5.3	11.0	766	9.4	85	E1.6	110	50	16	
JAN 1996													
17...	1010	216	86	4.6	2.5	768	14.1	103	E1.6	2	20	11	
MAR													
28...	1105	183	85	5.3	8.0	775	11.0	91	E1.5	2	<10	12	
MAY													
30...	0957	167	88	5.0	13.0	761	9.5	90	<1.0	31	50	13	
JUL													
17...	1022	502	65	4.5	22.5	765	6.0	69	<1.0	130	130	7	
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)	ALKA-LINITY LAB 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 1995													
30...	3.9	1.6	7.5	1.5	1.1	13	12	<0.1	6.2	60	48	5	
JAN 1996													
17...	2.6	1.2	7.2	0.90	<1.0	11	12	<0.1	5.2	36	--	4	
MAR													
28...	2.6	1.3	7.9	1.1	1.3	11	12	<0.1	3.7	56	43	2	
MAY													
30...	2.7	1.4	8.2	1.3	2.0	10	13	<0.1	4.8	74	45	5	
JUL													
17...	1.7	0.72	5.1	0.80	--	5.9	8.6	<0.1	4.2	40	--	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-SOLVED (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 1995													
30...	0.005	0.32	0.07	0.09	0.40	0.27	0.72	0.59	0.02	<0.01	6.9	0.8	
JAN 1996													
17...	0.008	0.47	0.11	0.11	0.30	0.36	0.77	0.83	<0.01	0.02	5.8	0.4	
MAR													
28...	<0.003	0.51	0.14	0.17	0.40	0.32	0.91	0.83	0.01	0.02	5.0	0.3	
MAY													
30...	0.005	0.52	0.24	0.23	0.70	0.57	1.2	1.1	0.04	0.03	6.5	1.5	
JUL													
17...	0.008	0.065	<0.03	<0.03	0.70	0.49	0.77	0.56	0.02	0.02	18	1.5	

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 IN BOT. MAT. (UG/L AS AS) (01002)	ARSENIC 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 TOTAL RECOV- ERABLE (UG/L AS CD) (01027)
OCT 1995											
30...	1020	--	25	--	--	--	<1	--	<10	20	<1
30...	1020	5.6	--	<2.0	50	71	--	7	--	--	--
DATE	TIME	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, TOTAL 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, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, TOTAL 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 1995											
30...		--	<1	--	--	<1	--	680	--	<1	--
30...		<1	--	1	<5	--	<1	--	1200	--	<10
DATE	TIME	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, TOTAL 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, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/L AS NI) (01068)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/L AS SE) (01148)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS ZN) (01093)
OCT 1995											
30...		60	--	<0.1	--	2	--	<1	--	20	--
30...		--	<10	--	0.03	--	<10	--	<1	--	<10
DATE	TIME	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 1995											
30...		--	--	--	--	--	--	--	--	--	--
30...		<0.1	2.2	<2	<1	<0.1	<1	0.2	0.2	0.1	<0.1
DATE	TIME	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 BOT- TOM MA- TERIAL (UG/KG) (39423)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT IN BOT- TOM MA- TERIAL (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. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1995											
30...		--	--	--	--	--	--	--	--	--	--
30...		<0.1	<0.1	<0.1	<0.1	<0.1	<8.2	<0.1	<1	<10	2

WATER-QUALITY QUALITY-CONTROL DATA

[The following analyses are quality-assurance samples processed during the 1996 water year and are defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUAALITY ASSURANCE SAMPLE (TYPE)	NITROGEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
MAR 1996				
28...	1106	SEQUENTIAL REPLICATE SAMPLE	0.51	0.40
28...	1107	SEQUENTIAL REPLICATE SAMPLE	0.51	0.40
28...	1108	SEQUENTIAL REPLICATE SAMPLE	0.51	0.40
28...	1109	SEQUENTIAL REPLICATE SAMPLE	0.50	0.40
28...	1110	SEQUENTIAL REPLICATE SAMPLE	0.50	0.40
28...	1111	SEQUENTIAL REPLICATE SAMPLE	0.50	0.40

BARNEGAT BAY

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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, Dec. 12-13, Feb. 5-9, and Mar. 4. 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 recorded, 3.29 ft, Dec. 24, 1994; minimum recorded, -0.64 ft, Mar. 4, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 3.28 ft, Nov. 14, 1995; minimum recorded, -0.64 ft, Mar. 4, 1996, 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 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	2.51	3.28	2.69	3.04	1.92	2.79	2.67	2.09	2.30	2.26	2.28	2.82
high tide	Date	7	14	20	8	17	20	16	30	23	4	1	17
Minimum	Elevation	-.17	.27	-.34	-.23	-.20	-.64	.44	.55	.90	.74	.81	1.19
low tide	Date	17	13	12	28	25	4	25	13	27	21	9	30
Mean high tide		1.56	1.51	1.30	1.57	---	1.28	1.63	1.54	1.65	1.64	1.73	2.21
Mean water level		1.35	1.29	1.09	1.33	---	1.02	1.38	1.31	1.42	1.43	1.51	1.96
Mean low tide		1.08	1.08	.82	1.12	---	.77	1.09	1.06	1.18	1.19	1.28	1.71

BARNEGAT BAY

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, Feb. 1, 5-7, 13, 18, and June 6. 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 recorded, 3.96 ft, Jan. 8, 1996; minimum recorded, -0.34 ft, Mar. 5.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 3.96 ft, Jan. 8; minimum recorded, -0.34 ft, Mar. 5.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	3.04	3.71	3.40	3.96	2.52	3.10	3.16	2.53	2.79	2.78	2.73	3.39
high tide	Date	7	15	20	8	17	20	16	30	23	4	2	18
Minimum	Elevation	.35	.67	.07	.17	.28	-.34	.64	.74	1.14	.97	.96	1.51
low tide	Date	17	13	12	29	25	5	25	15	1	11	9	30
Mean high tide		2.06	2.05	1.80	2.06	---	1.67	2.03	1.96	2.06	2.07	2.15	2.64
Mean water level		1.75	1.73	1.50	1.73	---	1.37	1.69	1.65	1.76	1.77	1.85	2.31
Mean low tide		1.45	1.48	1.22	1.45	---	1.10	1.38	1.35	1.45	1.48	1.57	2.00

MULLICA RIVER BASIN

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 mi².

PERIOD OF RECORD---Water years 1977-78, 1991 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995 29...	1125	4.4	108	6.6	6.5	757	10.4	85	21	5.1
FEB 1996 15...	1044	3.1	198	6.3	3.5	752	11.6	89	24	5.9
JUN 11...	1055	2.6	139	7.2	26.0	760	7.9	98	21	5.3
AUG 12...	1242	2.2	128	6.8	24.0	758	8.4	100	19	4.5
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 1995 29...	1.9	13	16	65	0.47	0.04	0.30	0.77	<0.01	<0.01
FEB 1996 15...	2.2	12	41	111	0.93	0.05	0.30	1.2	<0.01	<0.01
JUN 11...	2.0	9.4	25	52	0.28	0.03	0.40	0.68	0.02	0.01
AUG 12...	1.8	7.6	24	88	0.062	0.02	0.40	0.46	0.04	0.01

MULLICA RIVER BASIN

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 mi².

PERIOD OF RECORD.--Water years 1977-78, November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995										
08...	1110	18	103	4.0	7.0	751	8.8	74	12	2.7
FEB 1996										
07...	1155	17	90	4.3	0.5	770	9.4	65	8	1.6
APR										
23...	1150	25	80	4.0	18.5	756	5.2	56	4	0.40
JUN										
13...	1615	13	68	4.2	21.0	760	4.1	46	4	0.88
AUG										
08...	1420	19	94	5.0	22.0	764	1.7	19	10	2.2
SEP										
06...	1350	8.3	80	5.2	20.0	760	1.6	18	7	1.6

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)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 1995									
08...	1.3	16	6.9	41	<0.05	<0.015	0.30	0.03	<0.01
FEB 1996									
07...	0.90	12	9.4	40	<0.05	<0.015	0.20	<0.01	0.01
APR									
23...	0.70	8.3	8.4	51	<0.05	<0.015	0.40	<0.01	<0.01
JUN									
13...	0.49	2.6	9.3	66	<0.05	0.02	0.70	0.03	<0.01
AUG									
08...	0.99	1.4	8.1	256	<0.05	0.11	4.3	0.05	0.01
SEP									
06...	0.70	1.4	8.8	210	<0.05	0.12	3.7	0.08	0.01

MULLICA RIVER BASIN

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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 mi².

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 1995 TO SEPTEMBER 1996

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 OF WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY BROTH (MG/L) (00310)	COLI-FORM, FECAL, EC (MPN) (31615)	ENTERO-COCCI ME, MF TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1995 18...	1330	13	51	4.8	15.0	770	9.6	94	<1.0	<20	<10	8
JAN 1996 30...	1315	145	69	4.2	3.0	763	12.9	96	1.7	<20	<10	6
MAR 20...	1030	35	65	4.4	8.0	744	11.1	96	2.1	<20	<10	7
JUN 12...	1200	24	42	4.7	24.0	762	8.0	95	<1.0	20	10	5
AUG 06...	1200	20	57	4.3	23.5	766	6.0	70	<1.0	<20	<100	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)	ALKA-LINITY 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 (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT 1995 18...	1.6	0.90	2.6	0.60	<1.0	11	4.2	<0.1	3.4	26	3	0.003
JAN 1996 30...	1.3	0.74	3.4	0.70	--	9.1	6.8	<0.1	3.2	32	2	<0.003
MAR 20...	1.4	0.73	4.4	0.70	--	8.3	7.5	<0.1	2.2	30	3	0.003
JUN 12...	1.1	0.59	3.6	0.70	<1.0	4.2	6.5	<0.1	3.5	30	7	0.004
AUG 06...	1.3	0.68	3.8	0.90	--	2.4	6.7	<0.1	6.1	64	8	0.029

DATE	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 1995 18...	--	<0.03	<0.03	0.17	<0.03	--	--	<0.01	<0.01	2.6	0.7
JAN 1996 30...	0.11	<0.03	<0.03	0.30	0.28	0.41	0.39	<0.01	<0.01	8.4	0.3
MAR 20...	0.13	0.08	<0.03	0.20	0.20	0.33	0.33	<0.01	<0.01	6.0	0.2
JUN 12...	0.11	<0.03	<0.03	0.40	0.17	0.51	0.28	<0.01	<0.01	6.5	>4.0
AUG 06...	0.10	0.09	0.10	1.4	1.1	1.5	1.2	0.01	0.01	46	1.6

MULLICA RIVER BASIN

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 mi².

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 except for estimated daily discharges, which are fair. Some regulation from upstream cranberry bogs and Atsion Lake. Diversions from Sleeper Branch enter river upstream of 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	75	102	83	220	e120	173	81	74	89	151	65
2	19	78	101	88	203	e113	222	91	70	106	174	55
3	18	80	98	119	174	e111	240	108	83	122	164	53
4	17	76	96	135	166	e109	232	134	115	135	153	51
5	28	71	91	129	163	e122	229	132	116	135	141	51
6	54	68	90	124	146	e146	228	123	116	110	128	66
7	62	59	86	109	124	e188	205	125	100	104	107	71
8	58	59	80	125	115	e223	161	131	84	95	88	58
9	33	60	83	145	124	e226	157	141	79	89	94	55
10	23	68	87	111	138	e226	196	150	75	86	103	53
11	19	65	80	102	144	e220	222	153	72	80	88	52
12	20	104	75	105	144	e209	212	172	70	76	81	56
13	22	116	80	118	142	e200	209	179	70	117	128	56
14	25	131	81	122	153	e185	188	167	68	199	183	53
15	48	180	84	128	159	175	175	150	68	311	191	51
16	62	188	93	128	147	172	205	134	65	376	186	50
17	63	162	106	130	135	167	224	142	64	348	181	117
18	48	123	105	139	144	161	208	142	73	288	170	148
19	39	122	108	196	135	151	196	139	79	210	158	139
20	40	120	112	283	140	148	187	132	99	209	151	139
21	75	112	112	321	155	143	175	122	136	201	142	140
22	95	101	110	374	166	141	163	101	107	187	132	131
23	74	98	108	381	179	154	155	101	108	181	109	125
24	101	103	104	332	183	156	148	107	122	124	99	112
25	151	100	99	296	176	147	138	87	125	111	92	104
26	151	96	94	219	166	140	103	79	85	117	87	99
27	123	94	89	196	154	130	94	80	56	129	83	81
28	100	65	92	236	e144	125	108	78	55	124	80	65
29	98	65	87	236	e132	144	112	79	55	115	75	80
30	86	92	83	253	---	174	80	79	67	110	72	79
31	79	---	84	243	---	177	---	77	---	116	68	---
TOTAL	1850	2931	2900	5706	4471	5003	5345	3716	2556	4800	3859	2455
MEAN	59.7	97.7	93.5	184	154	161	178	120	85.2	155	124	81.8
MAX	151	188	112	381	220	226	240	179	136	376	191	148
MIN	17	59	75	83	115	109	80	77	55	76	68	50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1996, BY WATER YEAR (WY)

MEAN	67.3	88.9	118	139	139	159	151	122	77.6	73.4	76.8	61.6
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

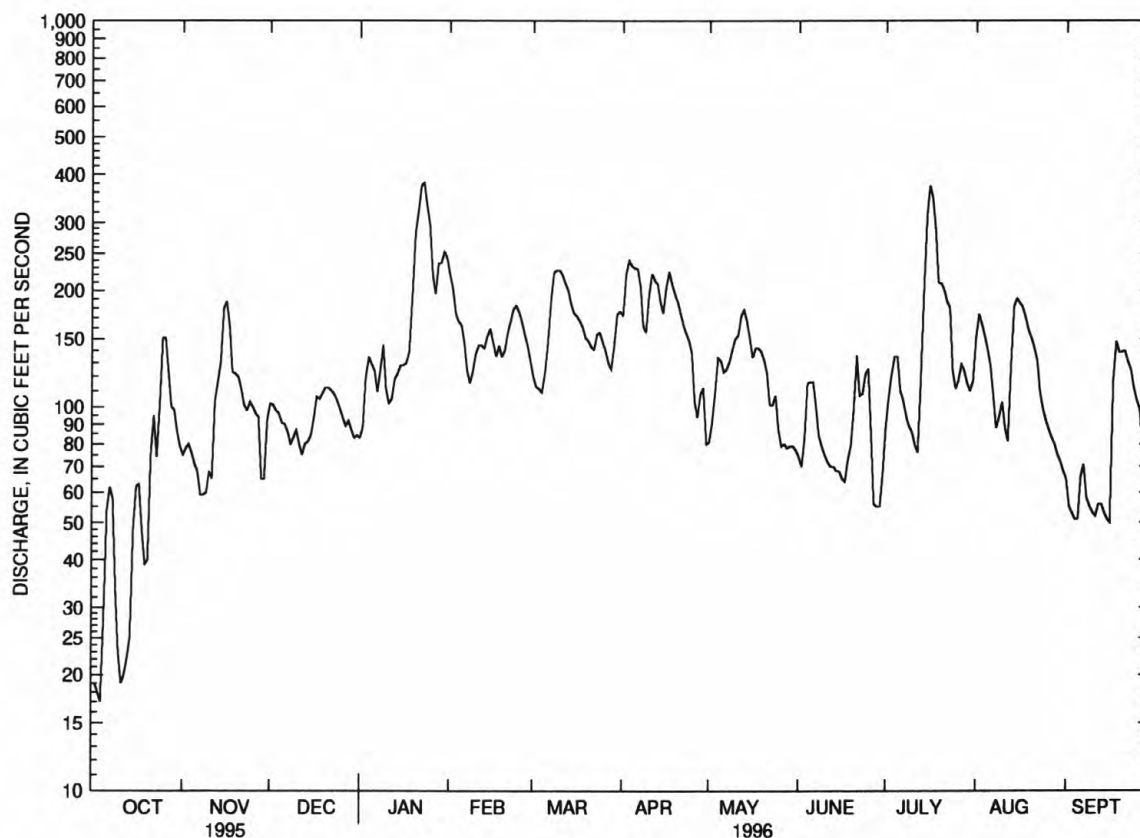
MULLICA RIVER BASIN

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Q1409400 MULLICA RIVER NEAR BATSTO, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1957 - 1996	
ANNUAL TOTAL	23456.6		45592		106	
ANNUAL MEAN	64.3		125		168	
HIGHEST ANNUAL MEAN					50.4	
LOWEST ANNUAL MEAN					1973	
HIGHEST DAILY MEAN	188	Nov 16	381	Jan 23	1630	Feb 26 1979
LOWEST DAILY MEAN	5.1	Sep 16	17	Oct 4	5.1	Sep 16 1995
ANNUAL SEVEN-DAY MINIMUM	6.4	Sep 10	27	Oct 9	6.4	Sep 10 1995
INSTANTANEOUS PEAK FLOW			401	Jan 23	1840	Feb 26 1979
INSTANTANEOUS PEAK STAGE			3.57	Jan 23	6.14	Feb 26 1979
INSTANTANEOUS LOW FLOW			16	Oct 4	4.9	Sep 16 1995
10 PERCENT EXCEEDS	110		202		200	
50 PERCENT EXCEEDS	66		115		86	
90 PERCENT EXCEEDS	18		61		32	

e Estimated.



01409400 MULLICA RIVER NEAR BATSTO, NJ, DAILY MEAN DISCHARGE

MULLICA RIVER BASIN

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 mi².

PERIOD OF RECORD.--November 1995 to September 1996.

REMARKS.--Diversions from Sleeper Branch enter river upstream of site and substantially increase the discharge at the site.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995										
08...	0800	58	60	5.0	8.0	754	10.2	87	11	2.3
FEB 1996										
07...	1250	138	68	4.6	0.0	771	11.1	75	10	2.1
APR										
23...	1134	178	59	4.5	19.0	764	6.7	72	5	0.70
JUN										
13...	1200	69	41	5.2	22.0	760	7.3	84	5	1.1
AUG										
08...	0920	93	45	5.0	21.5	767	6.0	68	6	1.3
SEP										
06...	0945	62	43	4.8	21.5	763	7.2	81	6	1.2

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 1995										
08...	1.2	13	6.5	38	<0.05	0.02	0.20	--	0.06	<0.01
FEB 1996										
07...	1.2	11	8.1	35	0.20	0.02	<0.20	--	<0.01	<0.01
APR										
23...	0.70	7.8	7.5	48	<0.05	<0.015	0.40	--	<0.01	<0.01
JUN										
13...	0.65	3.4	6.8	52	0.072	0.07	0.60	0.67	<0.01	<0.01
AUG										
08...	0.70	2.2	6.8	64	<0.05	0.07	1.0	--	0.01	0.01
SEP										
06...	0.67	3.5	6.5	56	0.067	0.04	1.0	1.1	0.03	<0.01

MULLICA RIVER BASIN

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 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 CENT SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995 29...	0930	3.8	88	6.7	6.0	758	10.0	81	18	3.8
FEB 1996 15...	0905	3.5	165	5.7	3.5	750	11.0	84	23	5.4
JUN 11...	0926	2.6	107	6.8	25.0	760	7.2	87	21	4.7
AUG 12...	1120	3.3	107	6.6	24.0	758	6.0	72	22	4.8
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 1995 29...	2.1	6.6	13	46	1.10	0.04	0.20	1.3	0.02	<0.01
FEB 1996 15...	2.4	8.6	33	86	1.60	<0.015	<0.20	--	<0.01	<0.01
JUN 11...	2.3	6.3	17	57	0.38	0.04	0.40	0.78	<0.01	<0.01
AUG 12...	2.4	6.3	17	71	0.17	0.03	0.60	0.77	0.01	<0.01

MULLICA RIVER BASIN

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 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995 29...	1305	16	86	6.0	7.0	759	9.4	78	15	3.2
FEB 1996 15...	1230	12	142	6.2	5.5	752	10.9	88	17	3.8
JUN 11...	1220	4.6	98	6.4	18.5	761	7.6	81	16	3.6
AUG 12...	1355	10	99	6.6	18.0	764	7.3	77	18	3.9
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 1995 29...	1.7	8.1	12	58	0.92	0.09	0.50	1.4	0.03	<0.01
FEB 1996 15...	1.8	7.5	28	82	1.60	<0.015	<0.20	--	0.01	<0.01
JUN 11...	1.8	5.5	15	66	1.20	0.03	0.20	1.4	<0.01	<0.01
AUG 12...	1.9	5.3	16	64	0.96	<0.015	0.20	1.2	<0.01	0.01

MULLICA RIVER BASIN

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 of Saltars Ditch, and 2.3 mi west of Atsion.

DRAINAGE AREA.--16.1 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995 29...	0845	20	66	4.6	7.0	760	9.9	82	11	2.1
FEB 1996 15...	1140	21	86	4.6	3.0	753	11.4	86	10	1.9
JUN 11...	1340	14	60	6.1	19.5	760	7.2	79	11	2.2
AUG 12...	1345	15	61	6.2	18.0	762	8.6	91	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 1995 29...	1.3	8.4	8.6	45	0.62	<0.015	0.20	0.82	<0.01	<0.01
FEB 1996 15...	1.2	7.2	13	52	0.83	<0.015	<0.20	--	<0.01	<0.01
JUN 11...	1.3	3.3	10	44	0.40	0.06	0.50	0.90	0.02	0.03
AUG 12...	1.2	2.9	10	55	0.38	0.02	0.40	0.78	<0.01	0.01

MULLICA RIVER BASIN

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 of Price Branch tributary, and 2.8 mi west of Atsion.

DRAINAGE AREA.--6.42 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995 29...	1040	4.6	96	4.4	5.5	760	9.4	75	22	4.6
FEB 1996 15...	0945	8.6	81	3.7	0.0	753	10.1	70	15	3.2
JUN 11...	1130	3.7	55	4.6	19.0	760	3.6	39	9	2.0
AUG 12...	1145	3.2	49	4.8	18.0	762	4.7	50	7	1.6

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 1995 29...	2.6	22	5.2	63	0.057	0.02	0.30	0.36	<0.01	<0.01
FEB 1996 15...	1.7	13	7.3	--	0.55	0.03	<0.20	--	<0.01	<0.01
JUN 11...	0.93	4.4	8.9	38	<0.05	0.04	0.40	--	<0.01	<0.01
AUG 12...	0.82	2.1	8.8	50	<0.05	<0.015	0.40	--	<0.01	<0.01

MULLICA RIVER BASIN

333

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 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995 29...	0750	10	64	6.3	7.0	758	8.4	70	15	2.4
FEB 1996 15...	1220	9.6	109	6.3	3.5	752	11.1	85	18	3.1
JUN 11...	1106	9.7	93	6.4	24.5	760	5.4	65	19	3.4
AUG 12...	1057	9.2	83	6.3	23.0	763	6.7	78	17	3.1
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 1995 29...	2.1	1.8	9.4	34	1.30	0.05	0.20	1.5	<0.01	<0.01
FEB 1996 15...	2.4	3.9	19	60	1.70	0.04	<0.20	--	0.01	<0.01
JUN 11...	2.5	4.1	14	51	0.51	0.06	0.50	1.0	0.04	0.01
AUG 12...	2.3	3.6	13	58	0.51	0.03	0.50	1.0	<0.01	<0.01

MULLICA RIVER BASIN

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 of confluence with Pump Branch.

DRAINAGE AREA.--4.86 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION) (MG/L) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995 29...	1520	3.4	75	6.7	7.0	760	11.0	91	13	2.9
FEB 1996 15...	1015	4.1	100	6.6	3.5	752	13.1	100	15	3.4
JUN 11...	0935	3.7	73	7.0	26.0	760	7.3	90	13	2.8
AUG 12...	1207	4.1	73	6.9	25.0	762	9.0	109	13	2.9
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 1995 29...	1.5	8.4	9.2	44	0.32	0.04	0.40	0.72	0.03	<0.01
FEB 1996 15...	1.6	8.0	14	57	0.81	0.07	0.30	1.1	0.04	<0.01
JUN 11...	1.5	5.3	10	48	<0.05	0.05	0.40	--	0.03	0.01
AUG 12...	1.5	5.0	10	49	<0.05	<0.015	0.50	--	0.02	0.01

MULLICA RIVER BASIN

335

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 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION (MG/L) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995 29...	1320	22	70	6.0	6.5	760	9.8	80	16	3.1
FEB 1996 15...	0820	22	92	6.2	3.0	752	11.2	84	16	3.0
JUN 11...	1216	22	82	6.5	22.5	760	6.9	80	17	3.3
AUG 12...	1320	25	71	6.4	20.5	762	7.3	81	16	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 1995 29...	2.0	7.0	8.6	39	1.00	0.03	0.20	1.2	<0.01	<0.01
FEB 1996 15...	2.1	6.5	14	55	1.40	0.04	<0.20	--	<0.01	<0.01
JUN 11...	2.2	5.1	12	40	0.38	0.04	0.30	0.68	<0.01	0.01
AUG 12...	2.0	4.7	11	50	0.28	<0.015	0.20	0.48	0.01	0.01

MULLICA RIVER BASIN

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 of mouth, 2.5 mi south of Parkdale, and 3.9 mi northeast of Hammonton.

DRAINAGE.--8.07 mi².

PERIOD OF RECORD.--November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995										
08...	0925	9.2	159	4.6	9.5	752	6.7	59	51	12
FEB 1996										
07...	1003	13	149	5.6	1.0	772	9.8	68	43	10
APR										
23...	1013	13	125	5.8	18.0	759	5.3	56	32	7.2
JUN										
13...	1404	3.8	115	6.2	20.5	758	5.4	60	34	7.9
AUG										
08...	1304	12	108	6.4	22.0	765	5.4	62	31	7.1
SEP										
06...	1247	6.3	111	6.4	20.0	762	5.6	62	35	8.1

MULLICA RIVER BASIN

337

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 mi² (revised).

PERIOD OF RECORD.--Water years 1977-78, November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995										
08...	1005	50	81	5.0	8.0	754	10.4	89	20	4.2
FEB 1996										
07...	1010	94	96	4.7	0.0	772	12.1	82	20	4.3
APR										
23...	0920	76	79	5.2	18.0	764	7.7	81	13	2.1
JUN										
13...	1000	52	64	6.2	21.5	760	7.7	87	14	2.9
AUG										
08...	1100	61	62	6.0	21.5	767	7.4	83	14	2.9
SEP										
06...	1045	34	64	5.5	22.0	763	8.0	91	14	2.9

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 1995										
08...	2.4	14	7.9	45	0.35	0.03	<0.20	--	0.06	<0.01
FEB 1996										
07...	2.3	17	11	56	1.00	0.03	<0.20	--	<0.01	<0.01
APR										
23...	1.8	12	10	55	0.29	<0.015	0.40	0.69	0.02	<0.01
JUN										
13...	1.7	7.1	9.7	54	0.27	0.05	0.40	0.67	0.04	<0.01
AUG										
08...	1.6	5.2	9.3	48	0.14	0.03	0.50	0.64	<0.01	0.01
SEP										
06...	1.6	6.2	9.3	42	0.19	<0.015	0.30	0.49	0.01	<0.01

MULLICA RIVER BASIN

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 mi², revised.

PERIOD OF RECORD.--Water years 1974 to current year.

REMARKS.--For February 21, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 1995													
18...	1045	E8	--	7.1	10.5	770	8.5	--	<1.0	40	10	21	
FEB 1996													
21...	1245	E35	120	5.7	7.0	762	9.5	78	--	--	--	25	
MAR													
28...	1030	E25	129	6.5	7.0	771	10.3	84	E1.2	<20	10	24	
MAY													
21...	1130	E25	113	6.5	20.5	749	6.4	72	<1.0	<20	10	23	
JUL													
24...	1230	E25	118	6.6	19.5	762	7.8	85	<1.0	260	50	23	
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)	ALKA-LINITY 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 1995													
18...	4.9	2.2	10	4.3	12	13	15	<0.1	7.4	78	64	3	
FEB 1996													
21...	5.9	2.6	7.8	3.9	1.4	15	16	<0.1	5.0	86	66	18	
MAR													
28...	5.7	2.3	11	3.5	9.4	13	17	<0.1	5.5	80	71	5	
MAY													
21...	5.6	2.3	9.5	3.5	9.0	11	14	<0.1	6.1	76	62	12	
JUL													
24...	5.5	2.2	9.5	3.8	12	11	15	<0.1	7.2	80	66	<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 1995													
18...	0.004	0.065	0.04	<0.03	0.20	0.17	0.27	0.24	0.19	0.16	3.3	0.3	
FEB 1996													
21...	--	2.00	--	--	0.80	0.25	2.8	2.3	0.11	0.03	4.4	1.0	
MAR													
28...	<0.003	1.60	0.03	0.03	0.30	0.22	1.9	1.8	0.06	0.05	2.8	1.8	
MAY													
21...	0.006	1.10	<0.03	<0.03	0.40	0.31	1.5	1.4	0.14	0.10	5.0	0.8	
JUL													
24...	0.009	1.00	0.05	0.03	0.40	0.25	1.4	1.2	0.11	0.07	4.5	0.4	

MULLICA RIVER BASIN

339

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 mi².

PERIOD OF RECORD.--November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995											
08...	1235	17	58	4.6	9.0	751	9.4	82	11	2.4	
FEB 1996											
07...	1230	18	68	4.6	1.5	771	12.0	85	12	2.5	
APR											
23...	1140	25	65	4.6	17.0	756	8.2	86	9	1.6	
JUN											
13...	1240	17	39	5.2	18.5	758	7.5	80	7	1.5	
AUG											
08...	1155	16	40	5.1	18.5	764	7.0	75	8	1.5	
SEP											
06...	1240	10	37	5.6	17.5	760	7.4	78	7	1.3	
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 1995											
08...	1.1	12	4.7	33	0.26	<0.015	<0.20	--	0.05	<0.01	
FEB 1996											
07...	1.4	14	5.9	36	0.52	<0.015	<0.20	--	<0.01	<0.01	
APR											
23...	1.3	11	6.2	41	0.20	<0.015	0.20	0.40	0.01	<0.01	
JUN											
13...	0.91	4.4	5.0	45	0.30	0.05	0.50	0.80	<0.01	<0.01	
AUG											
08...	0.93	3.2	5.3	36	0.34	0.03	0.50	0.84	0.03	<0.01	
SEP											
06...	0.92	3.0	4.9	26	0.42	0.02	0.30	0.72	0.01	<0.01	

MULLICA RIVER BASIN

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 of mouth, 2.5 mi south of Hampton Gate, and 3.9 mi southeast of Indian Mills.

DRAINAGE AREA.--10.8 mi².

PERIOD OF RECORD.--November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995										
08...	1035	14	50	4.1	7.0	752	10.4	87	4	0.80
FEB 1996										
07...	1030	17	44	3.9	0.5	772	11.5	79	3	0.50
APR										
23...	0940	15	41	4.4	18.0	757	7.5	80	1	0.10
JUN										
13...	1040	17	30	4.5	21.5	758	7.2	82	2	0.32
AUG										
08...	1000	13	32	4.4	21.5	765	6.3	71	2	0.32
SEP										
06...	1100	9.7	26	4.7	21.0	760	6.8	76	2	0.33

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 1995									
08...	0.50	10	3.5	16	<0.05	0.02	<0.20	0.04	<0.01
FEB 1996									
07...	0.40	9.7	3.4	18	<0.05	<0.015	<0.20	<0.01	<0.01
APR									
23...	0.30	5.8	3.0	22	<0.05	<0.015	<0.20	<0.01	0.02
JUN									
13...	0.24	3.5	3.1	32	<0.05	0.03	0.30	<0.01	<0.01
AUG									
08...	0.24	2.4	3.2	26	<0.05	0.03	0.40	0.04	<0.01
SEP									
06...	0.24	2.5	3.0	14	<0.05	0.02	0.30	<0.01	<0.01

MULLICA RIVER BASIN

341

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.

DRAINAGE AREA.--18.3 mi².

PERIOD OF RECORD.--Water years 1977-78, November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995											
08...	1430	14	185	6.0	8.0	753	9.0	77	62	15	
FEB 1996											
07...	1425	0.82	131	5.4	0.0	768	11.4	77	32	7.1	
APR											
23...	1350	36	109	6.1	21.5	754	7.2	82	23	4.7	
JUN											
13...	1410	12	115	6.7	23.5	757	6.4	76	32	7.3	
AUG											
08...	1350	18	97	6.3	23.5	764	5.2	61	25	5.9	
SEP											
06...	1410	8.1	125	6.7	23.5	759	6.6	78	33	7.6	
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 1995											
08...	6.0	45	15	101	0.53	0.03	0.30	0.83	0.04	<0.01	
FEB 1996											
07...	3.5	22	15	83	1.10	0.06	0.30	1.4	<0.01	<0.01	
APR											
23...	2.8	14	14	88	0.14	0.02	0.50	0.64	0.02	<0.01	
JUN											
13...	3.3	10	15	93	0.09	0.10	0.60	0.69	<0.01	<0.01	
AUG											
08...	2.6	7.0	14	86	<0.05	0.04	0.70	--	0.06	0.02	
SEP											
06...	3.4	10	17	81	0.068	0.02	0.50	0.57	0.04	<0.01	

MULLICA RIVER BASIN

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 of Penn Swamp Brook, and 4.7 mi north of Batsto.

DRAINAGE AREA.--55.7 mi².

PERIOD OF RECORD.--Water years 1976-78, November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995										
08...	1300	59	75	5.0	8.0	754	10.2	87	19	4.4
FEB 1996										
07...	1510	93	71	4.6	1.5	770	11.4	80	14	3.3
APR										
23...	1339	115	62	4.8	19.5	764	7.4	80	8	1.4
JUN										
13...	1430	75	40	5.7	20.5	760	7.6	85	8	1.8
AUG										
08...	1245	81	46	5.6	20.5	767	6.4	71	10	2.2
SEP										
06...	1240	52	41	6.0	18.5	762	7.4	79	8	1.8
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 1995										
08...	2.0	17	6.4	41	0.14	0.03	<0.20	--	0.06	<0.01
FEB 1996										
07...	1.4	9.8	7.0	39	0.41	0.02	<0.20	--	<0.01	0.02
APR										
23...	1.2	9.6	7.4	47	<0.05	<0.015	0.30	--	<0.01	<0.01
JUN										
13...	0.95	4.2	5.6	38	0.10	0.04	0.40	0.50	0.06	<0.01
AUG										
08...	1.1	3.5	6.6	64	0.074	0.04	0.50	0.57	0.02	<0.01
SEP										
06...	0.93	3.7	5.6	32	0.11	<0.015	0.30	0.41	0.04	<0.01

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.

WATER-DISCHARGE RECORDS

REMARKS.--Records fair except for estimated daily discharges, which are poor. 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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	72	109	82	e192	114	190	113	88	96	125	e70
2	41	74	105	88	e166	112	206	114	85	106	146	e65
3	39	77	101	e117	e157	111	239	114	95	112	165	e63
4	40	76	98	e120	e143	109	258	118	123	110	157	e60
5	50	72	93	e130	134	107	236	126	141	113	137	e60
6	57	72	93	e117	125	119	205	132	144	106	118	66
7	58	72	91	e111	122	142	185	130	127	95	107	66
8	54	76	89	e100	122	178	167	142	110	87	98	65
9	53	78	89	111	126	200	172	154	101	89	e96	61
10	53	75	88	e108	132	200	184	164	95	86	e98	61
11	48	76	87	104	143	184	204	171	93	78	e92	60
12	45	101	83	e107	149	175	236	169	91	76	e86	66
13	44	113	78	113	149	168	225	166	95	126	e110	75
14	46	131	78	120	143	158	207	160	95	153	e163	67
15	67	143	78	123	137	156	177	144	90	260	e207	65
16	64	155	86	120	134	152	198	144	87	311	e213	62
17	60	166	98	118	127	154	205	141	86	266	e181	139
18	54	149	105	122	120	148	228	145	90	219	e161	169
19	50	134	105	e153	116	134	220	146	99	195	e145	174
20	52	123	113	e223	122	153	197	138	111	172	e135	159
21	76	113	107	e440	132	156	170	126	152	162	e124	142
22	92	105	106	e432	148	157	153	118	207	152	e117	136
23	92	98	105	e323	166	149	143	110	208	136	e104	126
24	83	98	100	e247	174	139	132	104	165	123	e98	121
25	80	99	96	e216	164	131	124	100	126	111	e98	113
26	77	98	93	e195	153	124	121	94	101	109	e95	102
27	74	93	90	e187	142	116	117	92	88	109	e92	98
28	82	91	87	e202	134	112	113	92	80	106	e83	93
29	80	101	85	e235	122	134	112	93	76	102	e81	102
30	76	105	82	e242	---	153	113	93	78	98	e80	107
31	72	---	81	e219	---	181	---	91	---	107	e74	---
TOTAL	1900	3036	2899	5325	4094	4526	5437	3944	3327	4171	3786	2813
MEAN	61.3	101	93.5	172	141	146	181	127	111	135	122	93.8
MAX	92	166	113	440	192	200	258	171	208	311	213	174
MIN	39	72	78	82	116	107	112	91	76	76	74	60
CFSM	.90	1.49	1.38	2.53	2.08	2.15	2.67	1.88	1.64	1.98	1.80	1.38
IN.	1.04	1.67	1.59	2.92	2.25	2.48	2.98	2.16	1.83	2.29	2.08	1.54

MEAN	87.1	112	124	141	148	170	156	142	103	92.9	103	91.9
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

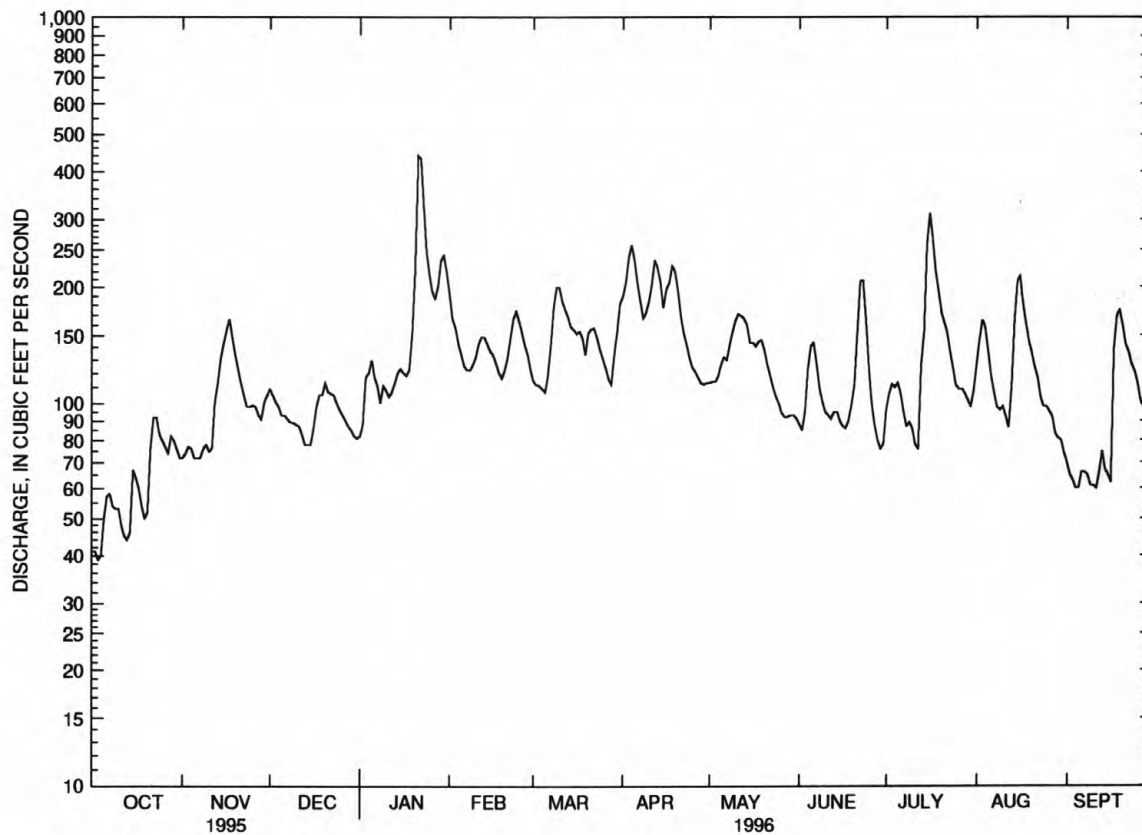
MULLICA RIVER BASIN

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1928 - 1996	
ANNUAL TOTAL	28543		45258			
ANNUAL MEAN	78.2		124		122	
HIGHEST ANNUAL MEAN					193	
LOWEST ANNUAL MEAN					66.2	
HIGHEST DAILY MEAN	168	Jan 23	440	Jan 21	2000	Aug 20 1939
LOWEST DAILY MEAN	34	Sep 5	39	Oct 3	5.7	Oct 4 1959
ANNUAL SEVEN-DAY MINIMUM	35	Sep 5	47	Oct 1	35	Sep 5 1995
INSTANTANEOUS PEAK FLOW			507		---	
INSTANTANEOUS PEAK STAGE			4.10		8.7a	
INSTANTANEOUS LOW FLOW			34		---	
ANNUAL RUNOFF (CFSM)	1.15		1.82		1.80	
ANNUAL RUNOFF (INCHES)	15.66		24.83		24.41	
10 PERCENT EXCEEDS	115		193		205	
50 PERCENT EXCEEDS	76		113		102	
90 PERCENT EXCEEDS	43		72		57	

a From floodmark.

e Estimated.



— 01409500 BATSTO RIVER AT BATSTO, NJ, DAILY MEAN DISCHARGE

MULLICA RIVER BASIN

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01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1925, 1956, 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 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, FECAL, EC BROTH (MPN) (31615)	ENTEROCOCCUS, MPN WATER TOTAL (COL / 100 ML) (31649)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	
OCT 1995													
31...	1045	72	76	4.8	11.5	772	9.5	86	<1.0	<20	<10	17	
JAN 1996													
30...	1030	E242	68	4.3	3.0	766	11.2	83	E1.7	<20	<10	9	
MAR													
20...	1300	146	62	4.6	8.0	744	10.3	89	E1.9	<20	<10	9	
MAY													
23...	1130	111	54	5.0	22.0	760	6.5	75	E1.1	20	<10	8	
JUL													
17...	1200	280	--	4.5	24.5	764	5.9	--	<1.0	20	20	7	
DATE		CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB AS CaCO3 (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT 1995													
31...	3.9	1.8	3.1	1.1	<1.0	17	5.5	<0.1	5.7	36	--	<1	
JAN 1996													
30...	2.1	1.0	3.1	0.70	--	9.4	6.1	<0.1	4.1	24	--	2	
MAR													
20...	2.1	0.98	4.2	0.80	--	9.6	5.7	<0.1	3.7	34	--	2	
MAY													
23...	1.8	0.90	3.1	0.90	1.3	5.5	5.7	<0.1	3.2	42	22	3	
JUL													
17...	1.7	0.79	2.8	0.90	--	5.5	6.4	<0.1	4.7	50	--	3	
DATE		NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, DIS-SOLVED (MG/L AS N) (00602)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
OCT 1995													
31...	0.003	0.082	<0.03	<0.03	0.12	0.12	0.20	0.20	<0.01	<0.01	2.9	0.3	
JAN 1996													
30...	<0.003	0.16	<0.03	<0.03	0.30	0.20	0.46	0.36	<0.01	<0.01	7.5	0.2	
MAR													
20...	<0.003	0.25	<0.03	0.07	0.18	0.15	0.43	0.40	<0.01	<0.01	4.8	0.3	
MAY													
23...	0.003	0.11	<0.03	<0.03	0.50	0.42	0.61	0.53	<0.01	0.03	8.3	2.0	
JUL													
17...	0.004	<0.05	<0.03	<0.03	0.60	0.59	--	--	<0.01	<0.01	--	1.9	

MULLICA RIVER BASIN

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 of highway bridge on State Highway 542 at Batsto.

DRAINAGE AREA.--73.6 mi².

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, Dec. 11-13, 20-23, 29-30, Jan. 7-15, Feb. 1-9, 13-14, 17-19, and Mar. 4, 9-11. 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 recorded, 7.2 ft, Mar. 7, 1962; minimum recorded (1966-95), -0.67 ft, Jan. 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 5.34 ft, Jan. 7; minimum recorded, 0.15 ft, Mar. 5.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	3.72	4.53	4.24	5.34	3.09	4.54	3.92	3.34	3.39	4.06	3.64	3.78
high tide	Date	21	14	20	7	16	20	16	7	4	13	14	13
Minimum	Elevation	.30	.42	e.2	e.2	e.3	.15	.40	.31	.30	.74	.75	.92
low tide	Date	13	11	22	20	29	5	29	31	1	12	27	3
Mean high tide		2.78	2.78	---	---	---	2.60	2.85	2.74	2.85	2.98	3.06	3.25
Mean water level		1.72	1.78	---	---	---	1.76	1.95	1.69	1.80	2.09	2.19	2.38
Mean low tide		.62	.79	---	---	---	.81	1.00	.58	.69	1.17	1.27	1.30

e Estimated.

MULLICA RIVER BASIN

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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 mi².

PERIOD OF RECORD.--November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 (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 1995											
08...	1032	23	41	4.6	9.5	751	8.7	77	5	1.0	
FEB 1996											
07...	1150	63	56	4.4	1.5	769	12.1	85	4	0.80	
APR											
23...	1015	75	52	4.2	18.0	757	7.0	74	--	<0.10	
JUN											
13...	1047	38	39	--	20.0	758	7.2	80	3	0.57	
AUG											
08...	0957	48	41	4.4	21.0	765	7.3	82	3	0.50	
SEP											
06...	1112	20	33	5.0	19.0	762	8.0	86	3	0.66	

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 1995									
08...	0.50	5.6	4.3	14	<0.05	0.02	<0.20	0.05	<0.01
FEB 1996									
07...	0.60	11	5.0	20	<0.05	<0.015	<0.20	<0.01	0.01
APR									
23...	0.40	6.4	4.7	26	<0.05	<0.015	0.30	0.01	<0.01
JUN									
13...	0.37	4.4	4.5	29	<0.05	0.05	0.40	0.07	0.01
AUG									
08...	0.35	3.5	4.7	22	<0.05	0.02	0.40	0.03	<0.01
SEP									
06...	0.37	4.5	3.8	20	<0.05	<0.015	0.30	0.05	<0.01

MULLICA RIVER BASIN

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 mi² (revised).

PERIOD OF RECORD.--Water years 1977-78, November 1995 to September 1996.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 1995										
08...	1200	16	43	4.5	8.5	751	9.5	82	4	0.70
FEB 1996										
07...	1015	55	50	4.1	0.5	769	10.3	71	3	0.60
APR										
23...	1210	29	45	4.2	21.0	757	7.3	82	--	<0.10
JUN										
13...	1225	20	36	4.5	22.5	758	6.2	72	2	0.42
AUG										
08...	1122	22	33	4.6	22.0	765	6.3	72	2	0.37
SEP										
06...	1010	11	25	5.0	20.0	762	6.7	74	2	0.42

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 1995									
08...	0.50	8.0	3.8	20	<0.05	0.03	<0.20	0.05	<0.01
FEB 1996									
07...	0.40	5.3	3.7	24	<0.05	0.02	0.30	<0.01	0.01
APR									
23...	0.30	5.1	2.7	28	<0.05	<0.015	0.50	<0.01	0.02
JUN									
13...	0.27	2.1	3.0	44	<0.05	0.04	0.70	0.01	0.01
AUG									
08...	0.26	1.7	2.9	26	<0.05	0.04	0.60	0.01	<0.01
SEP									
06...	0.27	2.2	2.8	43	<0.05	0.04	0.60	0.05	<0.01

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ

LOCATION.--Lat 39°41'17", long 74°32'54", Burlington County, Hydrologic Unit 02040301, on right bank 900 ft downstream from Godfrey Bridge on Washington-Jenkins Road, 2.2 mi downstream from Hospitality Brook, and 1.2 mi southwest of Jenkins.

DRAINAGE AREA.--84.1 mi².

PERIOD OF RECORD.--October 1974 to September 1996 (discontinued).

REVISED RECORDS.--WDR NJ-77-1: 1976. WDR NJ-81-1: 1975(P), 1976(P), 1977(P), 1978(P), 1979(P), 1980(P). WDR NJ-90-1: 1989 (M, m).

GAGE.--Water-stage recorder. Datum of gage is 10.17 ft above sea level.

REMARKS.--Records good. Some regulation by cranberry bogs and small ponds. Several measurements of water temperature were made during the year.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 3	0530	*516	*13.84	No peak greater than base discharge.			

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	72	82	69	95	243	120	299	113	83	110	202	64
2	58	90	64	105	216	122	391	102	73	98	283	60
3	45	135	56	165	199	130	480	105	108	125	265	58
4	50	87	56	171	188	121	394	132	224	135	225	53
5	92	78	59	149	176	119	337	139	196	106	161	53
6	102	69	66	130	165	147	295	154	153	85	125	53
7	74	63	63	117	151	200	277	154	121	72	110	57
8	59	75	58	135	150	257	308	172	104	69	96	54
9	56	68	65	151	174	244	329	209	92	83	89	54
10	57	63	82	142	187	224	370	231	84	80	97	53
11	62	65	74	129	191	204	420	227	78	62	86	52
12	49	181	69	139	186	195	435	218	76	63	76	62
13	43	158	70	178	168	204	384	194	78	191	199	66
14	44	179	67	167	151	191	319	165	74	353	346	62
15	151	368	77	161	156	175	291	149	75	344	315	58
16	126	331	106	158	142	199	373	148	77	297	275	55
17	83	271	139	162	146	169	384	173	71	262	232	261
18	66	210	131	171	143	152	321	170	102	209	203	370
19	76	172	138	261	135	150	282	145	111	170	155	334
20	72	150	164	399	148	218	238	145	219	189	118	273
21	179	113	149	474	173	190	214	126	260	154	104	198
22	226	103	140	395	176	166	183	128	252	111	87	170
23	134	96	131	335	183	146	148	109	211	108	81	214
24	99	106	125	294	181	130	140	98	170	102	97	165
25	96	90	119	283	172	118	125	90	141	90	92	153
26	73	75	113	254	157	110	117	81	105	123	80	141
27	78	71	108	266	148	103	114	79	72	131	74	115
28	114	64	104	356	138	107	109	80	69	97	71	106
29	115	79	99	354	129	189	105	83	63	85	66	142
30	87	80	96	312	---	250	101	89	74	85	63	128
31	84	---	94	277	---	252	---	95	---	100	66	---
TOTAL	2722	3772	2951	6885	4872	5302	8283	4303	3616	4289	4539	3684
MEAN	87.8	126	95.2	222	168	171	276	139	121	138	146	123
MAX	226	368	164	474	243	257	480	231	260	353	346	370
MIN	43	63	56	95	129	103	101	79	63	62	63	52
CFSM	1.04	1.50	1.13	2.64	2.00	2.03	3.28	1.65	1.43	1.65	1.74	1.46
IN.	1.20	1.67	1.31	3.05	2.16	2.35	3.66	1.90	1.60	1.90	2.01	1.63

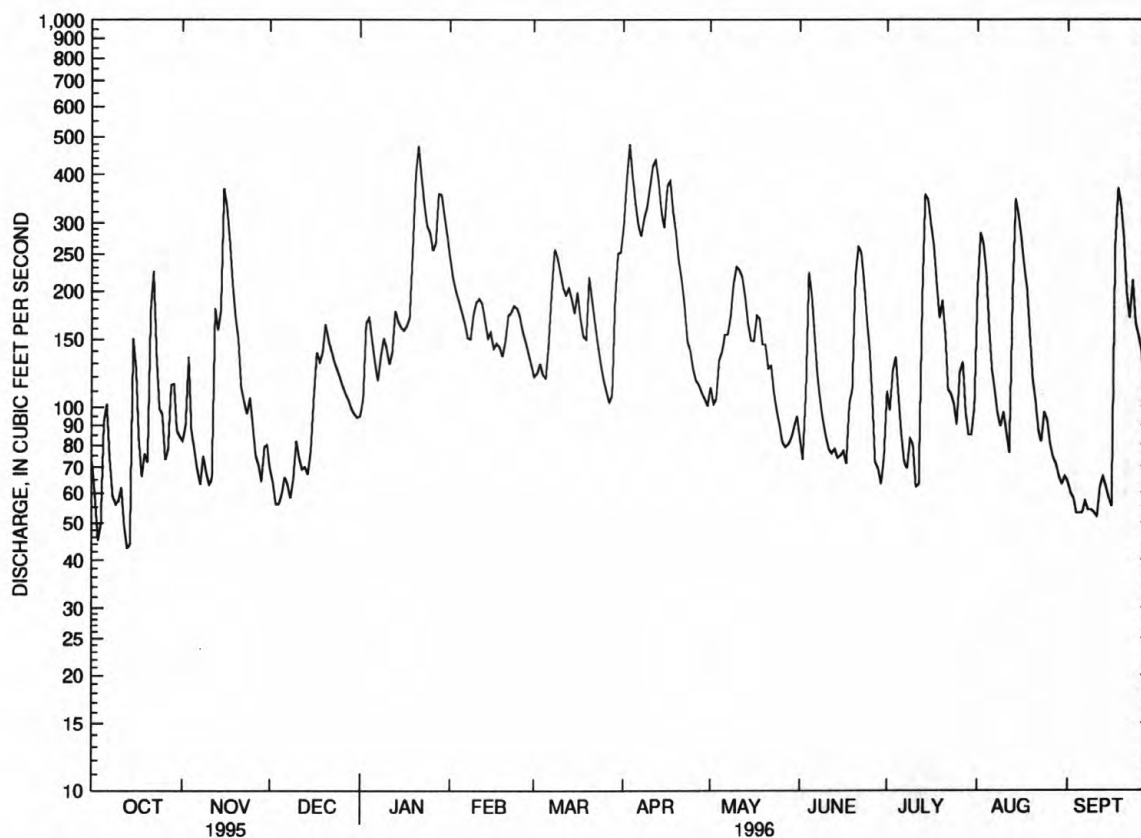
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, BY WATER YEAR (WY)

MEAN	99.5	117	122	186	167	213	209	168	106	103	107	82.3
MAX	237	261	270	379	313	416	418	326	210	250	278	226
(WY)	1976	1978	1978	1979	1979	1994	1983	1979	1984	1989	1978	1989
MIN	50.4	69.3	58.7	54.6	98.7	93.0	98.8	71.5	47.5	29.9	35.6	35.8
(WY)	1983	1979	1981	1981	1992	1985	1985	1992	1986	1977	1977	1995

MULLICA RIVER BASIN

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1975 - 1996	
ANNUAL TOTAL	32341		55218			
ANNUAL MEAN	88.6		151		140	
HIGHEST ANNUAL MEAN					224	
LOWEST ANNUAL MEAN					73.9	
HIGHEST DAILY MEAN	368	Nov 15	480	Apr 3	1260	Feb 27 1979
LOWEST DAILY MEAN	17	Sep 12	43	Oct 13	17	Sep 12 1995
ANNUAL SEVEN-DAY MINIMUM	18	Sep 10	53	Oct 8	18	Sep 10 1995
INSTANTANEOUS PEAK FLOW			516	Apr 3	1320	Feb 26 1979
INSTANTANEOUS PEAK STAGE			13.84	Apr 3	16.14	Feb 26 1979
INSTANTANEOUS LOW FLOW			39	Oct 13	12	Sep 14 1995
ANNUAL RUNOFF (CFSM)	1.05		1.79		1.66	
ANNUAL RUNOFF (INCHES)	14.31		24.42		22.61	
10 PERCENT EXCEEDS	147		282		266	
50 PERCENT EXCEEDS	82		129		105	
90 PERCENT EXCEEDS	38		64		48	



01409810 W B WADING RIVER NEAR JENKINS, NJ, DAILY MEAN DISCHARGE

MULLICA RIVER BASIN

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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.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--72.5 mi².

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 except for estimated daily discharges, which are fair. 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	e46	69	61	124	71	114	89	64	80	90	55
2	33	e49	63	69	112	73	163	87	61	73	105	53
3	34	e59	59	92	109	74	203	92	76	72	97	51
4	33	e49	57	91	104	71	195	97	94	69	86	50
5	45	e46	56	81	98	71	143	100	88	65	76	50
6	52	e42	62	72	92	87	125	107	78	59	69	48
7	48	e41	62	69	87	115	111	107	73	54	65	49
8	43	e47	59	92	87	142	115	120	66	52	61	48
9	42	54	65	87	97	129	146	147	62	54	58	46
10	47	50	75	79	107	118	227	162	61	60	56	45
11	46	52	66	76	110	109	241	163	59	55	53	45
12	39	107	67	82	109	106	246	164	58	54	51	51
13	35	104	60	97	100	118	210	148	57	106	117	53
14	38	118	57	95	93	107	175	127	56	169	171	51
15	96	274	58	92	89	99	143	111	55	170	161	48
16	75	304	73	91	89	96	213	108	52	127	124	48
17	57	224	88	93	87	90	257	113	55	103	109	174
18	48	160	85	101	85	99	227	111	74	88	98	247
19	44	139	83	168	81	108	180	104	88	88	87	182
20	41	120	88	272	86	105	154	97	113	86	77	140
21	61	106	79	273	102	102	138	86	129	78	70	113
22	71	95	71	220	105	94	125	88	128	70	66	107
23	62	86	66	173	103	88	114	81	124	67	63	108
24	55	90	64	178	101	87	107	75	127	64	73	102
25	55	83	63	169	95	84	100	70	113	61	69	93
26	e48	76	61	138	88	78	95	67	95	68	64	86
27	e49	70	60	140	83	74	92	70	82	65	60	81
28	e59	62	60	198	79	75	91	70	73	59	59	78
29	e59	71	60	199	74	110	86	72	67	55	62	86
30	e50	73	60	168	---	125	86	72	72	55	64	85
31	e47	---	59	143	---	117	---	69	---	59	59	---
TOTAL	1545	2897	2055	3959	2776	3022	4622	3174	2400	2385	2520	2473
MEAN	49.8	96.6	66.3	128	95.7	97.5	154	102	80.0	76.9	81.3	82.4
MAX	96	304	88	273	124	142	257	164	129	170	171	247
MIN	33	41	56	61	74	71	86	67	52	52	51	45
CFSM	.69	1.33	.91	1.76	1.32	1.34	2.13	1.41	1.10	1.06	1.12	1.14
IN.	.79	1.49	1.05	2.03	1.42	1.55	2.37	1.63	1.23	1.22	1.29	1.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1996, BY WATER YEAR (WY)

MEAN	63.2	82.0	83.7	101	103	118	113	96.9	70.7	67.6	75.5	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

MULLICA RIVER BASIN

01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

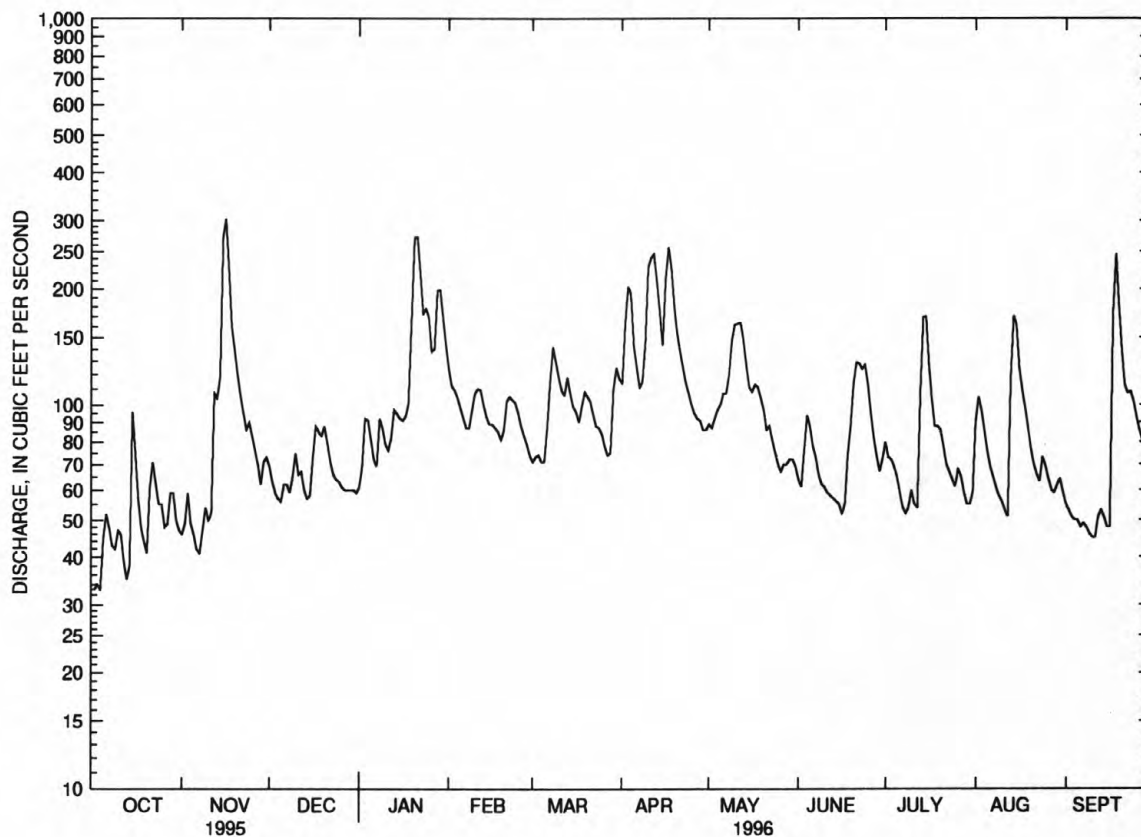
SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1931 - 1996	
ANNUAL TOTAL	21444		33828			
ANNUAL MEAN	58.8		92.4		86.2	
HIGHEST ANNUAL MEAN					138	
LOWEST ANNUAL MEAN					41.4	
HIGHEST DAILY MEAN	304	Nov 16	304	Nov 16	1220	Aug 20 1939
LOWEST DAILY MEAN	14	Sep 11	33	Oct 1	4.0	Jun 23 1967
ANNUAL SEVEN-DAY MINIMUM	15	Sep 10	40	Oct 1	14	Sep 7 1966
INSTANTANEOUS PEAK FLOW			325	Nov 16	1390a	Aug 20 1939
INSTANTANEOUS PEAK STAGE			3.93	Nov 16	9.45b	Aug 20 1939
INSTANTANEOUS LOW FLOW			27	Oct 1	.00c	Oct 26 1932
ANNUAL RUNOFF (CFSM)	.81		1.27		1.19	
ANNUAL RUNOFF (INCHES)	11.00		17.36		16.16	
10 PERCENT EXCEEDS	87		156		149	
50 PERCENT EXCEEDS	56		83		71	
90 PERCENT EXCEEDS	28		50		37	

a From rating curve extended above 640 ft³/s.

b From high-water mark in gage house.

c While pond filling.

e Estimated.



01410000 OSWEGO RIVER AT HARRISVILLE, NJ, DAILY MEAN DISCHARGE

MULLICA RIVER BASIN

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01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-63, 1976-94, alternate years beginning 1996.

REMARKS.--For February 20, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 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 (100 ML) (31615)	ENTERO-COCCI ME, MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1995												
17...	1130	58	63	4.6	13.0	771	9.8	92	<1.0	<20	<10	4
FEB 1996												
20...	1230	86	50	4.2	4.0	768	12.6	95	--	--	--	4
MAR												
21...	1040	104	51	4.1	7.5	745	11.4	97	E1.8	<20	<10	3
MAY												
30...	1115	75	44	4.6	15.0	760	9.4	93	<1.0	<20	<10	3
JUL												
18...	1200	89	57	4.3	25.5	764	7.5	91	<1.0	<20	<10	3

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)	ALKA-LINITY 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1995											
17...	0.64	0.47	2.4	1.1	<1.0	8.5	4.6	<0.1	6.4	24	<1
FEB 1996											
20...	0.62	0.48	2.5	0.60	--	7.1	4.6	<0.1	6.6	26	4
MAR											
21...	0.62	0.43	2.6	0.50	--	7.4	4.2	<0.1	5.7	22	3
MAY											
30...	0.53	0.37	2.4	0.60	--	5.9	4.2	<0.1	6.4	24	7
JUL											
18...	0.46	0.36	2.4	0.50	--	4.4	4.9	<0.1	4.9	22	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-SOLVED (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 1995												
17...	0.003	0.60	<0.03	<0.03	0.11	0.07	0.71	0.67	0.02	<0.01	3.1	0.2
FEB 1996												
20...	--	0.074	--	--	0.18	0.06	0.25	0.13	0.02	<0.01	3.2	0.5
MAR												
21...	<0.003	<0.05	<0.03	--	0.13	0.13	--	--	<0.01	<0.01	3.7	0.6
MAY												
30...	0.003	0.07	0.05	<0.03	0.20	0.20	0.27	0.27	0.01	0.02	3.4	2.6
JUL												
18...	<0.003	0.053	<0.03	<0.03	0.30	0.18	0.35	0.23	<0.01	<0.01	6.9	1.4

MULLICA RIVER BASIN

01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 IN BOT. TERIAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOT. TERIAL (UG/L AS AS) (01003)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)
OCT 1995											
17...	1130	--	11	--	--	--	<1	--	<10	30	<1
17...	1130	6.0	--	1.3	100	<40	--	<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/L AS CO) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (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 1995											
17...		--	<1	--	--	<1	--	330	--	<1	--
17...		<1	--	1	<5	--	2	--	5600	--	<10
DATE		MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (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 RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, IN BOT- TOM MA- TERIAL (UG/G AS SE) (01148)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)
OCT 1995											
17...		<10	--	<0.1	--	1	--	<1	--	<10	--
17...		--	4	--	0.01	--	<10	--	<1	--	6
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 1995											
17...		--	--	--	--	--	--	--	--	--	--
17...		<0.1	<0.1	<1	<1	<0.1	<1	<0.1	<0.2	<0.6	<0.1
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, TOTAL IN BOT- TOM MA- TERIAL (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. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT 1995											
17...		--	--	--	--	--	--	--	--	--	--
17...		<0.1	<0.1	<0.1	<0.1	<0.1	<2.4	<0.1	<1	<20	1

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ

LOCATION.--Lat 39°37'23", long 74°26'30", Burlington County, Hydrologic Unit 02040301, on left bank upstream of 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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 17	2030	*61	*5.05	No peak greater than base discharge.			

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	6.3	8.9	17	14	21	17	24	22	16	19	18	13
2	6.2	9.6	15	15	21	18	38	21	15	18	20	13
3	6.1	9.8	15	23	22	19	33	22	19	18	17	13
4	6.1	9.5	14	21	21	18	26	24	25	19	15	12
5	12	9.0	14	16	20	18	24	25	22	16	14	12
6	16	8.7	15	14	19	21	23	25	18	15	14	13
7	11	9.2	14	18	19	26	23	24	16	14	13	13
8	9.7	11	13	30	19	29	25	24	16	14	13	13
9	8.3	10	16	16	22	25	27	26	15	14	13	12
10	7.7	9.3	20	15	23	21	37	25	15	14	15	12
11	7.4	9.8	16	14	23	20	38	23	15	14	14	12
12	7.2	21	14	17	22	21	33	24	15	13	13	14
13	7.0	19	13	21	20	21	29	22	14	25	30	16
14	7.1	24	13	19	19	21	26	20	14	30	34	16
15	16	52	14	17	19	21	25	19	13	24	25	14
16	14	39	18	16	19	22	41	22	13	19	19	13
17	10	26	21	17	19	20	44	25	16	16	17	48
18	8.8	21	17	19	18	19	33	23	29	15	16	49
19	8.2	21	19	34	18	20	29	21	29	17	15	29
20	8.1	19	25	44	20	22	27	20	26	19	15	19
21	12	18	20	32	23	21	25	19	22	16	14	16
22	14	17	17	25	22	19	25	22	19	14	14	17
23	11	17	16	23	21	18	24	20	17	15	14	22
24	9.6	20	15	23	20	17	23	18	16	15	14	19
25	9.0	19	15	24	19	17	23	17	15	14	16	16
26	8.7	17	15	21	18	16	22	16	15	15	14	14
27	8.6	16	14	26	18	16	22	17	14	16	14	14
28	9.9	16	14	37	17	17	21	19	14	14	14	14
29	11	19	14	32	17	28	21	19	14	14	14	17
30	9.5	19	13	25	--	31	22	18	16	14	13	17
31	9.0	--	13	23	--	25	--	17	--	15	13	--
TOTAL	295.5	524.8	489	691	579	644	833	659	523	515	504	522
MEAN	9.53	17.5	15.8	22.3	20.0	20.8	27.8	21.3	17.4	16.6	16.3	17.4
MAX	16	52	25	44	23	31	44	26	29	30	34	49
MIN	6.1	8.7	13	14	17	16	21	16	13	13	13	12
CFSM	1.18	2.16	1.95	2.75	2.46	2.56	3.42	2.62	2.15	2.05	2.00	2.15
IN.	1.36	2.41	2.24	3.17	2.66	2.95	3.82	3.02	2.40	2.36	2.31	2.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

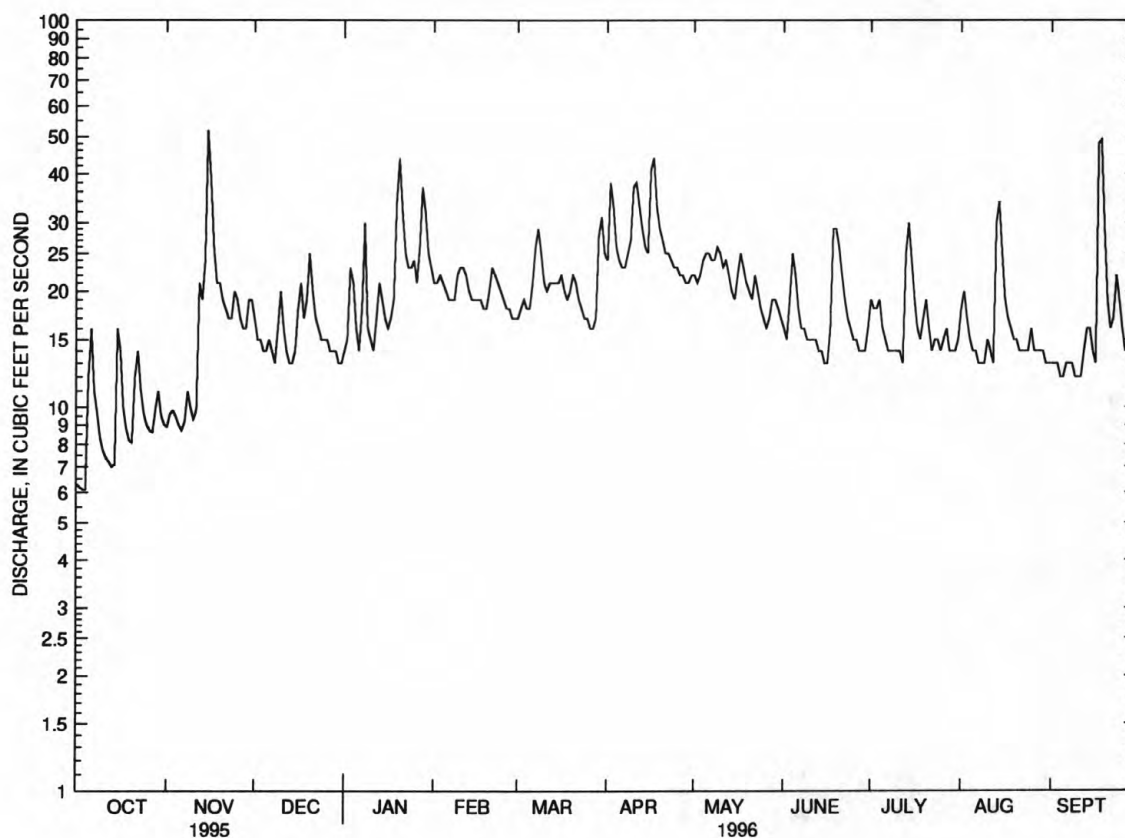
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	11.5	13.5	14.8	18.1	17.3	20.2	21.6	19.0	14.8	13.5	13.3	11.8							
MAX	24.2	23.1	23.4	35.0	29.8	36.8	38.6	30.3	27.2	25.8	24.6	21.0							
(WY)	1990	1990	1984	1978	1979	1979	1984	1984	1978	1978	1978	1989							
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							

MULLICA RIVER BASIN

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1978 - 1996	
ANNUAL TOTAL	4311.7		6779.3			
ANNUAL MEAN	11.8		18.5		15.4	
HIGHEST ANNUAL MEAN					21.8	
LOWEST ANNUAL MEAN					9.60	
HIGHEST DAILY MEAN	52	Nov 15	52	Nov 15	131	Jul 4 1978
LOWEST DAILY MEAN	4.8	Sep 15	6.1	Oct 3	4.8	Sep 15 1995
ANNUAL SEVEN-DAY MINIMUM	5.0	Sep 10	7.8	Oct 8	5.0	Sep 10 1995
INSTANTANEOUS PEAK FLOW			61	Sep 17	198	Jul 14 1991
INSTANTANEOUS PEAK STAGE			5.05	Sep 17	6.36a	Dec 11 1992
INSTANTANEOUS LOW FLOW			6.0	Oct 4	4.7	Sep 15 1995
ANNUAL RUNOFF (CFSM)	1.46		2.28		1.90	
ANNUAL RUNOFF (INCHES)	19.78		31.10		25.86	
10 PERCENT EXCEEDS	17		26		26	
50 PERCENT EXCEEDS	11		17		13	
90 PERCENT EXCEEDS	6.1		12		8.4	

a Stage affected by high tide.



01410150 E B BASS RIVER NEAR NEW GRETN, NJ, DAILY MEAN DISCHARGE

MULLICA RIVER BASIN

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01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ--Continued

WATER-QUALITY RECORDS

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

REMARKS.--For February 22, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301).
Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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,MP WATER TOTAL (COL / 100 ML) (31649)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1995												
31...	1300	9.1	51	4.5	10.5	771	7.8	69	<1.0	<20	<10	3
FEB 1996												
22...	1200	22	50	4.2	7.5	760	9.4	79	--	--	--	4
MAR												
21...	1230	21	48	4.3	7.0	745	9.3	78	E1.6	<20	10	3
JUN												
11...	1145	15	41	4.5	19.5	760	5.9	64	<1.0	<20	<10	3
AUG												
01...	1200	17	64	4.4	18.5	760	6.6	71	<1.0	350	70	2

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)	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- PENDE (MG/L) (00530)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT 1995											
31...	0.48	0.55	2.8	0.50	3.6	5.2	<0.1	8.3	22	1	<0.003
FEB 1996											
22...	0.55	0.59	3.3	0.50	4.6	6.0	<0.1	6.1	46	4	--
MAR											
21...	0.51	0.54	3.3	0.50	5.6	5.9	<0.1	5.4	20	2	<0.003
JUN											
11...	0.38	0.42	3.2	0.50	3.1	6.1	<0.1	5.7	14	4	0.003
AUG											
01...	0.34	0.38	2.8	0.60	2.9	5.4	<0.1	7.5	26	<1	<0.003

DATE	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- PENDE TOTAL (MG/L AS C) (00689)
OCT 1995											
31...	0.074	<0.03	<0.03	0.12	0.11	0.19	0.18	<0.01	<0.01	3.6	0.3
FEB 1996											
22...	<0.05	--	--	0.11	0.13	--	--	<0.01	<0.01	3.8	0.2
MAR											
21...	<0.05	0.06	0.05	0.11	0.10	--	--	<0.01	<0.01	3.9	0.3
JUN											
11...	0.058	<0.03	<0.03	0.15	0.15	0.21	0.21	<0.01	<0.01	4.6	--
AUG											
01...	0.07	0.09	<0.03	0.13	0.08	0.20	0.15	0.02	<0.01	3.2	<0.1

GREAT EGG HARBOR RIVER BASIN

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 of New Brooklyn Lake dam.

DRAINAGE AREA.--15.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 27 to September 30, 1996.

GAGE.--Water-stage recorder installed Mar. 27, 1996.

REMARKS.--Records good.

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	---	---	---	---	---	---	27	24	8.6	60	38	6.0
2	---	---	---	---	---	---	54	20	7.7	65	31	5.8
3	---	---	---	---	---	---	49	20	8.6	51	21	5.5
4	---	---	---	---	---	---	34	23	12	37	16	5.5
5	---	---	---	---	---	---	25	21	12	28	13	5.6
6	---	---	---	---	---	---	20	25	9.7	18	11	5.7
7	---	---	---	---	---	---	20	23	8.0	13	10	6.2
8	---	---	---	---	---	---	26	29	7.0	14	9.1	5.9
9	---	---	---	---	---	---	27	35	6.2	25	8.2	5.9
10	---	---	---	---	---	---	42	34	6.0	22	8.2	5.6
11	---	---	---	---	---	---	44	27	6.1	15	7.3	5.6
12	---	---	---	---	---	---	33	36	6.2	11	7.1	6.1
13	---	---	---	---	---	---	26	30	18	52	40	6.7
14	---	---	---	---	---	---	21	22	21	97	66	6.9
15	---	---	---	---	---	---	19	18	13	78	50	6.2
16	---	---	---	---	---	---	37	20	8.8	80	28	5.9
17	---	---	---	---	---	---	51	25	9.0	66	42	27
18	---	---	---	---	---	---	38	21	39	40	38	48
19	---	---	---	---	---	---	28	18	53	35	24	39
20	---	---	---	---	---	---	23	15	55	42	16	22
21	---	---	---	---	---	---	20	13	59	31	13	14
22	---	---	---	---	---	---	18	13	40	22	12	15
23	---	---	---	---	---	---	17	12	26	20	10	18
24	---	---	---	---	---	---	17	10	16	17	9.4	15
25	---	---	---	---	---	---	15	9.4	13	14	8.8	12
26	---	---	---	---	---	---	14	8.8	10	15	8.4	10
27	---	---	---	---	---	---	14	8.9	8.5	15	7.7	9.3
28	---	---	---	---	---	13	13	9.5	7.4	12	7.5	8.6
29	---	---	---	---	---	32	12	11	6.5	10	7.2	16
30	---	---	---	---	---	44	14	11	17	13	6.8	18
31	---	---	---	---	---	32	---	10	---	24	6.4	---
TOTAL	---	---	---	---	---	---	798	602.6	518.3	1042	581.1	367.0
MEAN	---	---	---	---	---	---	26.6	19.4	17.3	33.6	18.7	12.2
MAX	---	---	---	---	---	---	54	36	59	97	66	48
MIN	---	---	---	---	---	---	12	8.8	6.0	10	6.4	5.5
CFSM	---	---	---	---	---	---	1.76	1.29	1.14	2.23	1.24	.81
IN.	---	---	---	---	---	---	1.97	1.48	1.28	2.57	1.43	.90

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

MEAN	---	---	---	---	---	---	26.6	19.4	17.3	33.6	18.7	12.2
MAX	---	---	---	---	---	---	26.6	19.4	17.3	33.6	18.7	12.2
(WY)	---	---	---	---	---	---	1996	1996	1996	1996	1996	1996
MIN	---	---	---	---	---	---	26.6	19.4	17.3	33.6	18.7	12.2
(WY)	---	---	---	---	---	---	1996	1996	1996	1996	1996	1996

GREAT EGG HARBOR RIVER BASIN

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 September 1996.

WATER TEMPERATURES: April 1996 to September 1996.

INSTRUMENTATION.--Water-quality monitor since April 1996. Data recorded at hourly intervals.

REMARKS.--Discrete water-quality samples were collected downstream of the bridge. Water-quality monitor is on upstream left side of bridge.

Interruptions in the daily record were due to malfunction of instrument July 13-24 and loss of power Sept. 15-16. For February 21, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 Long Island-New Jersey Coastal Plain NAWQA study.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	ENTERO- COCCI ME,MP WATER TOTAL (COL / 100 ML) (31649)
NOV 1995												
21...	1300	15	74	5.6	--	8.0	750	9.3	80	E1.0	23	20
FEB 1996												
21...	1300	24	131	5.2	--	4.5	758	10.9	85	--	--	--
APR												
01...	1015	24	89	5.2	--	8.5	754	9.4	81	E1.6	2	10
22...	1140	18	79	6.1	31.0	19.0	758	10.0	108	--	--	--
29...	1055	12	77	6.1	--	14.0	759	8.0	78	--	--	--
MAY												
06...	1040	25	71	5.5	13.5	13.5	758	7.0	68	--	--	--
15...	1050	18	68	5.8	18.0	11.5	768	8.2	75	--	--	--
21...	0940	14	76	6.2	28.0	18.0	750	6.2	66	--	--	--
28...	1030	9.7	77	6.3	14.0	13.0	758	7.4	70	--	--	--
JUN												
03...	1010	7.3	77	6.4	17.5	13.5	760	7.5	72	--	--	--
12...	0930	6.0	76	6.4	--	17.5	758	6.5	68	<1.0	140	100
12...	1030	6.0	72	6.7	22.0	17.5	756	5.9	62	--	--	--
17...	1000	7.2	68	6.1	24.0	19.0	759	5.4	58	--	--	--
24...	1020	17	70	5.7	26.0	18.5	757	5.6	60	--	--	--
JUL												
08...	1040	13	67	6.2	24.0	19.0	750	5.6	61	--	--	--
13...	1930	82	52	4.9	24.0	22.0	751	3.4	39	--	--	--
18...	1130	39	56	5.0	27.0	22.0	760	3.9	45	--	--	--
25...	1010	15	72	5.8	--	18.5	759	6.2	66	<1.0	11	50
31...	1030	20	71	5.4	24.0	18.0	758	5.7	61	--	--	--
AUG												
21...	1100	14	62	6.0	23.0	18.5	763	5.9	63	--	--	--
SEP												
04...	1010	5.5	75	6.7	25.0	18.0	760	6.0	63	--	--	--
16...	1020	5.7	78	6.5	21.0	14.5	758	6.9	68	--	--	--

GREAT EGG HARBOR RIVER BASIN

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 WAT.DIS FET FIELD (MG/L HCO3 (MG/L) (29804)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	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 1995											
21...	16	3.8	1.6	5.2	1.3	--	2.5	--	11	7.7	<0.1
FEB 1996											
21...	17	4.0	1.7	15	1.4	--	2.1	--	10	25	<0.1
APR											
01...	13	3.2	1.3	9.8	1.4	--	2.5	--	9.3	14	<0.1
22...	15	3.6	1.4	8.2	1.5	4.8	4.7	3.9	7.8	13	<0.1
29...	15	3.6	1.4	8.1	1.6	9.2	6.0	7.5	7.1	12	<0.1
MAY											
06...	13	3.1	1.2	7.5	1.4	4.9	3.5	4.0	5.9	11	<0.1
15...	13	3.2	1.2	7.2	1.1	5.6	4.2	4.6	6.3	11	<0.1
21...	15	3.6	1.4	8.0	1.3	9.8	7.5	8.0	5.3	12	<0.1
28...	15	3.8	1.4	7.6	1.8	9.5	7.2	7.8	4.7	12	<0.1
JUN											
03...	16	3.8	1.5	8.5	1.3	11	8.1	9.1	5.1	12	<0.1
12...	15	3.7	1.5	6.5	1.4	--	9.3	--	4.3	11	<0.1
12...	16	4.0	1.4	6.7	1.4	12	9.4	9.9	4.9	11	<0.1
17...	15	3.7	1.4	6.5	1.4	12	9.0	9.8	3.9	10	<0.1
24...	15	3.6	1.4	6.8	1.6	7.8	5.8	6.4	3.9	11	0.2
JUL											
08...	16	3.8	1.5	6.2	1.5	11	6.8	9.0	5.1	10	<0.1
13...	8	2.1	0.75	3.8	0.90	1.1	--	0.9	3.3	5.6	<0.1
18...	12	3.0	1.1	5.1	1.6	3.7	2.8	3.0	2.7	7.6	0.1
25...	16	3.9	1.4	6.3	1.6	--	5.7	--	4.4	10	<0.1
31...	15	3.6	1.4	6.7	1.5	5.5	5.4	4.5	5.5	10	<0.1
AUG											
21...	15	3.5	1.4	5.7	1.1	8.2	6.2	6.7	4.2	8.9	<0.1
SEP											
04...	17	4.2	1.6	6.0	1.7	12	9.8	10	6.9	10	<0.1
16...	18	4.4	1.7	6.8	1.7	13	10	11	6.8	10	<0.1
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTIT- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	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)
NOV 1995											
21...	6.5	62	40	3	--	--	--	9.3	0.2	--	--
FEB 1996											
21...	4.3	96	65	13	--	--	--	10	0.7	--	--
APR											
01...	3.0	56	45	4	--	--	--	11	0.5	--	--
22...	2.3	68	42	--	--	380	17	12	0.5	4	0.18
29...	3.1	59	43	--	--	510	17	11	0.6	3	0.11
MAY											
06...	2.9	77	37	--	30	660	24	17	0.6	3	0.21
15...	3.3	66	38	--	30	530	21	14	0.2	3	0.14
21...	4.0	77	42	--	30	610	17	13	0.4	4	0.14
28...	5.4	73	44	--	30	710	12	11	0.3	3	0.06
JUN											
03...	5.5	66	45	--	30	460	11	8.3	0.3	3	0.05
12...	6.1	78	42	7	--	--	--	9.6	--	--	--
12...	5.9	64	44	--	30	590	10	11	0.9	3	0.04
17...	6.0	68	41	--	30	870	12	15	0.4	19	0.37
24...	6.3	104	42	--	30	1500	39	28	0.5	4	0.18
JUL											
08...	6.4	86	43	--	30	1100	19	17	0.7	4	0.14
13...	4.1	82	23	--	30	1000	24	29	0.6	6	1.3
18...	5.1	<1	31	--	30	1900	40	38	0.4	5	0.57
25...	6.7	88	39	<1	--	--	--	22	0.2	--	--
31...	6.6	94	41	--	30	1200	17	18	0.3	6	0.32
AUG											
21...	6.1	81	37	--	30	1100	14	18	0.4	6	0.22
SEP											
04...	4.3	52	43	--	30	340	5	6.0	0.2	4	0.06
16...	6.1	54	47	--	30	280	4	5.5	0.3	<1	--

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

The following analyses are quality assurance samples processed during the 1996 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	PH						
			SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	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)	
JUL 1996 18... AUG 21...	1010 1101	FIELD BLANK REPLICATE	-- 62	-- 5.9	-- 15	-- 3.6	-- 1.4	-- 5.6	
DATE		POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	BICAR-BONATE WAT.DIS FET FIELD HCO3 (MG/L) (29804)	ALKA-LINITY LAB (MG/L) AS CACO3 (90410)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	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)
JUL 1996 18... AUG 21...	-- 1.2	-- 8.4	-- 6.0	-- 6.9	-- 4.2	-- 8.9	-- <0.10	-- 6.0	
DATE		SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	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, SUS-PENDED TOTAL (MG/L) AS C (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
JUL 1996 18... AUG 21...	-- 77	-- 38	-- 30	-- 1100	-- 14	-- 18	0.30 0.30	--	-- 2

WATER COLUMN NUTRIENT ANALYSES PERFORMED BY THE U.S. GEOLOGICAL SURVEY
NATIONAL WATER QUALITY LABORATORY

DATE	TIME	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, AMMONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (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)
NOV 1995 21...	1300	--	0.36	--	0.30	0.28	0.66	0.64	<0.01	<0.01	--
FEB 1996 21...	1300	--	0.47	--	0.40	0.27	0.87	0.74	0.03	0.02	--
APR 01...	1015	--	0.29	--	0.40	0.32	0.69	0.61	0.04	0.03	--
22...	1140	0.02	0.28	0.03	0.50	0.40	0.78	0.68	0.02	0.03	0.02
29...	1055	<0.01	0.20	0.03	0.50	0.40	0.70	0.60	0.03	0.03	0.03
MAY 06...	1040	<0.01	0.17	0.03	0.60	0.50	0.77	0.67	0.04	0.03	0.03
15...	1050	<0.01	0.19	0.03	0.50	0.40	0.69	0.59	0.04	0.03	0.02
21...	0940	0.02	0.08	0.04	0.60	0.60	0.68	0.68	0.04	0.04	0.02
28...	1030	<0.01	0.34	0.05	0.50	0.40	0.84	0.74	0.09	0.06	0.04
JUN 03...	1010	<0.01	0.33	0.03	0.40	0.40	0.73	0.73	0.05	0.04	0.03
12...	0930	--	0.36	--	0.60	0.38	0.96	0.74	0.06	0.02	--
12...	1030	<0.01	0.37	0.03	0.50	0.40	0.87	0.77	0.08	0.05	0.04
17...	1000	0.02	0.26	0.07	0.60	0.50	0.86	0.76	0.06	0.06	0.06
24...	1020	<0.01	0.22	0.07	0.90	0.90	1.1	1.1	0.13	0.09	0.08
JUL 08...	1040	0.01	0.35	0.08	0.80	0.60	1.2	0.95	0.08	0.07	0.08
13...	1930	0.01	0.07	0.04	0.90	0.70	0.97	0.77	0.07	0.04	0.04
18...	1130	0.02	0.10	0.07	1.0	1.2	1.1	1.3	0.09	0.10	0.10
25...	1010	--	0.33	--	0.80	0.54	1.1	0.87	0.07	0.06	--
31...	1030	0.01	0.26	<0.015	0.70	0.70	0.96	0.96	0.05	0.06	0.07
AUG 21...	1100	<0.01	0.25	0.02	0.70	0.50	0.95	0.75	0.05	0.05	0.06
SEP 04...	1010	<0.01	0.39	<0.015	0.30	0.20	0.69	0.59	0.05	0.03	0.03
16...	1020	<0.01	0.58	0.05	0.30	0.20	0.88	0.78	0.02	0.02	0.03

GREAT EGG HARBOR RIVER BASIN

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

The following analysis is a quality assurance sample processed during the 1996 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	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)	
AUG 21...	1101	REPLICATE	<0.01	0.28	0.02	0.5	
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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
AUG 21...		0.6	0.78	0.88	0.03	0.06	0.06

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 1995 21...	1300	0.005	<0.03	<0.03
FEB 1996 21...	1300	--	--	--
APR 01...	1015	0.005	<0.03	<0.03
JUN 12...	0930	0.010	<0.03	0.09
JUL 25...	1010	0.015	<0.03	<0.03

ANALYSES PERFORMED BY THE U.S. GEOLOGICAL SURVEY NATIONAL WATER QUALITY LABORATORY--Continued

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 TOTAL RECOV- ERABLE (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 1996 12...	0930	37	<1	<10	30	<1	<1	1
DATE	TIME	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 12...	900	2	10	<0.1	2	<1	<10	

GREAT EGG HARBOR RIVER BASIN

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01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN PESTICIDE ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for pesticides on schedule 2001 (listed with minimum reporting levels on p. 18). Selected samples were analyzed for additional pesticides on schedule 2050 (listed with minimum reporting levels on p. 18). 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 GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD GF, REC (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
APR 1996												
22...	1140	<0.002	0.006	0.033	E0.006	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
29...	1055	<0.002	0.005	0.026	E0.007	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
MAY												
06...	1040	<0.002	0.008	0.025	E0.005	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
15...	1050	<0.002	0.004	0.033	E0.004	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
21...	0940	<0.002	<0.002	0.028	E0.007	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
28...	1030	<0.002	<0.002	0.027	E0.007	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
JUN												
03...	1010	<0.002	0.006	0.028	E0.006	<0.002	E0.009	E0.004	<0.004	<0.004	<0.002	<0.002
12...	1030	<0.002	0.005	0.022	E0.005	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
17...	1000	<0.002	0.006	0.025	E0.005	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	E0.002
24...	1020	<0.002	E0.003	0.036	E0.002	<0.002	<0.003	<0.003	0.013	<0.004	<0.002	E0.003
JUL												
08...	1040	<0.002	0.013	0.027	E0.006	<0.002	<0.003	<0.003	<0.004	<0.004	E0.003	<0.002
13...	1930	<0.002	<0.002	0.013	E0.004	<0.002	E0.014	E0.016	<0.004	<0.004	<0.002	<0.002
18...	1130	<0.002	0.007	0.027	E0.004	<0.002	E0.030	<0.003	<0.004	<0.004	<0.002	<0.002
31...	1030	<0.002	<0.002	0.013	E0.003	<0.002	E0.037	<0.003	<0.004	<0.004	<0.002	<0.002
AUG												
21...	1100	<0.002	0.005	0.014	E0.006	<0.002	E0.012	<0.003	<0.004	<0.004	<0.002	0.005
SEP												
04...	1010	<0.002	0.006	0.024	E0.007	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
16...	1020	<0.002	0.005	0.023	E0.006	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	<0.002
DATE		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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
APR 1996												
22...		<0.001	<0.003	<0.002	<0.005	0.020	<0.004	<0.004	<0.003	<0.004	<0.004	E0.012
29...		<0.001	<0.003	<0.002	<0.005	0.012	<0.004	<0.004	<0.003	<0.004	<0.004	E0.008
MAY												
06...		<0.001	<0.003	<0.002	<0.005	0.016	<0.004	<0.004	<0.003	<0.004	<0.004	E0.008
15...		<0.001	<0.003	<0.002	<0.005	0.024	<0.004	<0.004	<0.003	<0.004	<0.004	E0.006
21...		<0.001	<0.003	<0.002	<0.005	0.018	<0.004	<0.004	<0.003	<0.004	<0.004	E0.011
28...		<0.001	<0.003	<0.002	<0.005	0.014	<0.004	<0.004	<0.003	<0.004	<0.004	E0.016
JUN												
03...		<0.001	<0.003	<0.002	<0.005	0.014	<0.004	<0.004	<0.003	<0.004	<0.004	E0.013
12...		<0.001	<0.003	<0.002	<0.005	0.010	<0.004	<0.004	<0.003	<0.004	<0.004	E0.016
17...		<0.001	<0.003	<0.002	<0.005	0.023	<0.004	<0.004	<0.003	<0.004	<0.004	E0.016
24...		<0.001	<0.003	<0.002	<0.005	0.082	0.006	<0.004	<0.003	<0.004	<0.004	E0.013
JUL												
08...		<0.001	<0.003	<0.002	<0.005	0.089	<0.004	<0.004	<0.003	<0.004	<0.004	0.020
13...		<0.001	<0.003	<0.002	<0.005	0.025	<0.004	<0.004	<0.003	<0.004	<0.004	E0.008
18...		<0.001	<0.003	<0.002	<0.005	0.120	0.009	<0.004	<0.003	<0.004	<0.004	E0.017
31...		<0.001	<0.003	<0.002	<0.005	0.033	<0.004	<0.004	<0.003	<0.004	<0.004	0.020
AUG												
21...		<0.001	<0.003	<0.002	<0.005	0.043	0.005	<0.004	<0.003	<0.004	<0.004	E0.016
SEP												
04...		<0.001	<0.003	<0.002	<0.005	0.013	<0.004	<0.004	<0.003	<0.004	<0.004	0.021
16...		<0.001	<0.003	<0.002	<0.005	0.010	<0.004	<0.004	<0.003	<0.004	<0.004	0.018

GREAT EGG HARBOR RIVER BASIN

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, WAT,FLT GF 0.7U REC (UG/L) (49310)	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)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
APR 1996											
22...	0.009	<0.010	<0.013	<0.001	<0.002	--	--	--	--	--	--
29...	0.008	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
MAY											
06...	0.023	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
15...	0.100	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
21...	0.023	E0.003	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
28...	0.011	E0.004	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
JUN											
03...	0.010	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
12...	0.011	<0.010	<0.013	<0.001	<0.002	<0.008	E0.030	<0.035	<0.020	<0.035	<0.018
17...	0.042	<0.010	<0.013	<0.001	<0.002	<0.008	E0.020	<0.035	<0.020	<0.035	<0.018
24...	0.018	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
JUL											
08...	0.015	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
13...	0.009	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
18...	0.012	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018
31...	0.006	<0.010	<0.013	<0.001	<0.002	E0.001	E0.020	<0.035	<0.020	<0.035	<0.018
AUG											
21...	0.007	<0.010	<0.013	<0.001	<0.002	<0.008	E0.007	<0.035	<0.020	<0.035	<0.018
SEP											
04...	0.009	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	E0.004	<0.035	<0.018
16...	0.012	E0.006	<0.013	<0.001	<0.002	<0.008	E0.030	<0.035	<0.020	<0.035	<0.018

The following analyses are quality assurance samples processed during the 1996 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	QUALITY ASSURANCE 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 FLT GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DISS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)					
JUL 1996																
18...	1020	FIELD BLANK	<0.002	<0.002	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004					
AUG																
21...	1101	REPLICATE	<0.002	0.005	0.015	E0.005	<0.002	E0.013	<0.003	<0.004	<0.004					
DATE			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)	FONOFOFOS 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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683)			
JUL 1996																
18...	<0.002	<0.002	<0.001	<0.003	<0.002	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004			
AUG																
21...	<0.002	0.005	<0.001	<0.003	<0.002	<0.005	0.050	0.005	<0.004	<0.003	<0.004	<0.004	<0.004			
DATE			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- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CAR- BARYL, WATER, FLTRD, WAT,FLT GF 0.7U REC (UG/L) (49310)	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)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)		
JUL 1996																
18...	<0.018	<0.005	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018	<0.018	<0.018		
AUG																
21...	E0.016	0.009	<0.010	<0.013	<0.001	<0.002	<0.008	<0.035	<0.035	<0.020	<0.035	<0.018	<0.018	<0.018		

GREAT EGG HARBOR RIVER BASIN

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01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER COLUMN VOLATILE ORGANIC COMPOUND ANALYSES. The following analyses are samples collected as part of the Long Island - New Jersey Coastal Plain NAWQA Program. Selected samples were analyzed for volatile organic compounds (VOCs) on custom method schedule 9090 (listed with minimum reporting levels on p. 19). Only VOCs measured at or above the reporting level in one or more samples are listed in the water quality tables.

DATE	TIME	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)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)
APR 1996							
22...	1139	E0.010	<0.100	<0.100	<0.100	<0.200	<0.200
MAY							
06...	1039	<0.050	<0.050	<0.050	<0.050	<0.100	<0.100
15...	1049	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
21...	0939	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
28...	1029	<0.200	<0.200	<0.200	<0.200	<0.400	<0.400
JUN							
03...	1009	E0.010	<0.050	<0.050	<0.050	<0.100	<0.100
12...	1029	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
17...	0959	<0.250	<0.250	<0.250	<0.250	<0.500	<0.500
24...	1020	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
JUL							
08...	1039	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
13...	1929	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
18...	1129	<0.200	<0.200	<0.200	<0.200	<0.400	<0.400
31...	1029	<0.200	<0.200	<0.200	<0.200	<0.400	<0.400
AUG							
21...	1059	<0.100	<0.100	<0.100	<0.100	<0.200	<0.200
SEP							
04...	1009	E0.020	<0.100	<0.100	<0.100	<0.200	<0.200
16...	1019	E0.020	<0.050	E0.010	<0.050	<0.100	<0.100

DATE	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- FORM TOTAL (UG/L) (32106)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)
APR 1996										
22...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	E0.020	<0.200	<0.200	<0.100
MAY										
06...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	<0.050	<0.100	<0.100	<0.050
15...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
21...	<0.200	<0.200	<0.400	<0.200	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
28...	<0.400	<0.400	<0.800	<0.400	<0.20	<0.800	<0.200	<0.400	<0.400	<0.200
JUN										
03...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.010	<0.100	<0.100	<0.050
12...	<0.200	<0.200	<0.400	0.440	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
17...	<0.500	<0.500	<1.00	0.320	<0.25	<1.00	<0.250	<0.500	<0.500	<0.250
24...	<0.200	<0.200	<0.400	E0.110	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
JUL										
08...	<0.200	<0.200	<0.400	E0.120	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
13...	<0.200	<0.200	E0.020	E0.100	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
18...	<0.400	<0.400	<1.00	<0.400	<0.20	<0.800	<0.200	<0.400	<0.400	<0.200
31...	<0.400	<0.400	<0.800	E0.400	<0.20	<0.800	<0.200	<0.400	<0.400	<0.200
AUG										
21...	<0.200	<0.200	E0.050	0.480	<0.10	<0.400	<0.100	<0.200	<0.200	<0.100
SEP										
04...	<0.200	<0.200	E0.030	<0.200	<0.10	<0.400	E0.010	<0.200	<0.200	E0.004
16...	<0.100	<0.100	<0.200	<0.100	<0.05	<0.200	E0.030	<0.100	<0.100	<0.050

GREAT EGG HARBOR RIVER BASIN

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BENZENE TOTAL (UG/L) (34030)	STYRENE TOTAL (UG/L) (77128)	BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	ETHYL- BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)
APR 1996										
22...	E0.010	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
MAY										
06...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
15...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
21...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
28...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
JUN										
03...	E0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.150	<0.050
12...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
17...	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	0.150	<0.250
24...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
JUL										
08...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
13...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
18...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
31...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
AUG										
21...	E0.030	<0.100	<0.100	E0.005	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
SEP										
04...	E0.030	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
16...	E0.040	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
DATE	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- BENZENE TOTAL (UG/L) (34301)	METHYL- ETHYL- KETONE WATER TOTAL (UG/L) (81595)	ACETONE WATER TOTAL (UG/L) (81552)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT- PENTYL METHYL- UNFLTRD RECOVER (UG/L) (50005)	CARBON DI. SULFIDE WATER TOTAL (UG/L) (77041)
APR 1996										
22...	<0.100	<0.100	<0.100	<10	<10	<0.20	E0.150	<10.0	<0.200	<0
MAY										
06...	<0.050	<0.050	<0.050	<5	<5	<0.10	<0.100	<5.00	<0.100	<0
15...	<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
21...	<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
28...	<0.200	<0.200	<0.200	<20	<20	<0.40	<0.400	<20.0	<0.400	<0
JUN										
03...	<0.050	<0.050	<0.050	<5	1	<0.10	E0.070	<5.00	<0.100	<0
12...	<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
17...	<0.250	<0.250	<0.250	<30	<30	<0.50	<0.500	<25.0	<0.500	<0
24...	<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
JUL										
08...	<0.100	<0.100	<0.100	<10	E2	<0.20	<0.200	<10.0	<0.200	E0
13...	<0.100	<0.100	<0.100	<10	<10	<0.20	<0.200	<10.0	<0.200	<0
18...	<0.200	<0.200	<0.200	<20	<20	<0.40	<0.400	<20.0	<0.400	<0
31...	<0.200	<0.200	<0.200	<20	<20	<0.40	<0.400	<20.0	<0.400	<0
AUG										
21...	<0.100	<0.100	<0.100	<10	2	<0.20	<0.200	<10.0	<0.200	E0
SEP										
04...	<0.100	<0.100	<0.100	<10	<10	<0.20	E0.050	<10.0	<0.200	E0
16...	<0.050	<0.050	<0.050	<5	<5	<0.10	0.150	<5.00	<0.100	<0

The following analyses are quality assurance samples processed during the 1996 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data."

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	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)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)
JUL 1996							
17...	1550	CANNISTER BLANK	<0.050	<0.050	<0.050	<0.050	<0.100
17...	1600	FIELD BLANK	<0.050	<0.050	<0.050	<0.050	<0.100

GREAT EGG HARBOR RIVER BASIN

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01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	DI - CHLORO- BROMO- METHANE (UG/L) (32101)	CHLORO- DI- BROMO- METHANE (UG/L) (32105)	CHLORO- ETHANE (UG/L) (34311)	METHYL- CHLO- RIDE (UG/L) (34418)	METHYL- ENE CHLO- RIDE (UG/L) (34423)	METHYL IODIDE WATER UNFLTRD (UG/L) (77424)	BROMO- FORM (UG/L) (32104)	CHLORO- FORM (UG/L) (32106)	1,1-DI- CHLORO- ETHYL- ENE (UG/L) (34501)	VINYL CHLO- RIDE (UG/L) (39175)	TETRA- CHLORO- ETHYL- ENE (UG/L) (34475)
JUL 1996											
17...	E0.010	E0.010	<0.100	<0.270	<0.100	<0.05	<0.200	E0.050	<0.100	<0.100	<0.050
17...	E0.010	<0.100	<0.100	<0.260	<0.100	<0.05	<0.200	E0.050	<0.100	<0.100	<0.050

DATE	TRI- CHLORO- ETHYL- ENE (UG/L) (39180)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BENZENE TOTAL (UG/L) (34030)	STYRENE TOTAL (UG/L) (77128)	BENZENE 124-TRI METHYL UNFILTR RECOVER (UG/L) (77222)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	ETHYL- BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)
JUL 1996										
17...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
17...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

DATE	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- BENZENE TOTAL (UG/L) (34301)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ETHER ETHYL- WATER UNFLTRD RECOVER (UG/L) (81576)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	FURAN TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ETHER TERT- PENTYL METHYL- UNFLTRD RECOVER (UG/L) (50005)	CARBON DI. SULFIDE WATER WHOLE TOTAL (UG/L) (77041)
JUL 1996										
17...	<0.050	<0.050	<0.050	<5	2	<0.10	<0.100	<5.00	<0.100	<0
17...	<0.050	<0.050	<0.050	<5	2	<0.10	<0.100	<5.00	<0.100	<0

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	92	71	83
2	---	---	---	---	---	---	---	---	---	86	73	78
3	---	---	---	---	---	---	---	---	---	73	68	70
4	---	---	---	---	---	---	---	---	---	81	71	79
5	---	---	---	---	---	---	---	---	---	78	72	74
6	---	---	---	---	---	---	---	---	---	80	69	72
7	---	---	---	---	---	---	---	---	---	80	72	76
8	---	---	---	---	---	---	---	---	---	81	66	70
9	---	---	---	---	---	---	---	---	---	81	66	72
10	---	---	---	---	---	---	---	---	---	74	69	72
11	---	---	---	---	---	---	---	---	---	69	65	68
12	---	---	---	---	---	---	96	85	89	79	63	71
13	---	---	---	---	---	---	85	82	83	75	65	69
14	---	---	---	---	---	---	82	80	81	66	64	65
15	---	---	---	---	---	---	81	79	80	68	66	67
16	---	---	---	---	---	---	90	71	78	67	64	66
17	---	---	---	---	---	---	90	78	83	73	65	71
18	---	---	---	---	---	---	78	76	77	72	70	70
19	---	---	---	---	---	---	76	75	76	71	70	70
20	---	---	---	---	---	---	77	75	76	73	71	72
21	---	---	---	---	---	---	78	76	77	76	73	75
22	---	---	---	---	---	---	79	77	78	79	75	77
23	---	---	---	---	---	---	80	78	78	81	78	80
24	---	---	---	---	---	---	87	77	80	81	80	80
25	---	---	---	---	---	---	86	80	81	80	79	80
26	---	---	---	---	---	---	80	78	79	80	78	79
27	---	---	---	---	---	---	79	79	79	78	75	76
28	---	---	---	---	---	---	79	76	77	75	73	74
29	---	---	---	---	---	---	77	75	77	74	72	73
30	---	---	---	---	---	---	78	72	76	78	72	74
31	---	---	---	---	---	---	---	---	---	79	78	78
MONTH	---	---	---	---	---	---	---	---	---	92	63	74
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	78	77	78	60	53	57	64	60	62	74	73	73
2	78	76	77	61	60	60	63	59	61	75	73	74
3	77	70	74	62	59	60	62	61	61	75	73	74
4	83	70	73	69	60	63	65	60	62	76	74	75
5	83	78	81	69	66	67	68	62	65	77	75	76
6	78	73	75	69	62	65	71	66	68	78	76	77
7	73	72	72	74	66	69	72	67	69	78	77	78
8	72	71	71	73	68	70	74	67	71	80	78	78
9	72	71	71	82	68	76	73	69	71	80	78	79
10	72	71	71	73	66	69	76	70	73	79	77	78
11	72	71	72	75	67	71	76	71	73	79	77	78
12	73	69	72	74	69	71	75	71	72	77	76	76
13	77	62	66	---	---	---	71	50	57	101	77	87
14	81	72	77	---	---	---	56	52	54	98	83	87
15	72	67	68	---	---	---	56	54	55	---	---	---
16	67	66	66	---	---	---	59	54	56	---	---	---
17	70	58	67	---	---	---	62	49	54	78	62	69
18	67	53	59	---	---	---	63	56	59	69	63	65
19	66	63	65	---	---	---	59	54	56	65	65	65
20	68	61	65	---	---	---	62	57	59	65	64	64
21	69	67	68	---	---	---	64	60	62	67	64	65
22	69	65	67	---	---	---	68	63	65	68	64	66
23	73	67	70	---	---	---	73	67	69	72	64	69
24	74	68	71	---	---	---	73	70	72	72	66	69
25	77	71	74	77	71	74	75	69	72	66	64	65
26	77	70	74	76	72	74	74	70	72	67	64	66
27	77	69	73	84	73	79	73	69	72	69	67	68
28	77	71	74	83	76	79	73	72	73	71	69	70
29	76	70	73	79	74	75	74	73	74	72	64	66
30	74	54	65	75	67	71	75	74	74	75	61	69
31	---	---	---	72	64	68	74	73	74	---	---	---
MONTH	83	53	71	---	---	---	76	49	66	101	61	72

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	17.0	12.0	14.0
2	---	---	---	---	---	---	---	---	---	16.5	12.5	14.5
3	---	---	---	---	---	---	---	---	---	15.0	12.5	13.5
4	---	---	---	---	---	---	---	---	---	15.0	13.0	13.5
5	---	---	---	---	---	---	---	---	---	18.0	13.5	15.0
6	---	---	---	---	---	---	---	---	---	15.5	12.5	14.0
7	---	---	---	---	---	---	---	---	---	14.5	10.5	12.5
8	---	---	---	---	---	---	---	---	---	13.0	11.5	12.5
9	---	---	---	---	---	---	---	---	---	12.5	12.0	12.0
10	---	---	---	---	---	---	---	---	---	16.0	12.0	13.5
11	---	---	---	---	---	---	---	---	---	18.5	13.5	15.5
12	---	---	---	---	---	---	12.0	8.5	10.0	16.5	13.5	15.0
13	---	---	---	---	---	---	14.0	9.5	11.5	14.0	11.5	13.0
14	---	---	---	---	---	---	12.0	10.0	11.0	14.5	10.0	12.0
15	---	---	---	---	---	---	12.0	8.0	10.0	14.5	10.5	12.5
16	---	---	---	---	---	---	12.0	10.0	11.0	13.0	11.5	12.0
17	---	---	---	---	---	---	10.5	9.0	10.0	14.5	12.0	13.0
18	---	---	---	---	---	---	13.0	7.5	10.0	15.5	13.0	14.0
19	---	---	---	---	---	---	13.5	9.5	11.5	19.5	14.0	16.5
20	---	---	---	---	---	---	16.0	11.5	13.5	21.5	16.0	18.5
21	---	---	---	---	---	---	17.0	13.0	15.0	22.0	17.5	19.5
22	---	---	---	---	---	---	19.5	13.0	16.0	20.5	17.0	19.0
23	---	---	---	---	---	---	20.5	15.0	17.5	20.0	15.5	17.5
24	---	---	---	---	---	---	18.0	13.0	15.5	20.0	16.5	18.5
25	---	---	---	---	---	---	15.5	11.5	13.5	18.5	14.5	16.5
26	---	---	---	---	---	---	16.5	13.0	14.5	17.0	13.0	14.5
27	---	---	---	---	---	---	16.5	12.5	14.5	14.5	13.5	14.0
28	---	---	---	---	---	---	16.5	10.0	13.0	13.5	12.5	13.0
29	---	---	---	---	---	---	17.0	12.5	14.5	13.5	12.5	13.0
30	---	---	---	---	---	---	16.5	14.5	15.5	15.5	11.0	13.0
31	---	---	---	---	---	---	---	---	---	16.5	11.5	14.0
MONTH	---	---	---	---	---	---	---	---	---	22.0	10.0	14.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	17.5	12.5	15.0	19.0	16.5	17.5	20.5	19.0	19.5	18.5	16.0	17.5
2	17.5	12.5	15.5	19.5	18.5	19.0	21.0	19.0	20.0	19.0	16.0	17.5
3	16.5	13.5	14.0	20.0	19.0	19.5	20.5	19.0	19.5	19.5	16.5	18.0
4	17.5	13.5	15.5	19.5	18.5	19.0	21.0	18.0	19.5	19.5	17.5	18.5
5	19.5	15.5	17.5	20.5	17.5	19.0	21.0	18.0	19.5	20.0	17.5	19.0
6	19.0	15.0	17.0	21.0	17.0	19.0	21.5	18.5	20.0	19.5	18.0	18.5
7	20.0	15.5	18.0	22.0	18.0	19.5	21.0	18.5	20.0	21.0	19.0	20.0
8	21.0	17.0	19.0	21.0	19.0	20.0	21.0	18.0	19.5	21.0	18.5	20.0
9	21.0	18.0	19.5	23.0	20.0	21.0	20.0	17.5	18.5	21.0	18.5	20.0
10	20.5	18.5	19.0	22.0	20.0	21.0	21.0	18.0	19.0	21.0	18.5	20.0
11	19.5	17.5	18.5	20.5	17.5	19.0	20.0	17.0	18.5	20.5	18.0	18.5
12	20.0	17.5	18.5	19.5	17.5	18.0	19.0	17.0	17.5	18.0	17.0	17.5
13	20.5	17.5	19.0	---	---	---	18.0	16.5	17.5	18.0	17.0	17.5
14	22.0	18.5	20.0	---	---	---	19.0	17.5	18.0	17.5	15.0	16.5
15	22.0	19.0	20.5	---	---	---	20.0	18.0	19.0	---	---	---
16	22.0	18.0	20.0	---	---	---	20.0	18.0	19.0	---	---	---
17	21.5	18.5	20.0	---	---	---	20.5	18.5	19.5	17.0	15.5	16.5
18	20.5	19.0	19.5	---	---	---	21.0	19.0	20.0	17.0	16.5	16.5
19	20.0	19.5	19.5	---	---	---	21.0	18.5	19.5	17.5	15.5	16.5
20	20.5	19.5	20.0	---	---	---	20.5	18.0	19.5	17.0	14.5	16.0
21	22.0	20.0	21.0	---	---	---	19.5	18.0	19.0	16.5	14.0	15.5
22	22.0	19.5	20.5	---	---	---	20.5	17.5	19.0	16.5	15.0	15.5
23	22.5	19.5	21.0	---	---	---	21.5	18.5	20.0	16.0	15.0	15.5
24	21.5	18.0	20.0	---	---	---	21.0	19.5	20.0	15.0	13.0	14.5
25	22.0	19.0	20.0	21.5	18.5	19.5	20.5	18.0	19.0	16.0	14.0	15.0
26	20.5	17.5	19.0	21.0	19.0	20.0	20.0	17.0	18.5	15.0	12.5	14.0
27	20.0	16.0	18.0	21.0	18.5	20.0	19.5	17.5	18.5	15.5	14.0	15.0
28	20.0	17.0	18.5	21.0	17.5	19.5	20.0	18.0	18.5	17.5	14.5	16.0
29	19.0	16.0	17.5	19.5	17.5	18.5	20.0	17.5	18.5	17.5	15.5	16.0
30	18.0	16.0	16.5	18.5	17.0	17.5	19.5	16.5	18.0	16.0	13.5	15.0
31	---	---	---	19.5	18.0	18.5	19.0	16.0	18.0	---	---	---
MONTH	22.5	12.5	18.6	---	---	---	21.5	16.0	19.0	21.0	12.5	17.0

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 mi².

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 except for estimated daily discharges, which are fair. 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	55	96	56	158	86	174	91	66	103	100	50
2	29	56	100	61	135	83	182	100	63	134	127	50
3	28	57	90	80	116	85	200	104	65	168	135	48
4	27	55	78	98	106	84	212	103	76	203	121	47
5	40	52	70	116	e84	83	193	108	75	187	99	47
6	65	50	68	e120	e81	91	161	114	69	141	81	46
7	74	50	66	e79	e89	110	137	120	64	105	75	47
8	69	57	63	65	89	148	123	126	60	80	80	47
9	56	58	64	75	95	192	125	130	56	72	70	46
10	46	56	73	79	106	190	143	139	54	70	66	46
11	41	55	73	72	119	170	169	147	54	68	61	48
12	38	79	67	71	132	143	188	149	52	69	58	52
13	36	97	62	84	130	125	180	145	57	115	88	52
14	35	120	60	100	118	116	157	142	65	188	127	52
15	59	145	60	108	105	112	135	131	64	267	186	51
16	71	150	67	107	98	113	129	115	59	299	196	49
17	73	147	83	103	94	117	140	109	55	254	167	87
18	61	133	94	99	90	113	172	110	71	206	137	111
19	51	113	100	125	88	106	183	108	91	182	135	125
20	47	92	94	231	89	106	164	102	116	174	126	131
21	84	78	92	397	103	117	141	93	127	172	102	120
22	106	72	85	395	126	131	123	89	143	154	81	99
23	110	67	76	296	154	125	110	84	154	128	71	88
24	118	69	70	228	161	110	103	77	127	110	71	86
25	110	71	67	198	145	100	99	72	92	99	67	79
26	80	69	64	180	126	93	96	68	70	89	62	71
27	62	66	61	172	109	88	92	67	61	84	59	65
28	60	63	60	183	98	84	88	68	55	79	57	62
29	66	71	58	199	92	96	85	70	52	72	55	76
30	64	85	57	203	---	126	84	71	64	69	54	85
31	59	---	56	184	---	162	---	68	---	81	52	---
TOTAL	1895	2388	2274	4564	3236	3605	4288	3220	2277	4222	2966	2063
MEAN	61.1	79.6	73.4	147	112	116	143	104	75.9	136	95.7	68.8
MAX	118	150	100	397	161	192	212	149	154	299	196	131
MIN	27	50	56	56	81	83	84	67	52	68	52	46
CFSM	1.07	1.39	1.28	2.58	1.95	2.04	2.50	1.82	1.33	2.39	1.68	1.20
IN.	1.23	1.56	1.48	2.97	2.11	2.35	2.79	2.10	1.48	2.75	1.93	1.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1996, BY WATER YEAR (WY)

	MEAN	60.2	78.5	92.0	103	106	121	114	95.3	71.7	63.5	64.6	60.7
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	

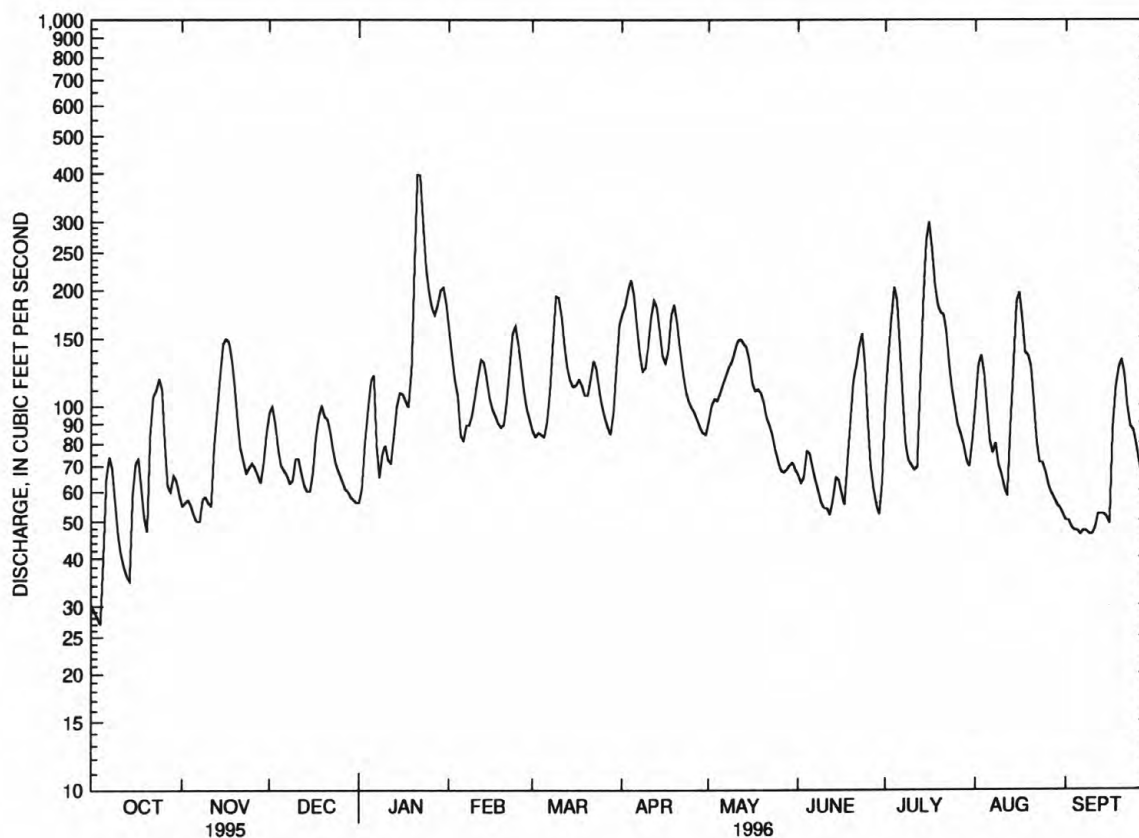
GREAT EGG HARBOR RIVER BASIN

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01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1925 - 1996	
ANNUAL TOTAL	21744		36998			
ANNUAL MEAN	59.6		101		85.7	
HIGHEST ANNUAL MEAN					133	
LOWEST ANNUAL MEAN					44.4	
HIGHEST DAILY MEAN	150	Nov 16	397	Jan 21	1300	Sep 3 1940
LOWEST DAILY MEAN	17	Sep 6	27	Oct 4	15	Aug 29 1966
ANNUAL SEVEN-DAY MINIMUM	18	Sep 2	42	Oct 1	16	Aug 26 1966
INSTANTANEOUS PEAK FLOW			429	Jan 21	1440	Sep 3 1940
INSTANTANEOUS PEAK STAGE			5.90	Jan 21	9.09	Sep 3 1940
INSTANTANEOUS LOW FLOW			27	Oct 4	15	Sep 6 1957
ANNUAL RUNOFF (CFSM)	1.04		1.77		1.50	
ANNUAL RUNOFF (INCHES)	14.17		24.10		20.40	
10 PERCENT EXCEEDS	93		169		148	
50 PERCENT EXCEEDS	58		89		73	
90 PERCENT EXCEEDS	27		54		36	

e Estimated.



01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ, DAILY MEAN DISCHARGE

GREAT EGG HARBOR RIVER BASIN

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961-80, 1991 to current year.

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.

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 1995 TO SEPTEMBER 1996

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 (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 TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1995 21...	1035	77	72	5.0	7.0	752	9.7	81	<1.0	8	<10	14
FEB 1996 01...	1021	160	95	4.4	1.0	765	11.2	78	E1.1	<2	<10	13
APR 02...	1146	181	74	4.7	9.0	760	9.5	82	2.8	4	30	10
JUN 12...	1220	53	59	6.2	18.5	757	8.1	87	E1.0	140	60	11
JUL 29...	1058	72	54	6.0	18.5	766	7.6	81	E1.0	110	40	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)	ALKA-LINITY 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 1995 21...	3.0	1.5	5.6	1.0	1.5	10	8.4	<0.1	6.7	58	39	<1
FEB 1996 01...	2.7	1.5	8.4	1.0	<1.0	7.7	13	<0.1	4.5	50	--	2
APR 02...	2.2	1.1	7.6	0.90	<1.0	7.2	11	<0.1	2.4	58	--	5
JUN 12...	2.2	1.3	5.7	1.1	5.2	4.0	8.2	<0.1	6.2	48	35	6
JUL 29...	2.8	1.3	6.0	1.3	4.2	3.9	9.6	<0.1	7.1	--	36	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-SOLVED (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 1995 21...	0.006	0.36	0.10	0.10	0.40	0.38	0.76	0.74	<0.01	<0.01	13	0.2
FEB 1996 01...	0.003	0.38	<0.03	<0.03	0.40	0.37	0.78	0.75	<0.01	<0.01	14	0.2
APR 02...	0.007	0.18	<0.03	<0.03	0.40	0.36	0.58	0.54	<0.01	0.01	14	0.4
JUN 12...	0.008	0.60	0.16	0.14	0.50	0.37	1.1	0.97	0.01	<0.01	6.8	0.2
JUL 29...	0.007	0.39	0.15	0.14	0.70	0.69	1.1	1.1	0.07	<0.01	16	0.9

GREAT EGG HARBOR RIVER BASIN

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01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 12...	1220	27	<1	<10	80	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 12...	950	1	10	<0.1	4	<1	<10

GREAT EGG HARBOR RIVER BASIN

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 mi².

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

REMARKS.--For February 21, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 1995													
13...	1112	270	77	4.7	7.5	765	9.6	80	E1.8	220	120	13	
FEB 1996													
21...	1104	290	92	4.7	6.0	761	11.2	90	--	--	--	12	
APR 02...	0950	450	74	4.5	8.5	760	9.3	80	2.2	2	40	10	
JUN 06...	1020	220	56	5.6	18.0	767	8.3	87	<1.0	<20	50	10	
JUL 29...	0917	203	54	5.5	20.5	766	7.0	77	E1.7	80	90	10	
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)	ALKA-LINITY LAB 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 1995													
13...	2.8	1.5	5.4	1.4	<1.0	9.9	9.1	<0.1	6.9	60	--	--	<1
FEB 1996													
21...	2.4	1.4	8.6	1.1	<1.0	8.7	16	<0.1	5.9	74	--	--	6
APR 02...	2.1	1.1	6.7	1.1	<1.0	7.5	11	<0.1	3.3	46	--	--	1
JUN 06...	2.0	1.1	5.2	1.1	2.6	4.7	9.0	<0.1	5.2	34	31	31	7
JUL 29...	2.0	1.1	4.8	1.2	2.9	3.6	8.3	<0.1	7.3	66	31	31	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-SOLVED (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 1995													
13...	0.005	0.21	0.04	0.04	0.30	0.31	0.51	0.52	<0.01	<0.01	13	13	0.7
FEB 1996													
21...	--	0.54	--	--	0.30	0.23	0.84	0.77	0.02	0.02	6.8	6.8	0.4
APR 02...	0.007	0.20	<0.03	<0.03	0.30	0.29	0.50	0.49	<0.01	<0.01	11	11	0.5
JUN 06...	0.005	0.28	0.09	0.07	0.50	0.39	0.78	0.67	0.03	<0.01	9.3	9.3	0.8
JUL 29...	0.005	0.27	0.07	0.09	0.70	0.47	0.97	0.74	<0.01	<0.01	17	17	0.6

GREAT EGG HARBOR RIVER BASIN

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01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 06...	1020	31	<1	<10	30	<1	1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 06...	1300	1	60	<0.1	2	<1	<10

TUCKAHOE RIVER BASIN

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 mi².

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 fair. Occasional regulation by ponds above station. There is a fish gate in the left control which was open this year. Planks were placed on top of the center and right weirs from Apr. 1 to May 10 to raise water level for fish migration. Several measurements of water temperature were made during the year.

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	13	24	34	29	52	39	82	49	42	45	36	20
2	12	26	31	32	49	39	167	48	38	48	39	20
3	12	26	29	46	47	41	164	46	41	44	32	21
4	11	25	28	49	45	40	130	48	56	39	29	20
5	21	24	27	40	42	39	103	62	56	39	27	18
6	31	22	29	34	42	47	82	82	51	31	28	18
7	25	25	30	32	42	75	75	84	43	25	25	19
8	18	39	28	175	42	102	77	92	37	22	24	18
9	15	39	30	36	54	91	82	107	34	25	24	18
10	14	30	38	34	71	73	127	96	32	25	31	18
11	14	28	34	32	73	61	146	79	31	23	26	18
12	14	48	30	35	74	56	129	81	30	28	24	40
13	13	57	28	44	66	53	108	75	31	134	104	46
14	12	67	28	42	56	52	87	61	30	236	187	34
15	24	81	29	40	51	50	74	53	28	173	124	26
16	28	74	35	39	48	50	104	53	26	138	81	24
17	21	53	47	41	47	48	144	62	25	100	68	83
18	18	43	42	48	45	46	126	60	25	68	63	171
19	16	39	44	98	43	47	106	55	38	56	53	113
20	16	36	68	177	47	64	87	49	65	56	42	66
21	43	34	59	137	59	63	75	44	65	49	34	44
22	66	31	47	102	61	55	66	73	56	42	30	40
23	55	30	40	75	60	50	60	78	43	39	27	63
24	35	34	37	61	58	46	58	58	36	36	26	56
25	28	35	35	61	52	43	54	47	31	33	25	43
26	24	32	33	57	47	41	52	42	26	32	23	35
27	21	31	31	56	44	39	52	41	23	32	25	30
28	31	29	30	86	42	39	49	45	22	30	23	27
29	41	34	29	85	41	68	47	49	21	27	21	35
30	33	37	29	69	---	105	46	52	26	27	21	40
31	27	---	28	59	---	93	---	48	---	28	21	---
TOTAL	752	1133	1087	1951	1500	1755	2759	1919	1108	1730	1343	1224
MEAN	24.3	37.8	35.1	62.9	51.7	56.6	92.0	61.9	36.9	55.8	43.3	40.8
MAX	66	81	68	177	74	105	167	107	65	236	187	171
MIN	11	22	27	29	41	39	46	41	21	22	21	18
CFSM	.79	1.23	1.14	2.04	1.68	1.84	2.99	2.01	1.20	1.81	1.41	1.32
IN.	.91	1.37	1.31	2.36	1.81	2.12	3.33	2.32	1.34	2.09	1.62	1.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1996, BY WATER YEAR (WY)

MEAN	26.0	34.0	41.2	51.8	53.3	66.9	68.4	54.2	38.6	28.4	25.7	22.9
MAX	58.1	81.4	94.3	101	101	150	174	111	83.7	55.8	55.6	64.7
(WY)	1990	1973	1973	1978	1973	1994	1983	1983	1984	1996	1971	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

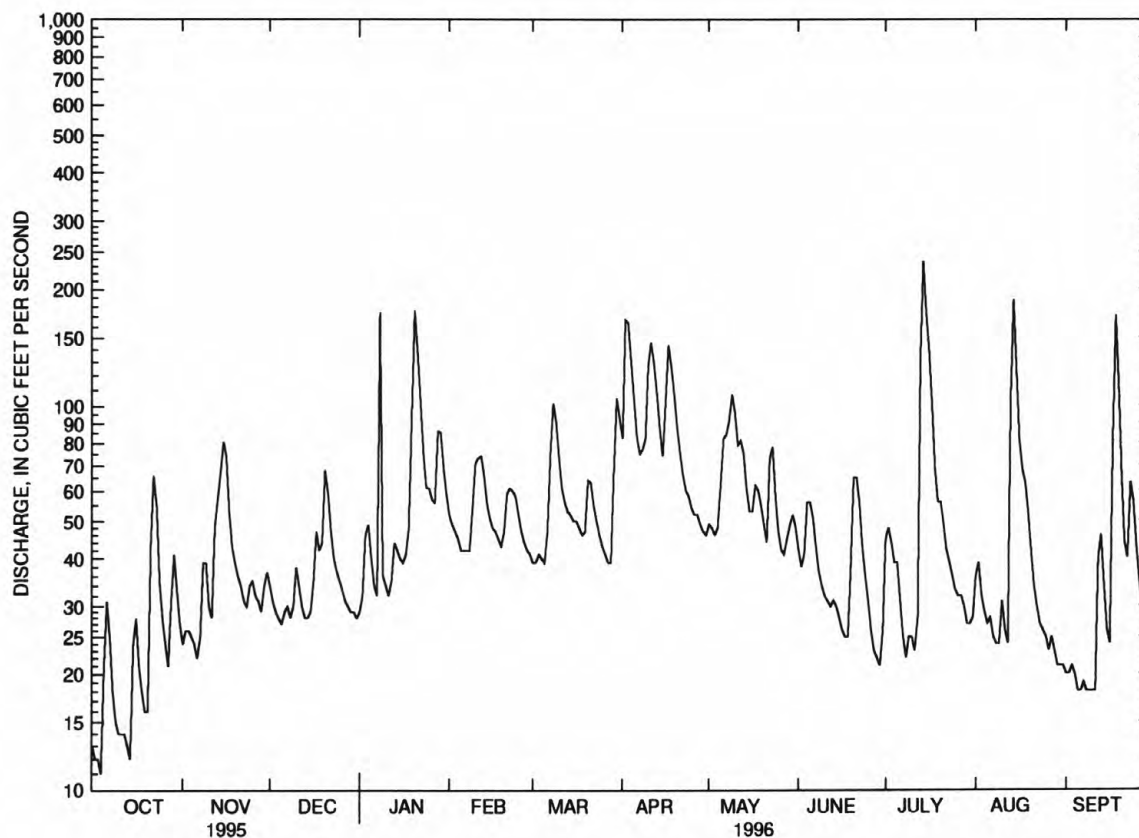
TUCKAHOE RIVER BASIN

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01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1970 - 1996	
ANNUAL TOTAL	9051.7		18261			
ANNUAL MEAN	24.8		49.9		42.5	
HIGHEST ANNUAL MEAN					64.3	1984
LOWEST ANNUAL MEAN					21.7	1995
HIGHEST DAILY MEAN	81	Nov 15	236	Jul 14	464	May 31 1984
LOWEST DAILY MEAN	7.2	Sep 14	11	Oct 4	1.3	Sep 3 1980
ANNUAL SEVEN-DAY MINIMUM	7.5	Sep 10	14	Oct 8	1.9	Sep 9 1980
INSTANTANEOUS PEAK FLOW			331	Jan 8	510	May 31 1984
INSTANTANEOUS PEAK STAGE			5.61	Jan 8	7.01a	Mar 29 1984
INSTANTANEOUS LOW FLOW			10	Oct 4	---	
ANNUAL RUNOFF (CFSM)	.81		1.62		1.38	
ANNUAL RUNOFF (INCHES)	10.93		22.06		18.73	
10 PERCENT EXCEEDS	39		86		82	
50 PERCENT EXCEEDS	24		42		32	
90 PERCENT EXCEEDS	11		23		15	

a Tide affected.



— 01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ, DAILY MEAN DISCHARGE

01411352 LUDLAM THOROFARE NEAR SEA ISLE CITY, NJ

LOCATION.--Lat 39°08'40", long 74°42'20", Cape May County, Hydrologic Unit 02040302, on the bulkhead at 5918 Sound Avenue on the east side of Ludlam Thorofare, 1.1 mi southwest of Sea Isle City, and 2.0 mi north of Townsends Inlet.

PERIOD OF RECORD.--October 1993 to May 1996.

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, Feb. 5-15 and Apr. 2-5. 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 recorded, 7.28 ft, Mar. 3, 1994; minimum recorded, e-2.60 ft, Dec. 22, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 6.67 ft, Jan. 7; minimum recorded, e-2.60 ft, Dec. 22.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	4.47	5.58	5.69	6.67	4.59	5.95	4.59					
high tide	Date	7	14	20	7	17	19	7					
Minimum	Elevation	e-2.3	-2.02	e-2.6	-2.20	e-2.5	-2.30	-2.23					
low tide	Date	29	24	22	20	19	4	11					
Mean high tide		3.13	3.13	2.89	3.21	2.85	2.85	3.13					
Mean water level		1.17	1.14	.96	1.34	---	.95	1.15					
Mean low tide		-.96	-1.01	-1.09	-.73	---	-1.03	-.96					

e Estimated.

ATLANTIC OCEAN

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01411370 GRASSY SOUND CHANNEL AT NUMMY ISLAND, NEAR NORTH WILDWOOD, NJ

LOCATION.--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 of North Wildwood, and 1.0 mi west of Hereford Inlet.

PERIOD OF RECORD.--October 1993 to May 1996.

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.

COOPERATION.--Record of stage collected in cooperation with the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 7.64 ft, Mar. 3, 1994; minimum recorded, -3.27 ft, Jan. 10, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 5.78 ft, Nov. 14 and Mar. 19; minimum recorded, -2.88 ft, Jan. 20.

Summaries of tide elevations during the year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	4.51	5.78	5.66	6.85	4.58	5.78	4.55					
high tide	Date	7	14	20	7	17	19	7					
Minimum	Elevation	-2.43	-2.18	-2.87	-2.88	-2.83	-2.95	-2.79					
low tide	Date	29	24	22	20	19	4	11					
Mean high tide		3.08	3.08	2.79	3.15	2.74	2.75	3.05					
Mean water level		1.04	.98	.74	1.09	.64	.69	.97					
Mean low tide		-1.10	-1.16	-1.38	-1.02	-1.50	-1.35	-1.16					

MAURICE RIVER BASIN

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 mi².

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 fair. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 20	1400	*115	*4.19	Apr. 2	1430	54	3.53

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	1.6	5.7	14	5.2	24	11	31	20	5.7	12	14	2.7
2	1.5	5.8	13	7.3	19	11	51	21	4.8	11	14	2.5
3	1.5	6.2	11	15	15	11	48	20	5.1	16	12	2.3
4	1.5	6.2	9.4	17	14	10	39	18	6.4	18	9.5	2.3
5	3.3	5.5	7.8	16	13	11	31	19	6.1	15	7.6	2.2
6	4.5	5.0	7.3	13	12	16	24	22	5.9	9.9	6.6	2.3
7	3.7	4.8	6.6	8.8	11	26	21	21	5.4	6.6	5.7	2.5
8	3.4	7.6	5.9	6.5	11	40	22	23	4.8	5.0	5.0	2.3
9	3.0	7.7	6.3	6.9	14	37	24	26	4.0	4.2	4.5	2.3
10	2.6	6.9	8.1	7.3	18	30	34	25	3.6	3.5	4.3	2.2
11	2.3	6.8	7.0	7.3	22	25	38	23	3.5	3.0	3.9	2.3
12	2.0	18	5.5	8.6	25	22	34	27	3.4	2.9	3.7	4.2
13	1.7	19	5.3	12	21	20	28	24	4.9	20	23	3.9
14	2.2	21	6.1	13	18	18	23	20	4.4	37	35	3.3
15	11	25	6.2	13	15	19	19	16	3.7	33	30	2.9
16	11	23	9.1	12	13	20	31	15	3.3	31	22	2.8
17	11	20	13	12	12	18	42	16	3.1	21	25	14
18	8.7	16	14	13	12	17	40	14	4.5	14	20	19
19	6.3	13	14	48	11	16	34	13	5.1	19	14	19
20	4.6	11	14	105	13	29	27	11	7.9	26	10	15
21	6.2	9.4	12	78	26	32	22	9.2	11	18	7.9	9.4
22	9.1	8.0	11	49	34	29	19	9.1	9.3	13	6.5	8.4
23	7.4	7.0	9.7	34	33	24	17	7.7	7.6	11	5.5	8.3
24	6.1	7.7	8.7	29	29	19	16	6.7	5.8	8.7	4.8	6.6
25	4.9	7.6	8.0	30	24	16	14	5.9	4.7	7.0	4.4	5.7
26	4.1	6.8	7.3	25	20	14	13	5.3	3.8	8.0	4.0	4.9
27	3.3	6.1	6.7	29	16	12	12	5.2	3.2	7.6	3.6	4.4
28	6.2	5.7	6.2	45	14	12	11	5.4	2.8	6.1	3.6	4.1
29	8.9	12	5.7	42	13	23	10	6.3	2.6	5.3	3.4	8.9
30	7.8	15	5.2	36	---	33	12	7.0	6.1	6.9	3.1	8.2
31	6.6	---	4.9	30	---	33	---	6.3	---	10	2.9	---
TOTAL	158.0	319.5	269.0	773.9	522	654	787	468.1	152.5	409.7	319.5	178.9
MEAN	5.10	10.6	8.68	25.0	18.0	21.1	26.2	15.1	5.08	13.2	10.3	5.96
MAX	11	25	14	105	34	40	51	27	11	37	35	19
MIN	1.5	4.8	4.9	5.2	11	10	10	5.2	2.6	2.9	2.9	2.2
CFM	.52	1.09	.89	2.56	1.84	2.16	2.69	1.55	.52	1.35	1.05	.61
IN.	.60	1.22	1.02	2.95	1.99	2.49	3.00	1.78	.58	1.56	1.22	.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1996, BY WATER YEAR (WY)

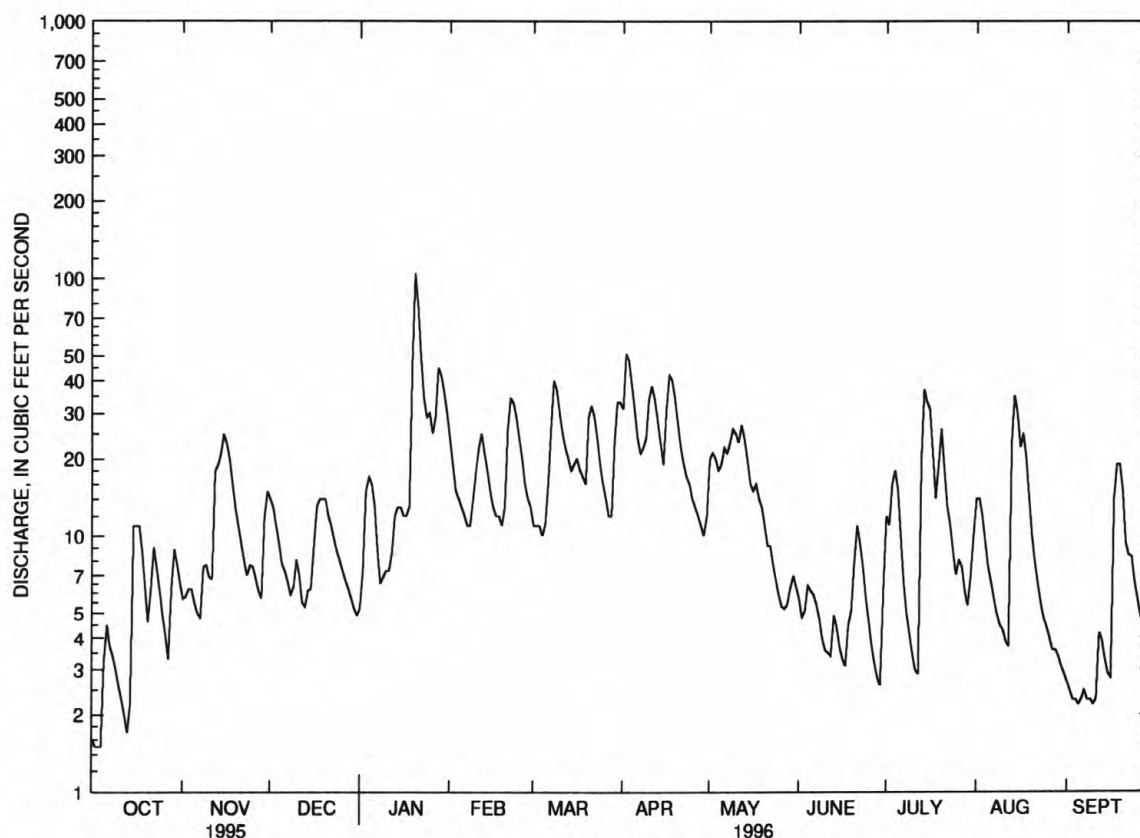
	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	5.62	7.96	10.9	15.6	13.5	19.7	17.1	12.8	6.72
MAX	19.7	15.0	17.6	26.5	21.7	38.7	26.2	29.3	15.4
(WY)	1990	1990	1993	1991	1994	1996	1989	1989	1989
MIN	1.93	4.22	6.86	6.98	6.37	9.91	5.65	4.54	2.14
(WY)	1989	1992	1995	1992	1992	1992	1992	1992	1995

MAURICE RIVER BASIN

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01411456 LITTLE EASE RUN NEAR CLAYTON, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1988 - 1996
ANNUAL TOTAL	2369.94	5012.1	
ANNUAL MEAN	6.49	13.7	10.8
HIGHEST ANNUAL MEAN			14.3
LOWEST ANNUAL MEAN			5.70
HIGHEST DAILY MEAN	25 Mar 9	105 Jan 20	111 Sep 20 1989
LOWEST DAILY MEAN	.72 Sep 16	1.5 Oct 2	.41 Aug 16 1988
ANNUAL SEVEN-DAY MINIMUM	.77 Sep 1	2.3 Sep 4	.50 Aug 10 1988
INSTANTANEOUS PEAK FLOW		115 Jan 20	124 Sep 20 1989
INSTANTANEOUS PEAK STAGE		4.19 Jan 20	4.27 Sep 20 1989
INSTANTANEOUS LOW FLOW		1.3 Sep 8	.35 Aug 15 1988
ANNUAL RUNOFF (CFSM)	.66	1.40	1.11
ANNUAL RUNOFF (INCHES)	9.02	19.08	15.02
10 PERCENT EXCEEDS	14	29	23
50 PERCENT EXCEEDS	5.7	11	7.3
90 PERCENT EXCEEDS	1.1	3.4	1.6



01411456 LITTLE EASE RUN 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 mi².

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Dec. 27, 1937. Datum of gage is 46.94 ft above sea level.

REMARKS.--Records good. Occasional regulation by ponds above 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 380 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 22	1300	*453	*3.57	No other peak greater than base discharge.			

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	63	95	138	109	251	166	246	208	154	197	181	101
2	60	96	135	115	236	171	313	209	147	200	207	95
3	57	95	132	136	222	174	317	220	151	213	202	83
4	55	94	129	136	210	169	323	229	171	212	192	84
5	79	87	124	139	198	165	320	244	168	191	175	85
6	97	83	126	141	191	164	296	253	163	172	145	87
7	98	84	124	135	177	177	274	248	154	156	131	88
8	97	94	120	135	175	211	267	259	144	141	126	89
9	89	90	124	130	183	236	260	266	137	129	129	89
10	82	88	130	128	188	248	281	268	131	119	125	88
11	76	89	101	128	173	244	293	266	126	107	110	91
12	71	148	134	132	193	240	287	284	124	103	108	113
13	67	140	125	142	199	230	286	269	130	149	181	123
14	65	149	129	141	200	218	278	256	130	201	230	128
15	94	176	124	143	200	214	254	244	128	229	251	115
16	100	169	131	142	192	215	302	236	121	259	259	109
17	112	164	137	141	186	208	305	236	115	274	240	168
18	115	158	136	144	178	203	296	226	111	275	215	217
19	106	149	144	190	172	199	307	218	121	239	192	217
20	96	139	152	258	173	217	298	209	158	230	163	207
21	107	129	148	324	205	221	279	196	173	211	149	188
22	118	120	141	442	227	224	237	198	197	204	142	173
23	112	113	134	419	229	220	230	194	197	201	133	163
24	110	118	127	363	236	216	227	182	166	191	133	149
25	104	115	122	321	234	208	218	152	119	176	128	127
26	96	112	117	276	225	193	211	143	117	153	120	126
27	87	110	112	259	211	179	207	146	113	151	115	120
28	93	107	109	265	193	170	199	149	108	148	111	113
29	98	131	113	258	167	198	191	154	103	139	106	131
30	100	138	112	263	---	226	190	160	127	139	105	136
31	99	---	109	263	---	232	---	157	---	150	104	---
TOTAL	2803	3580	3939	6318	5824	6356	7992	6679	4204	5659	4908	3803
MEAN	90.4	119	127	204	201	205	266	215	140	183	158	127
MAX	118	176	152	442	251	248	323	284	197	275	259	217
MIN	55	83	101	109	167	164	190	143	103	103	104	83
CFSM	.81	1.07	1.13	1.82	1.79	1.83	2.38	1.92	1.25	1.63	1.41	1.13
IN.	.93	1.19	1.31	2.10	1.93	2.11	2.65	2.22	1.40	1.88	1.63	1.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1996, BY WATER YEAR (WY)

MEAN	112	140	166	190	200	229	226	190	146	124	125	122
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

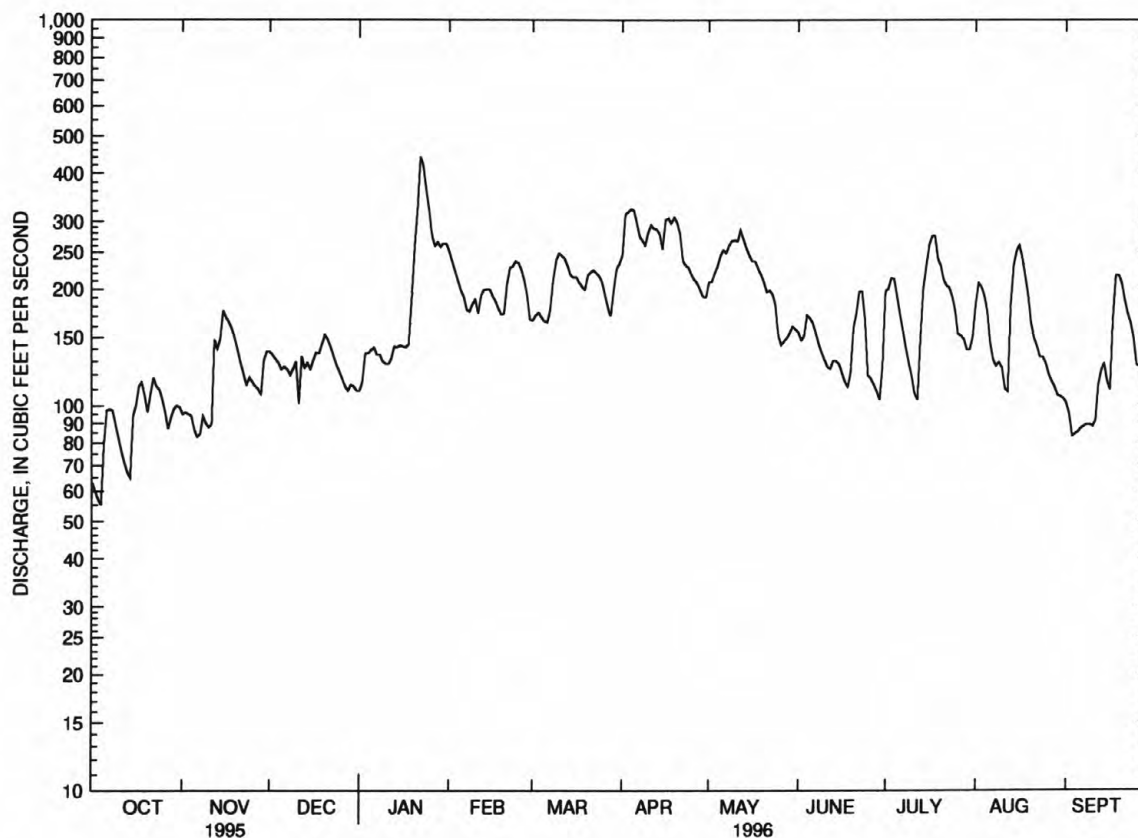
MAURICE RIVER BASIN

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01411500 MAURICE RIVER AT NORMA, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR			FOR 1996 WATER YEAR			WATER YEARS 1933 - 1996		
ANNUAL TOTAL	34585			62065					
ANNUAL MEAN	94.8			170			164		
HIGHEST ANNUAL MEAN							253		1973
LOWEST ANNUAL MEAN							67.4		1966
HIGHEST DAILY MEAN	176	Nov 15		442	Jan 22		5260	Sep 2	1940
LOWEST DAILY MEAN	25	Sep 4		55	Oct 4		23	Sep 8	1964
ANNUAL SEVEN-DAY MINIMUM	28	Sep 1		73	Oct 1		23	Sep 7	1966
INSTANTANEOUS PEAK FLOW							7360a	Sep 2	1940
INSTANTANEOUS PEAK STAGE							8.72	Sep 2	1940
INSTANTANEOUS LOW FLOW							23	Sep 8	1964
ANNUAL RUNOFF (CFSM)	.85			1.51			1.46		
ANNUAL RUNOFF (INCHES)	11.49			20.61			19.90		
10 PERCENT EXCEEDS	135			259			281		
50 PERCENT EXCEEDS	96			153			143		
90 PERCENT EXCEEDS	49			96			69		

a From rating curve extended above 3,000 ft³/s, highest since 1867.



— 01411500 MAURICE RIVER AT NORMA, NJ, DAILY MEAN DISCHARGE

MAURICE RIVER BASIN

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953, 1962-63, 1965 to current year.

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.--For February 22, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 1995										
01...	1040	95	95	6.5	12.5	769	9.4	87	<1.0	4
FEB 1996										
22...	1118	227	95	5.9	6.0	760	10.7	86	--	--
APR										
01...	1059	234	88	6.2	9.5	757	9.2	81	E1.2	130
JUN										
04...	1050	174	84	6.5	17.5	761	7.3	76	E1.4	41
JUL										
24...	0930	194	75	6.5	20.0	760	6.1	67	<1.0	27

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)	ALKA- LINITY 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 1995										
01...	<10	23	4.7	2.7	6.1	1.7	5.8	12	10	<0.1
FEB 1996										
22...	--	21	4.4	2.4	6.6	1.7	3.4	10	11	<0.1
APR										
01...	20	20	4.3	2.2	6.4	1.7	4.0	10	10	<0.1
JUN										
04...	160	20	4.3	2.3	6.2	1.9	7.3	7.5	9.9	<0.1
JUL										
24...	40	19	4.0	2.1	5.5	1.9	8.1	5.0	9.2	<0.1

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, SUB- PENED (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 1995									
01...	5.5	54	51	<1	0.003	1.10	<0.03	<0.03	0.30
FEB 1996									
22...	6.0	--	51	--	--	1.60	--	--	0.30
APR									
01...	4.0	52	47	3	0.003	1.40	<0.03	<0.03	0.30
JUN									
04...	4.8	58	46	3	0.008	0.98	0.05	0.05	0.60
JUL									
24...	6.9	74	42	--	0.011	0.62	0.08	0.08	0.90

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		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- PENDE TOTAL (MG/L AS C) (00689)		SEDI- MENT, SUS- PENDE (MG/L) (80154)		SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)			
NOV 1995																					
01...		0.21		1.4		1.3		0.02		<0.01		5.2		0.4		..		..
FEB 1996																					
22...		0.23		1.9		1.8		0.02		0.02		5.7		0.3		3		2.0			
APR																					
01...		0.28		1.7		1.7		0.02		0.02		7.5		0.4		..		..
JUN																					
04...		0.56		1.6		1.5		0.04		<0.01		9.2		0.9		..		..
JUL																					
24...		0.56		1.5		1.2		0.05		<0.01		17		1.1		5		2.7			
DATE		PH SED BOT 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 TOT IN BOT MAT (MG/KG AS N) (00626)		PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)		ARSENIC TOTAL IN BOT. MAT. (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 TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	
NOV 1995																					
01...		1040		..		19			11		..		<10		40	
01...		1040		5.4		..		2.4		80		48		..		2		
JUN 1996																					
04...		1050		..		46			31		..		<10		70	
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 AS HG) (01029)		COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)		COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CU) (01042)		COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01043)		IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS FE) (01045)		IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)		LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS PB) (01051)		LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	
NOV 1995																					
01...		..		<1			<1		..		310		..		<1		..	
01...		<1		..		<1		<5		..		<1		..		330		..		<10	
JUN 1996																					
04...		..		1			1		..		1300		..		2		..	
DATE		MANGA- NESE, TOTAL RECOV- ERABLE (G/KG AS MN) (01055)		MANGA- NESE, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G AS C) (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 RECOV- ERABLE (UG/L AS SE) (01147)		SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01148)		ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)		ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	
NOV 1995																					
01...		30		..		<0.1		..		2		..		<1		..		<10		..	
01...		..		13		..		0.03		..		<10		..		<1		..		<10	
JUN 1996																					
04...		10		..		<0.1		..		3		..		<1		..		<10		..	
DATE		CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)		CARBON, INOR- GANIC + 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 1995																					
01...		
01...		<0.1		0.9		<2		<1		<0.1		<1		E0.1		0.2		E0.3		0.1	
JUN 1996																					
04...		

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

COHANSEY RIVER BASIN

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01412800 COHANSEY RIVER AT SEELEY, NJ

LOCATION.--Lat 39°28'21", long 75°15'21", Cumberland County, Hydrologic Unit 02040206, on right bank just downstream from bridge on Silver Lake Road, 0.6 mi south of Seeley, 2.6 mi east of Shiloh, 4.1 mi north of Bridgeton, and 22.5 mi upstream from mouth.

DRAINAGE AREA.--28.0 mi².

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

REMARKS.--For February 20, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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,MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV 1995 02...	0943	E25	218	6.8	14.0	761	8.1	79	<1.0	130	110	55	
FEB 1996 20...	0955	E35	216	6.8	5.0	767	11.7	91	--	--	--	60	
MAR 26...	1040	E30	211	7.0	11.5	766	10.6	97	E2.0	<2	100	60	
JUN 03...	1105	E20	214	7.0	17.0	764	8.2	85	E1.7	170	30	65	
JUL 24...	1137	E25	205	7.0	20.5	761	7.5	83	E1.2	490	80	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)	ALKA-LINITY LAB AS CAC03) (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 1995 02...	11	6.8	11	5.8	14	24	24	<0.1	8.7	128	118	5	
FEB 1996 20...	12	7.4	11	4.0	13	23	22	<0.1	8.4	114	120	13	
MAR 26...	12	7.2	10	4.1	14	24	21	<0.1	6.5	118	115	12	
JUN 03...	13	7.8	11	4.2	19	23	23	<0.1	7.0	--	120	9	
JUL 24...	11	6.9	11	5.2	19	20	22	<0.1	8.1	138	114	11	
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 1995 02...	0.037	4.10	0.10	0.10	0.40	0.31	4.5	4.4	0.05	<0.01	3.7	0.1	
FEB 1996 20...	--	5.50	--	--	0.40	0.26	5.9	5.8	0.07	<0.01	2.0	>4.0	
MAR 26...	0.014	4.90	<0.03	<0.03	0.50	0.20	5.4	5.1	0.05	<0.01	2.4	1.0	
JUN 03...	0.023	4.50	0.07	0.05	0.40	0.31	4.9	4.8	0.08	0.01	3.0	0.7	
JUL 24...	0.034	4.10	0.09	0.09	0.60	0.33	4.7	4.4	0.06	<0.01	3.6	0.4	

COHANSEY RIVER BASIN

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 02...	0943	17	1	<10	30	<1	<1	2
JUN 1996 03...	1105	29	<1	<10	20	<1	<1	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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
NOV 1995 02...	840	<1	100	0.2	1	<1	<10
JUN 1996 03...	740	<1	90	<0.1	2	<1	<10

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)	MERCURY DIS- SOLVED (UG/L) AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L) AS NI) (01065)	ZINC, DIS- SOLVED (UG/L) AS ZN) (01090)
JUN 1996 03...	1105	FIELD BLANK	<1	<1	<0.1	<1	1

01434000 DELAWARE RIVER AT PORT JERVIS, 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 mi².

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 mi² 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 ft³/s, Aug. 19, 1955, gage height, 12.49 ft, from rating curve extended above 11,000 ft³/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, 8,220 ft³/s, Jan. 19, gage height, 8.86 ft; minimum, 43 ft³/s, Oct. 4.

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	83	421	385	e200	e1000	846	459	4370	244	258	287	149
2	e69	484	393	e190	e840	758	596	2740	228	234	267	155
3	47	555	377	e190	e700	676	533	1940	231	274	244	160
4	e46	524	375	e180	e600	562	485	1320	331	284	264	163
5	e84	466	373	e180	e550	547	458	1030	302	252	238	167
6	558	420	368	e170	e520	625	433	939	258	214	226	168
7	e342	404	351	e170	e500	617	438	908	238	191	225	225
8	e224	475	325	e180	493	e510	533	791	223	183	209	389
9	169	425	e310	e180	510	e490	515	710	222	197	198	399
10	145	388	e300	e200	503	e450	479	801	544	197	197	319
11	e134	385	e290	e220	e470	e440	443	866	918	172	174	272
12	e134	2650	e280	e220	e450	e420	432	1580	522	161	161	254
13	e128	1460	e270	e210	e410	e430	683	1190	416	1250	168	244
14	e149	1220	e270	e200	e370	507	927	931	388	1700	167	285
15	445	2090	e270	e190	e340	719	814	751	303	1460	161	256
16	e312	1770	e260	e190	e320	943	2160	716	257	2000	162	251
17	e220	1290	e260	e200	e310	775	2060	730	261	1660	221	375
18	e176	1040	e260	e210	e300	731	1650	645	443	880	182	1360
19	e159	897	e260	e1200	e300	736	1300	666	364	591	161	973
20	e155	802	e250	e2900	e310	1250	1040	565	536	476	153	586
21	1760	718	e250	e1600	e780	1090	892	514	375	408	149	481
22	1560	656	e250	e1200	e1000	963	795	593	303	336	147	427
23	776	563	e250	e1000	1130	826	705	485	298	298	143	452
24	554	517	e240	e1100	1310	735	1040	421	268	273	185	394
25	518	466	e230	1890	1380	674	834	372	252	262	216	380
26	436	431	e230	1310	1210	659	715	337	222	668	172	335
27	370	412	e220	3370	1080	600	692	327	201	608	156	312
28	631	397	e210	4040	1070	529	586	315	216	426	152	345
29	592	419	e210	2370	1030	513	790	296	208	355	154	1240
30	515	402	e200	1790	---	504	1960	273	238	312	140	741
31	442	---	e200	e1300	---	486	---	259	---	288	142	---
TOTAL	11933	23147	8717	28550	19786	20611	25447	28381	9810	16868	5821	12257
MEAN	385	772	281	921	682	665	848	916	327	544	188	409
MAX	1760	2650	393	4040	1380	1250	2160	4370	918	2000	287	1360
MIN	46	385	200	170	300	420	432	259	201	161	140	149

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1996, BY WATER YEAR (WY)

MEAN	296	379	434	367	411	684	851	542	367	237	228	217
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

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR			FOR 1996 WATER YEAR			WATER YEARS 1954 - 1996
ANNUAL TOTAL	123223			211328			
ANNUAL MEAN	338			577			
HIGHEST ANNUAL MEAN						417	
LOWEST ANNUAL MEAN						704	1956
HIGHEST DAILY MEAN	3070	Mar 9	4370	May 1	15900	215	1965
LOWEST DAILY MEAN	46	Oct 4	46	Oct 4	32		Aug 19 1955
ANNUAL SEVEN-DAY MINIMUM	72	Sep 29	150	Aug 27	38		Aug 17 1965
10 PERCENT EXCEEDS	595		1230			873	Aug 11 1965
50 PERCENT EXCEEDS	247		406			270	
90 PERCENT EXCEEDS	98		170			107	

e Estimated.

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.

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."

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 mi² 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 ft³/s, Aug. 19, 1955, gage height, 12.49 ft, from rating curve extended above 11,000 ft³/s, on basis of slope-area measurement of peak flow; minimum discharge observed, no flow July 21, 22, 28, 1911, result of regulation.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1996, BY WATER YEAR (WY)

MEAN	296	379	434	367	411	684	851	542	367	237	228	217
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

DELAWARE RIVER BASIN

01437500 NEVERSINK RIVER AT GODEFFROY, NY--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1954 - 1996	
ANNUAL TOTAL	123223		211328			
ANNUAL MEAN	338		577		417	
HIGHEST ANNUAL MEAN					704	1956
LOWEST ANNUAL MEAN					215	1965
HIGHEST DAILY MEAN	3070	Mar 9	4370	May 1	15900	Aug 19 1955
LOWEST DAILY MEAN	46	Oct 4	46	Oct 4	32	Aug 17 1965
ANNUAL SEVEN-DAY MINIMUM	72	Sep 29	150	Aug 27	38	Aug 11 1965
10 PERCENT EXCEEDS	595		1230		873	
50 PERCENT EXCEEDS	247		406		270	
90 PERCENT EXCEEDS	98		170		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 mi².

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records good except for 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1640	4540	5770	e1800	13900	10800	5950	31800	2510	3240	4590	1630
2	1620	4730	5290	e2200	12200	9260	7210	27900	2210	3550	4840	1740
3	1630	5190	4670	e3200	e10300	8190	7550	21600	2100	3440	4240	1810
4	1660	5750	4690	e2700	e8700	7310	6500	18000	2590	3530	3270	2040
5	2000	4850	5550	e2600	e7500	6680	5960	15700	2520	3130	3180	1990
6	2810	4260	5500	e2900	e7100	6590	5030	14400	2250	3400	3930	2810
7	2710	4340	5310	e2400	e6400	7560	4770	14500	2530	2900	3560	3320
8	2330	4100	4950	e2500	e6200	7090	5770	12900	2280	2730	3340	3200
9	1590	4380	4070	e2800	e6400	6130	6280	11500	2570	3360	3260	3400
10	1270	3900	e3500	e2900	e6300	5030	5830	11600	3830	3280	3670	3110
11	1030	3610	e3600	e2700	e6000	5360	5460	12400	8340	2490	2280	2110
12	1210	12800	e4500	e2900	6200	5230	4870	22500	8640	2500	1990	1880
13	1450	18000	e4300	e2800	5800	5440	5730	26100	11100	5210	3140	1960
14	1620	13300	e3700	e1900	4930	6200	12300	22300	10400	16700	2860	2000
15	2350	17500	e3600	e2200	4580	7410	16700	17700	7740	14000	1990	2010
16	3670	20400	e4100	e3400	4530	9870	26000	14700	5720	15400	2140	1940
17	2850	15300	e3400	e3300	4390	8570	37900	12700	4610	15400	2350	2300
18	2020	12300	e3200	e3200	3700	8100	27900	10900	4960	12000	2240	6510
19	1650	10600	e3900	e17000	3860	8660	21300	9640	4850	10000	1930	7510
20	1430	9750	e3600	118000	4200	11200	16800	9130	5440	8730	2030	4740
21	3740	9170	e3700	42900	8610	14500	13400	8840	5060	7580	1680	3520
22	28000	8600	e3600	25500	14600	12800	11800	8440	4230	6210	1500	2720
23	16700	6760	e2200	18500	16200	10700	11200	7610	3310	6110	2550	2830
24	9490	6010	e2300	14800	16900	8860	11800	6680	3180	5230	2110	3900
25	6820	5350	e2400	20300	19200	8070	11800	5640	3650	4550	2580	3570
26	5410	4870	e2600	16500	16400	8300	11100	4000	3380	6230	2550	3310
27	4520	4830	e3800	24500	13800	8500	9890	3560	3130	8190	2460	3210
28	5000	4890	e3300	57900	12300	7900	8660	3380	2990	6020	1990	3150
29	8350	5140	e3000	36100	12400	7570	8380	3320	2700	5080	2400	4210
30	7140	6720	e2800	25700	---	6830	16300	3190	2360	5240	2550	4740
31	5350	---	e1800	17500	---	6120	---	2600	---	4660	1960	---
TOTAL	139060	241940	118700	483600	263600	250830	350140	395230	131180	200090	85160	93170
MEAN	4486	8065	3829	15600	9090	8091	11670	12750	4373	6455	2747	3106
MAX	28000	20400	5770	118000	19200	14500	37900	31800	11100	16700	4840	7510
MIN	1030	3610	1800	1800	3700	5030	4770	2600	2100	2490	1500	1630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

	MEAN	3327	5111	6086	5843	5986	9965	12030	7418	4354	3055	2618	2661
MAX	15690	11760	14050	15600	15120	24480	31560	16090	15200	11220	14230	9167	
(WY)	1956	1952	1974	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	

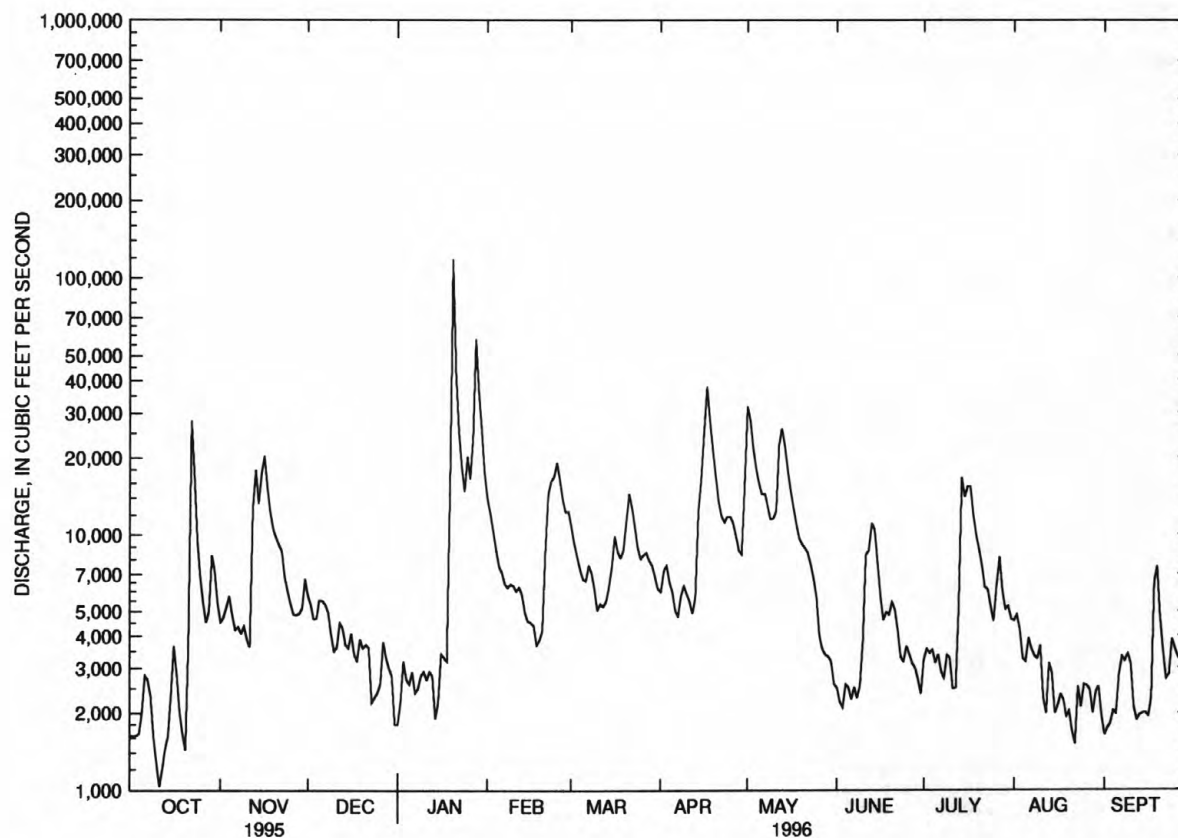
DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1940 - 1996	
ANNUAL TOTAL	1567620		2752700			
ANNUAL MEAN	4295		7521		5699	
HIGHEST ANNUAL MEAN					8621	1952
LOWEST ANNUAL MEAN					2309	1965
HIGHEST DAILY MEAN	28000	Oct 22	118000	Jan 20	187000	Aug 19 1955
LOWEST DAILY MEAN	1030	Oct 11	1030	Oct 11	412	Aug 23 1954
ANNUAL SEVEN-DAY MINIMUM	1500	Oct 8	1500	Oct 8	565	Jul 1 1965
INSTANTANEOUS PEAK FLOW			149000	Jan 20	250000 ^a	Aug 19 1955
INSTANTANEOUS PEAK STAGE			26.66	Jan 20	35.15	Aug 19 1955
INSTANTANEOUS LOW FLOW			970	Oct 11	382	Aug 24 1954
10 PERCENT EXCEEDS	8640		16200		12000	
50 PERCENT EXCEEDS	3180		4870		3420	
90 PERCENT EXCEEDS	1670		2110		1590	

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

e Estimated.



01438500 DELAWARE RIVER AT MONTAGUE, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER-QUALITY RECORDS

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

REMARKS.--For February 15, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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, EC BROTH (MPN) (31615)	ENTERO-COCCI ME,MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL AS CACO3 (00900)	
DEC 1995													
06...	1200	4830	79	8.0	3.0	753	12.8	96	<1.0	<20	<10	22	
FEB 1996													
15...	1200	4370	91	7.9	0.5	743	13.5	96	--	--	--	23	
APR													
08...	1200	5690	82	8.4	6.0	750	12.3	100	E1.1	<20	<10	21	
JUN													
26...	1145	3220	78	7.5	19.5	751	8.5	94	E2.8	<20	10	21	
AUG													
05...	1145	2810d	80	8.0	23.0	756	8.5	100	<1.0	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)	ALKA-LINITY 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)
DEC 1995													
06...	6.7	1.3	4.9	0.70	12	8.6	8.4	<0.1	2.5	46	42	4	
FEB 1996													
15...	7.0	1.4	7.2	0.80	11	8.3	12	<0.1	4.0	62	50	1	
APR													
08...	6.3	1.2	6.4	0.60	11	7.6	11	<0.1	1.4	42	42	2	
JUN													
26...	6.3	1.3	5.3	0.80	13	7.7	9.0	<0.1	2.1	40	41	6	
AUG													
05...	7.2	1.4	5.4	0.80	17	7.4	8.4	<0.1	2.0	52	43	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-SOLVED (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)
DEC 1995													
06...	0.005	0.31	0.03	<0.03	0.14	0.18	0.45	0.49	0.02	<0.01	2.6	0.3	
FEB 1996													
15...	--	0.60	--	--	0.18	0.17	0.78	0.77	0.02	0.02	2.2	0.2	
APR													
08...	0.003	0.26	<0.03	<0.03	0.15	0.18	0.41	0.44	0.01	<0.01	2.2	0.4	
JUN													
26...	<0.003	0.24	<0.03	0.04	0.12	0.11	0.36	0.35	<0.01	<0.01	2.6	0.3	
AUG													
05...	0.009	<0.05	<0.03	<0.03	0.16	0.20	--	--	<0.01	<0.01	2.6	0.4	

DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 26...	1145	12	<1	<10	70	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 26...	150	<1	40	<0.1	1	<1	<10

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUN 1996 26...	1145	FIELD BLANK	<1	<1	<0.1	<1	<1

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ

LOCATION.--Lat 41°06'24", long 74°57'09", Sussex County, Hydrologic Unit 02040104, on right bank 1.0 mi upstream from Flatbrookville, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--64.0 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1545	960	4.30	Jan. 28	0345	*2,710	*7.04
Nov. 15	1515	764	3.92	Apr. 16	2030	1,440	5.15
Jan. 20	0600	2,370	6.58	May 1	0700	1,110	4.57
Jan. 25	0445	993	4.36	July 14	0230	982	4.34

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	8.9	111	97	53	266	154	135	941	79	80	84	22
2	8.9	134	101	56	248	146	249	530	71	68	73	22
3	8.0	144	96	55	214	141	213	366	67	52	70	20
4	7.8	114	96	e48	205	122	171	317	92	48	71	19
5	15	96	89	e46	197	123	155	271	121	45	64	20
6	304	84	91	e49	181	149	148	270	106	42	59	19
7	135	82	86	61	175	176	148	273	81	38	54	24
8	69	102	81	79	156	151	196	228	69	37	49	32
9	46	92	80	114	164	143	191	205	62	52	46	41
10	36	79	79	109	e170	140	174	237	60	63	46	31
11	30	77	74	96	e160	126	151	258	72	55	43	26
12	26	680	74	90	e140	121	136	423	83	42	41	24
13	23	445	74	86	e120	129	155	394	72	317	70	24
14	32	297	67	77	127	151	196	288	66	682	73	38
15	118	671	71	74	118	210	198	245	58	261	54	33
16	79	495	79	66	107	212	760	225	52	251	45	26
17	57	309	77	73	107	176	902	235	48	168	44	52
18	45	247	72	73	100	158	477	204	55	123	41	265
19	38	226	68	458	92	146	342	187	60	102	36	174
20	34	205	e65	1810	106	243	285	170	70	92	34	82
21	255	185	88	723	328	243	251	150	69	76	33	58
22	331	165	70	396	348	208	217	138	60	67	33	50
23	175	150	66	299	308	182	197	127	53	64	31	50
24	124	137	64	399	308	162	226	115	48	63	30	48
25	98	127	62	826	286	149	193	105	45	60	31	51
26	82	119	62	434	240	137	175	98	43	238	28	41
27	79	115	63	853	206	125	159	98	40	211	26	36
28	261	112	59	1840	197	119	142	96	37	124	26	40
29	227	108	59	678	177	127	210	104	36	93	25	232
30	156	101	59	450	---	131	642	90	46	87	25	149
31	129	---	63	350	---	148	---	80	---	85	23	---
TOTAL	3037.6	6009	2332	10821	5551	4848	7794	7468	1921	3786	1408	1749
MEAN	98.0	200	75.2	349	191	156	260	241	64.0	122	45.4	58.3
MAX	331	680	101	1840	348	243	902	941	121	682	84	265
MIN	7.8	77	59	46	92	119	135	80	36	37	23	19
CFSM	1.53	3.13	1.18	5.45	2.99	2.44	4.06	3.76	1.00	1.91	.71	.91
IN.	1.77	3.49	1.36	6.29	3.23	2.82	4.53	4.34	1.12	2.20	.82	1.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996, BY WATER YEAR (WY)

MEAN	55.4	98.5	121	123	134	205	207	143	87.3	57.7	51.8	47.4
MAX	306	292	369	367	275	513	570	372	334	333	386	258
(WY)	1956	1928	1974	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

DELAWARE RIVER BASIN

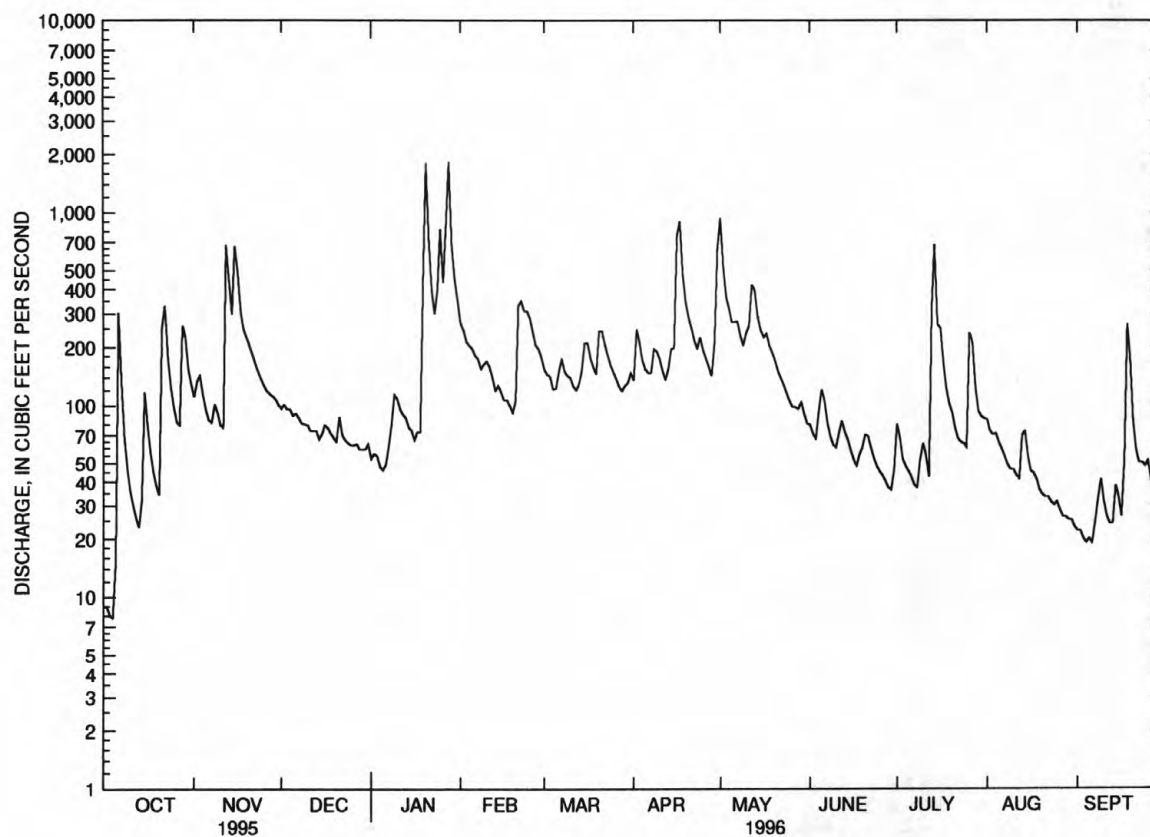
01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1924 - 1996	
ANNUAL TOTAL	32800.3		56724.6		111	
ANNUAL MEAN	89.9		155		210	
HIGHEST ANNUAL MEAN					43.4	
LOWEST ANNUAL MEAN					1928	
HIGHEST DAILY MEAN	938	Mar 9	1840	Jan 28	6310	Aug 19 1955
LOWEST DAILY MEAN	5.0	Sep 8	7.8	Oct 4	4.1	Sep 11 1966
ANNUAL SEVEN-DAY MINIMUM	5.3	Sep 6	21	Aug 31	5.3	Sep 6 1995
INSTANTANEOUS PEAK FLOW			2710	Jan 28	9560a	Aug 19 1955
INSTANTANEOUS PEAK STAGE			7.04	Jan 28	12.58b	Aug 19 1955
INSTANTANEOUS LOW FLOW			7.1	Oct 4	3.6	Sep 25 1964
ANNUAL RUNOFF (CFSM)	1.40		2.42		1.73	
ANNUAL RUNOFF (INCHES)	19.07		32.97		23.50	
10 PERCENT EXCEEDS	176		300		237	
50 PERCENT EXCEEDS	74		98		71	
90 PERCENT EXCEEDS	8.3		35		17	

a From rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow.

b From high-water mark in gage house.

c Estimated.



01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01443000 DELAWARE RIVER AT PORTLAND, PA

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

DRAINAGE AREA.--4,165 mi².

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

REMARKS.--For February 20, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 (DEG C) (00010)	BARO-METRIC PRES-SURE (MM 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, MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)
NOV 1995 28...	1130	6980	83	8.0	3.5	748	13.6	104	E1.1	<20	<10	26
FEB 1996 20...	1145	6310	110	7.8	1.0	758	12.9	91	--	--	--	28
APR 09...	1100	9370	93	8.0	6.0	752	12.2	100	E1.8	<20	<10	28
JUN 18...	1100	6430	99	7.2	22.0	754	7.3	84	<1.0	330	190	30
AUG 05...	1200	4540	112	7.5	22.0	760	8.5	98	<1.0	20	100	34
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)	ALKA-LINITY LAB (MG/L AS CAC03) (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 1995 28...	7.8	1.5	5.5	0.80	13	9.5	9.6	<0.1	3.5	50	47	2
FEB 1996 20...	8.6	1.7	6.8	0.70	17	9.4	12	<0.1	4.5	56	64	8
APR 09...	8.5	1.7	6.7	0.70	17	8.5	12	<0.1	1.3	50	51	2
JUN 18...	8.8	2.0	6.2	0.90	21	7.7	10	<0.1	2.9	54	53	6
AUG 05...	10	2.2	7.3	0.80	25	8.8	12	<0.1	2.2	56	58	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 (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 1995 28...	0.005	0.33	<0.03	--	0.12	0.18	0.45	0.51	<0.01	0.01	2.7	0.2
FEB 1996 20...	--	2.30	--	--	0.70	0.58	3.0	2.9	0.22	0.16	2.7	--
APR 09...	<0.003	0.21	<0.03	<0.03	0.20	0.18	0.41	0.39	0.02	0.02	2.0	0.4
JUN 18...	0.005	0.35	<0.03	<0.03	0.30	0.26	0.65	0.61	0.05	0.03	2.9	0.3
AUG 05...	0.015	<0.05	<0.03	0.03	0.20	0.21	--	--	<0.01	<0.01	2.6	0.4

DELAWARE RIVER BASIN

01443000 DELAWARE RIVER AT PORTLAND, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 18...	1100	18	<1	<10	40	<1	<1	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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
JUN 1996 18...		150	<1	70	<0.1	<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 mi².

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 of gage.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	1915	115	4.22	Apr. 16	2230	90	3.90
Nov. 12	1745	115	4.22	May 1	1030	100	4.03
Nov. 15	1615	101	4.05	May 12	1500	84	3.80
Jan. 20	0600	*275	*5.81a	July 14	0430	99	4.02
Jan. 28	0245	114	4.21				

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	15	17	21	e14	e51	29	30	93	18	17	16	9.2
2	14	21	23	e15	e45	27	56	67	17	13	14	9.3
3	14	20	21	e15	e41	27	47	51	18	16	13	9.2
4	16	18	20	e16	e37	25	37	46	26	20	14	9.1
5	25	16	19	e15	e34	26	34	46	33	15	13	9.3
6	82	15	20	e14	e33	37	32	47	23	14	12	9.1
7	68	16	19	e11	e32	44	31	41	19	12	11	11
8	27	20	17	e13	e31	42	40	38	17	13	11	11
9	16	18	17	e18	e29	42	35	36	16	15	13	12
10	13	15	19	e20	e28	38	34	36	16	13	13	11
11	11	15	19	e17	e29	30	32	37	16	12	12	10
12	10	83	18	e17	e28	29	29	73	16	11	11	10
13	9.3	80	18	e17	e24	32	32	59	15	42	14	11
14	14	56	18	e18	e24	43	33	43	14	84	14	17
15	42	90	16	e17	e23	49	29	37	14	38	13	14
16	35	83	15	e16	e23	52	62	35	13	28	12	12
17	19	60	15	e17	e22	39	79	35	13	23	12	19
18	15	50	16	e16	e22	35	54	32	13	20	12	52
19	13	44	e16	e59	e21	33	43	31	16	17	11	47
20	13	39	e16	e133	e23	62	39	28	16	17	10	27
21	30	35	e16	e80	e41	59	39	27	14	15	10	20
22	60	31	e18	e56	e44	46	37	27	13	15	10	19
23	36	28	e16	e50	e38	40	31	25	16	15	10	21
24	25	27	e16	e60	e39	35	26	24	14	15	12	18
25	21	24	e16	e87	e38	33	24	22	13	14	12	18
26	18	23	e16	e69	e35	31	23	21	12	15	11	16
27	17	23	e15	e78	37	28	22	21	11	15	10	15
28	29	21	e15	e107	37	27	20	21	11	14	10	15
29	31	21	e14	e83	33	30	41	20	11	13	9.6	26
30	23	21	e14	e66	---	32	82	19	16	13	9.5	25
31	17	---	e14	e59	---	34	---	18	---	14	9.4	---
TOTAL	778.3	1030	533	1273	942	1136	1153	1156	480	598	364.5	512.2
MEAN	25.1	34.3	17.2	41.1	32.5	36.6	38.4	37.3	16.0	19.3	11.8	17.1
MAX	82	90	23	133	51	62	82	93	33	84	16	52
MIN	9.3	15	14	11	21	25	20	18	11	11	9.4	9.1
CFSM	1.93	2.64	1.32	3.16	2.50	2.82	2.96	2.87	1.23	1.49	.91	1.31
IN.	2.23	2.95	1.53	3.65	2.70	3.25	3.30	3.31	1.37	1.71	1.04	1.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

MEAN	13.6	19.7	23.2	28.6	24.2	46.1	43.1	24.5	14.9	13.5	10.2	11.3
MAX	25.1	34.3	33.6	41.1	32.5	58.5	64.3	37.3	18.4	19.3	14.8	17.1
(WY)	1996	1996	1993	1996	1996	1993	1993	1996	1994	1996	1994	1996
MIN	8.52	12.6	17.1	17.0	17.4	35.0	17.5	14.3	11.9	8.95	6.49	8.58
(WY)	1993	1995	1995	1994	1995	1995	1995	1995	1995	1993	1995	1992

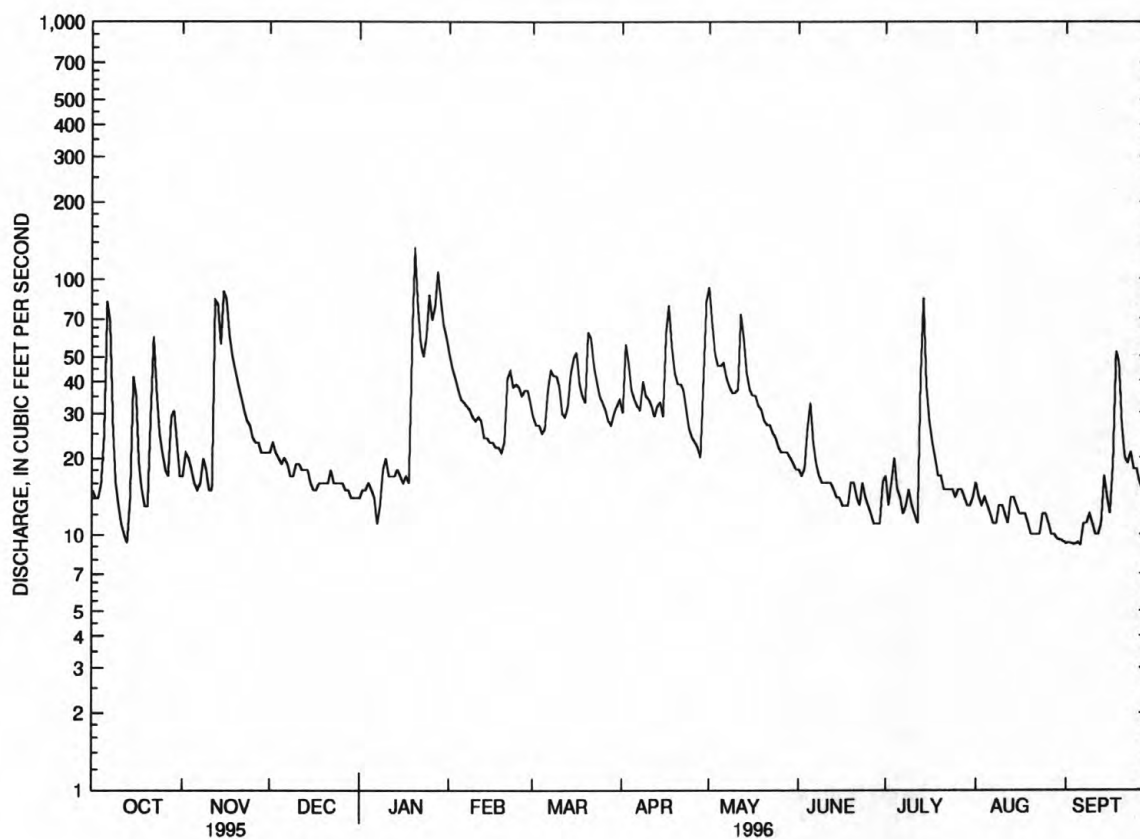
DELAWARE RIVER BASIN

0144328Q EAST BRANCH PAULINS KILL NEAR LAFAYETTE, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1992 - 1996	
ANNUAL TOTAL	6826.0		9956.0			
ANNUAL MEAN	18.7		27.2		22.8	
HIGHEST ANNUAL MEAN					27.2	1996
LOWEST ANNUAL MEAN					15.6	1995
HIGHEST DAILY MEAN	124	Mar 9	133	Jan 20	133	Jan 20 1996
LOWEST DAILY MEAN	5.5	Aug 23	9.1	Sep 4	5.5	Aug 23 1995
ANNUAL SEVEN-DAY MINIMUM	5.8	Aug 20	9.2	Aug 31	5.8	Aug 20 1995
INSTANTANEOUS PEAK FLOW			275	Jan 20	275	Jan 20 1996
INSTANTANEOUS PEAK STAGE			5.81a	Jan 20	5.81a	Jan 20 1996
INSTANTANEOUS LOW FLOW			8.6	Oct 14	4.3	Aug 13 1995
ANNUAL RUNOFF (CFSM)	1.44		2.09		1.75	
ANNUAL RUNOFF (INCHES)	19.55		28.51		23.84	
10 PERCENT EXCEEDS	31		51		45	
50 PERCENT EXCEEDS	16		20		16	
90 PERCENT EXCEEDS	7.5		12		8.2	

a From crest-stage gage.

e Estimated.



01443280 E B PAULINS KILL NEAR LAFAYETTE, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01443440 PAULINS KILL AT BALESVILLE, NJ

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

DRAINAGE AREA.--67.1 mi².

PERIOD OF RECORD.--January 1979 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 1995 TO SEPTEMBER 1996

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 HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY BROTH (MG/L) (00310)	COLI-FORM, FECAL, EC (MPN) (31615)	ENTERO-COCCI ME,MP WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 1995	01...	1145	120	399	7.9	10.5	759	10.5	95	<1.0	1200	280	140
FEB 1996	01...	1145	515	359	7.8	0.5	753	13.1	92	E1.3	120	60	120
APR	01...	1145	154	452	8.3	8.5	744	12.2	107	2.0	80	<10	150
JUN	18...	1145	53	523	8.1	19.5	746	8.1	90	E1.1	2400	100	190
JUL	31...	1200	60	489	8.2	18.0	746	8.4	91	<1.0	5400	80	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)	ALKA-LINITY LAB 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 1995	01...	37	11	23	1.8	99	30	38	<0.1	6.8	222	211	<1
FEB 1996	01...	30	10	22	1.3	74	17	41	<0.1	5.6	178	177	17
APR	01...	38	13	31	1.6	113	21	59	<0.1	2.4	246	237	2
JUN	18...	50	17	29	1.8	157	21	56	0.1	8.4	288	283	7
JUL	31...	46	15	29	1.7	145	19	52	0.1	5.8	266	259	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. TOTAL (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 1995	01...	0.014	0.97	0.05	0.04	0.50	0.44	1.5	1.4	0.04	0.02	6.5	0.4
FEB 1996	01...	0.009	1.40	<0.03	<0.03	0.50	0.35	1.9	1.7	0.04	0.02	4.1	0.6
APR	01...	0.008	0.77	<0.03	<0.03	0.30	0.26	1.1	1.0	0.03	0.02	4.3	1.1
JUN	18...	0.025	1.20	0.08	0.09	0.50	0.38	1.7	1.6	0.08	0.05	3.3	0.4
JUL	31...	0.010	0.85	0.08	<0.03	0.40	0.28	1.2	1.1	0.03	0.04	4.3	0.7

DELAWARE RIVER BASIN

01443440 PAULINS KILL AT BALESVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 18...	1145	<10	<1	<10	70	<1	<1	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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
JUN 1996 18...		300	<1	90	<0.1	<1	<1	<10

01443500 PAULINS KILL AT BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'44", long 74°57'15", Warren County, Hydrologic Unit 02040105, on right bank 1,200 ft upstream from bridge on State Highway 94 in Blairstown, 1,400 ft upstream from Blairs Creek, and 10 mi upstream from mouth. Water-quality samples collected at bridge 1,200 ft downstream from gage at high flows.

DRAINAGE AREA.--126 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--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 ft³/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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	1500	1,120	3.63	Jan. 25	0600	1,640	5.04
Oct. 21	1815	1,120	3.63	Jan. 28	0300	*2,500	*6.41
Nov. 12	1400	1,210	3.91	Apr. 16	2015	1,560	4.87
Nov. 15	1700	1,380	4.43	May 1	0615	1,280	4.15
Jan. 20	0815	2,410	6.28	July 14	0045	1,230	3.98

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	36	279	214	102	773	324	287	1200	116	158	170	44
2	36	339	216	106	623	304	549	971	110	113	145	42
3	34	365	202	105	508	288	500	727	114	111	127	40
4	33	303	195	115	425	258	406	604	147	155	129	39
5	85	257	187	107	363	251	360	513	207	129	114	39
6	877	231	183	97	e350	333	331	529	187	102	103	39
7	514	222	176	63	332	409	325	491	146	90	93	42
8	308	248	164	83	324	364	386	423	126	90	85	44
9	207	230	162	e120	327	322	367	378	115	114	86	50
10	157	194	158	167	343	305	336	388	113	121	94	49
11	127	182	151	134	341	289	306	413	117	93	84	44
12	106	959	165	140	336	278	280	891	155	79	78	42
13	94	882	155	e140	267	287	304	695	132	551	112	45
14	101	772	135	146	256	331	326	513	120	939	123	63
15	224	1280	137	140	237	413	305	420	108	565	100	61
16	217	1210	147	130	224	429	1020	379	96	488	87	52
17	169	998	147	138	215	382	1290	372	90	378	91	94
18	133	780	140	126	208	349	1010	334	93	292	83	344
19	118	665	137	705	192	331	750	310	100	250	73	312
20	108	526	133	2120	205	484	582	284	109	215	66	208
21	659	410	e140	1570	463	498	493	255	101	184	63	151
22	848	374	154	1210	e530	448	425	247	93	158	63	133
23	512	342	133	979	e490	387	377	228	96	149	61	131
24	367	312	126	1020	e500	346	352	206	87	139	70	117
25	290	287	123	1520	e460	314	313	186	82	125	70	107
26	252	268	119	1190	e400	294	293	165	73	195	62	95
27	228	255	110	1470	e370	269	280	159	67	202	57	85
28	599	241	114	2170	e350	250	252	155	64	160	54	80
29	523	241	106	1590	e340	275	419	147	58	133	51	171
30	384	226	101	1240	---	288	982	140	108	123	48	192
31	317	---	103	1040	---	300	---	127	---	122	46	---
TOTAL	8663	13878	4633	19983	10752	10400	14206	12850	3330	6723	2688	2955
MEAN	279	463	149	645	371	335	474	415	111	217	86.7	98.5
MAX	877	1280	216	2170	773	498	1290	1200	207	939	170	344
MIN	33	182	101	63	192	250	252	127	58	79	46	39
CFSM	2.22	3.67	1.19	5.12	2.94	2.66	3.76	3.29	.88	1.72	.69	.78
IN.	2.56	4.10	1.37	5.90	3.17	3.07	4.19	3.79	.98	1.98	.79	.87

DELAWARE RIVER BASIN

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

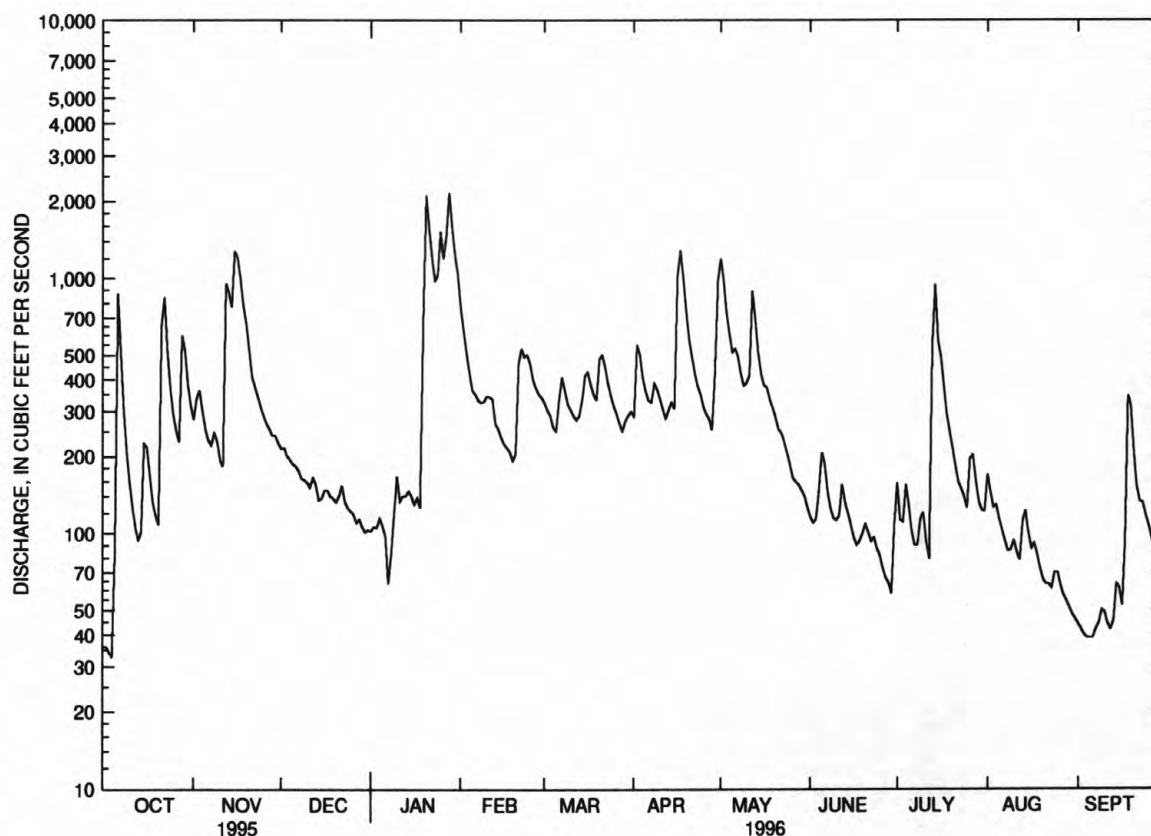
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	106	168	210	224	249	373	338	224	153	117	106	105
MAX	634	479	588	712	516	963	930	650	690	527	663	626
(WY)	1956	1933	1974	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 1995 CALENDAR YEAR			FOR 1996 WATER YEAR			WATER YEARS 1922 - 1996		
ANNUAL TOTAL	67206			111061					
ANNUAL MEAN	184			303			197		
HIGHEST ANNUAL MEAN							362		
LOWEST ANNUAL MEAN							67.4		
HIGHEST DAILY MEAN	1380			2170			5950		
LOWEST DAILY MEAN	12			33			5.0		
ANNUAL SEVEN-DAY MINIMUM	14			41			12		
INSTANTANEOUS PEAK FLOW				2500			8750		
INSTANTANEOUS PEAK STAGE				6.41			11.12a		
INSTANTANEOUS LOW FLOW				26			2.8		
ANNUAL RUNOFF (CFSM)	1.46			2.41			1.57		
ANNUAL RUNOFF (INCHES)	19.84			32.79			21.28		
10 PERCENT EXCEEDS	349			634			413		
50 PERCENT EXCEEDS	136			206			133		
90 PERCENT EXCEEDS	30			72			35		

a From high-water mark in gage house.

e Estimated.



01443500 PAULINS KILL AT BLAIRSTOWN, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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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 1995 TO SEPTEMBER 1996

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-URE (MM 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 1995													
02...	1145	341	324	8.0	11.5	753	10.2	95	<1.0	460	250	120	
FEB 1996													
01...	1130	707	315	8.1	0.5	754	13.7	96	<1.0	20	30	110	
APR													
03...	1200	494	382	8.3	9.0	748	11.7	103	E1.5	<20	10	130	
JUN													
19...	1130	98	421	8.0	21.0	750	7.6	87	E2.1	260	70	170	
AUG													
01...	1145	185	366	8.2	20.5	748	8.4	95	<1.0	9200	770	140	
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)	ALKA-LINITY LAB 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 1995													
02...	30	11	15	1.4	95	22	25	<0.1	6.8	196	171	4	
FEB 1996													
01...	26	10	17	1.1	85	14	29	<0.1	5.7	158	158	8	
APR													
03...	32	11	24	1.2	105	17	45	<0.1	3.1	202	199	4	
JUN													
19...	41	16	19	1.4	141	15	36	<0.1	5.1	228	221	4	
AUG													
01...	34	13	18	1.4	119	14	33	<0.1	5.9	216	193	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-SOLVED (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 1995													
02...	0.010	0.58	<0.03	<0.03	0.50	0.33	1.1	0.91	0.03	0.02	5.3	0.4	
FEB 1996													
01...	0.007	1.00	<0.03	<0.03	0.30	0.24	1.3	1.2	0.01	<0.01	3.3	0.4	
APR													
03...	0.005	0.55	<0.03	<0.03	0.30	0.19	0.85	0.74	0.02	<0.01	3.3	0.7	
JUN													
19...	0.031	0.60	0.05	0.03	0.50	0.36	1.1	0.96	0.07	0.05	3.7	0.6	
AUG													
01...	0.013	0.50	<0.03	0.04	0.30	0.29	0.80	0.79	<0.01	0.01	4.1	0.6	

DELAWARE RIVER BASIN

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 19...	1130	17	<1	<10	70	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 19...		270	<1	80	<0.1	<1	<1	<10

DELAWARE RIVER BASIN

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01443900 YARDS CREEK NEAR BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'51", long 75°02'25", Warren County, Hydrologic Unit 02040105, on left bank 100 ft upstream from bridge on Hainesburg-Mount Vernon Road, 1.4 mi downstream of Yards Creek Reservoir, 2.2 mi northeast of Hainesburg, 4.2 mi west of Blairstown, and 2.4 mi upstream from mouth.

DRAINAGE AREA.--5.34 mi².

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 good except for estimated daily discharges, which are fair. 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 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	31	13	4.0	80	42	9.7	39	7.7	4.2	23	3.3
2	2.8	37	12	3.8	27	22	21	36	7.6	3.7	13	3.3
3	2.9	34	11	4.1	e24	20	23	36	5.5	4.1	5.6	3.1
4	3.0	31	8.9	4.6	e25	23	22	35	4.4	4.1	5.5	3.2
5	10	27	6.7	7.5	e24	21	20	32	4.6	3.8	5.3	3.3
6	20	24	6.7	10	e26	22	18	31	4.1	4.4	5.1	3.3
7	5.5	23	6.4	15	28	25	18	24	3.9	3.7	4.8	3.6
8	3.9	22	6.1	9.2	11	32	17	21	4.0	4.1	4.5	3.6
9	3.3	20	6.3	7.2	10	55	17	20	4.0	4.3	4.2	3.4
10	3.1	18	6.7	4.5	10	65	17	20	4.2	3.6	4.1	3.4
11	2.9	19	e5.3	3.9	9.9	23	13	23	3.7	3.4	3.9	3.4
12	2.8	35	e5.4	3.9	9.5	14	9.5	22	3.5	3.5	3.8	3.4
13	3.0	30	e6.0	3.9	15	9.9	10	21	3.6	22	5.9	3.8
14	13	36	9.8	3.5	10	11	9.8	21	3.5	10	4.2	3.7
15	14	43	6.2	3.2	9.7	11	9.0	21	3.9	18	3.9	3.5
16	11	40	5.7	3.2	11	11	54	22	3.5	24	3.9	3.1
17	9.7	38	5.6	3.5	11	10	60	22	5.3	25	4.3	5.9
18	9.2	35	5.3	3.8	9.1	9.2	58	22	4.1	24	3.8	5.9
19	8.6	33	5.2	79	12	9.6	57	20	4.6	24	3.7	4.0
20	8.5	30	6.2	160	8.6	12	45	13	4.2	23	3.8	3.7
21	41	27	6.4	131	14	11	32	9.1	3.7	22	3.7	3.6
22	58	24	5.3	77	12	11	31	9.3	3.9	20	3.7	4.4
23	58	22	4.9	22	12	16	33	9.0	4.0	19	3.6	3.5
24	51	20	4.6	39	14	18	23	8.9	3.4	15	4.1	3.6
25	44	18	4.3	52	11	17	17	8.8	3.7	7.3	3.7	3.7
26	38	17	3.8	28	15	17	15	8.4	3.5	20	3.4	3.5
27	34	15	4.2	77	22	13	9.4	7.7	3.4	23	3.3	3.5
28	49	14	4.2	61	41	9.2	8.7	7.2	3.6	20	3.5	7.8
29	40	14	4.4	51	57	10	21	7.5	3.6	20	3.3	8.9
30	36	13	4.8	49	---	10	36	7.6	5.9	20	3.2	4.8
31	33	---	4.3	52	---	9.4	---	7.6	---	21	3.3	---
TOTAL	622.0	790	195.7	976.8	568.8	589.3	734.1	592.1	128.6	424.2	155.1	121.2
MEAN	20.1	26.3	6.31	31.5	19.6	19.0	24.5	19.1	4.29	13.7	5.00	4.04
MAX	58	43	13	160	80	65	60	39	7.7	25	23	8.9
MIN	2.8	13	3.8	3.2	8.6	9.2	8.7	7.2	3.4	3.4	3.2	3.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1996, BY WATER YEAR (WY)

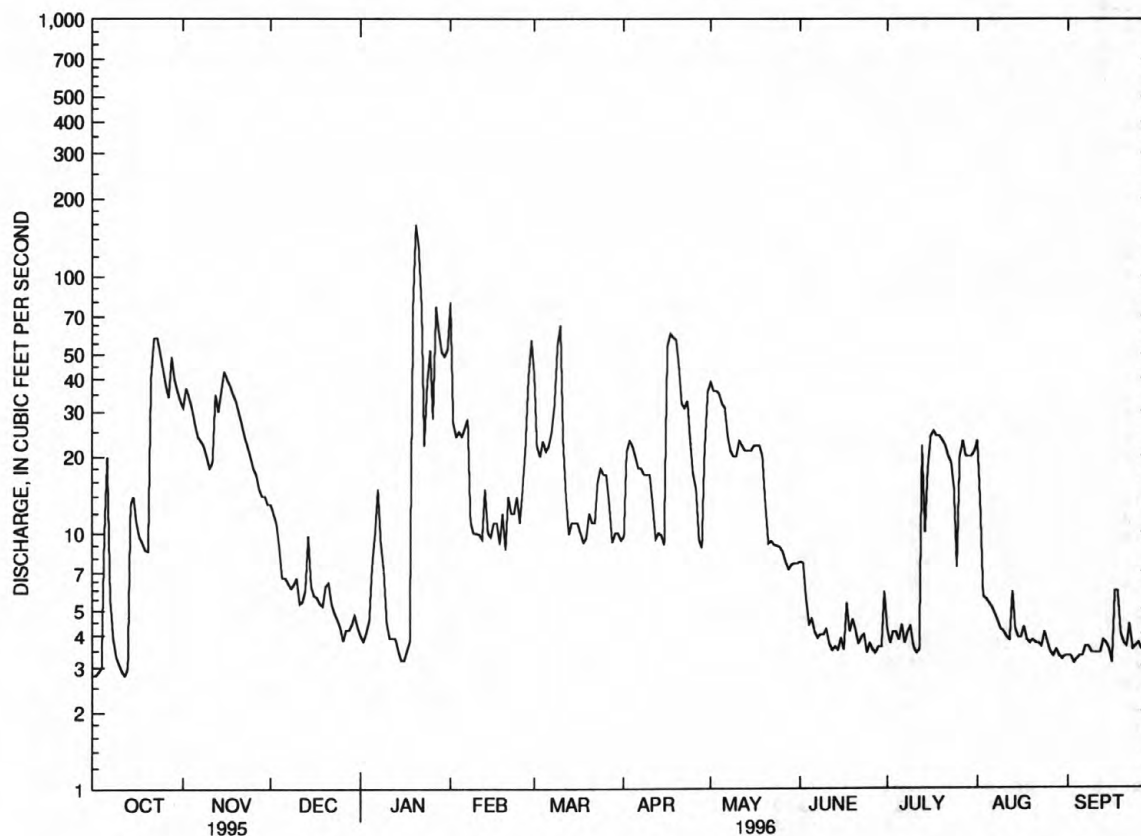
MEAN	5.66	8.23	13.7	14.9	14.7	17.9	18.4	14.1	8.84	5.10	4.68	4.68
MAX	33.6	26.3	37.7	51.0	36.4	50.1	55.3	33.7	35.2	19.9	21.6	27.0
(WY)	1990	1996	1974	1979	1979	1977	1983	1989	1972	1984	1969	1987
MIN	.97	1.20	.91	1.66	2.24	6.99	4.43	1.58	1.00	.89	.65	.58
(WY)	1981	1967	1981	1981	1985	1973	1981	1970	1980	1980	1980	1980

DELAWARE RIVER BASIN

01443900 YARDS CREEK NEAR BLAIRSTOWN, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1967 - 1996	
ANNUAL TOTAL	3795.5		5897.9		10.9	
ANNUAL MEAN	10.4		16.1		16.1	
HIGHEST ANNUAL MEAN					3.17	
LOWEST ANNUAL MEAN					1996	
HIGHEST DAILY MEAN	58	Oct 22	160	Jan 20	225	Jan 18 1977
LOWEST DAILY MEAN	2.1	Sep 4	2.8	Oct 1	.02	Jun 19 1970
ANNUAL SEVEN-DAY MINIMUM	2.2	Aug 31	3.2	Aug 29	.46	Oct 7 1980
INSTANTANEOUS PEAK FLOW			210	Jan 19	583	Feb 24 1977
INSTANTANEOUS PEAK STAGE			3.20	Jan 19	3.92	Feb 24 1977
INSTANTANEOUS LOW FLOW			2.8	Sep 3	.00	Sep 12 1971
10 PERCENT EXCEEDS	27		36		24	
50 PERCENT EXCEEDS	5.3		9.7		4.9	
90 PERCENT EXCEEDS	2.6		3.5		1.2	

e Estimated.



01443900 YARDS CREEK NEAR BLAIRSTOWN, NJ, DAILY MEAN DISCHARGE

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 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1902: 1940(M), 1945, 1955(M), 1957, 1959(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1929. Datum of gage is 398.78 ft above 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 poor. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 22	0030	1,120	4.17	Apr. 2	0630	682	3.20
Nov. 12	1445	832	3.55	Apr. 16	1545	1,100	4.12
Nov. 15	1130	983	3.88	May 1	0130	895	3.69
Jan. 20	0245	1,320	4.56	May 12	0600	670	3.17
Jan. 25	0315	1,260	4.45	July 13	1930	836	3.56
Jan. 28	0115	*1,510	*4.92				

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	28	158	164	96	699	279	272	785	123	142	114	55
2	27	195	167	96	623	270	567	588	111	106	107	52
3	26	199	156	84	472	263	416	471	112	96	148	51
4	26	170	150	92	e380	240	356	410	125	104	268	53
5	48	148	139	90	e340	238	311	372	181	98	150	54
6	349	136	145	83	e330	331	286	362	158	84	119	53
7	173	132	137	e49	e300	387	291	341	138	75	104	58
8	121	159	131	56	e280	336	354	316	127	75	93	57
9	70	149	135	80	e270	281	330	292	110	97	89	54
10	56	140	129	95	e280	266	315	276	113	82	94	52
11	49	134	103	92	e290	257	288	303	107	71	86	52
12	44	730	118	90	e295	250	265	588	110	66	80	52
13	41	533	110	89	e240	260	263	444	105	455	88	55
14	53	445	110	92	e230	309	262	363	98	503	92	67
15	264	926	118	91	e220	349	252	309	89	478	82	67
16	149	715	124	87	e200	352	787	283	82	390	78	60
17	102	565	125	92	e190	307	797	275	82	263	77	90
18	80	446	119	95	e180	281	627	261	97	213	83	176
19	69	387	116	562	e175	265	506	245	92	183	75	170
20	64	340	e100	1280	e180	430	429	222	101	170	69	120
21	675	303	112	e1200	527	396	381	207	101	140	67	88
22	820	283	128	e850	487	360	332	210	97	117	73	87
23	385	265	119	e770	429	317	311	213	115	122	77	99
24	233	238	114	918	464	293	295	197	96	121	76	90
25	193	216	110	1210	422	278	272	178	87	111	78	84
26	165	202	107	982	372	258	268	161	77	127	69	81
27	140	193	96	1110	335	241	248	156	71	146	62	76
28	281	183	105	1480	325	233	226	155	67	127	60	74
29	246	173	98	1440	301	268	330	152	65	109	60	124
30	199	168	90	1290	---	303	625	139	106	106	57	116
31	172	---	96	1030	---	290	---	128	---	111	55	---
TOTAL	5348	9031	3771	15671	9836	9188	11262	9402	3143	5088	2830	2367
MEAN	173	301	122	506	339	296	375	303	105	164	91.3	78.9
MAX	820	926	167	1480	699	430	797	785	181	503	268	176
MIN	26	132	90	49	175	233	226	128	65	66	55	51
CFSM	1.63	2.84	1.15	4.77	3.20	2.80	3.54	2.86	.99	1.55	.86	.74
IN.	1.88	3.17	1.32	5.50	3.45	3.22	3.95	3.30	1.10	1.79	.99	.83

DELAWARE RIVER BASIN

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	86.5	129	160	172	198	279	264	186	128	105	91.5	88.8
MAX	391	409	426	627	371	750	720	430	556	487	409	354
(WY)	1990	1928	1974	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 1995 CALENDAR YEAR

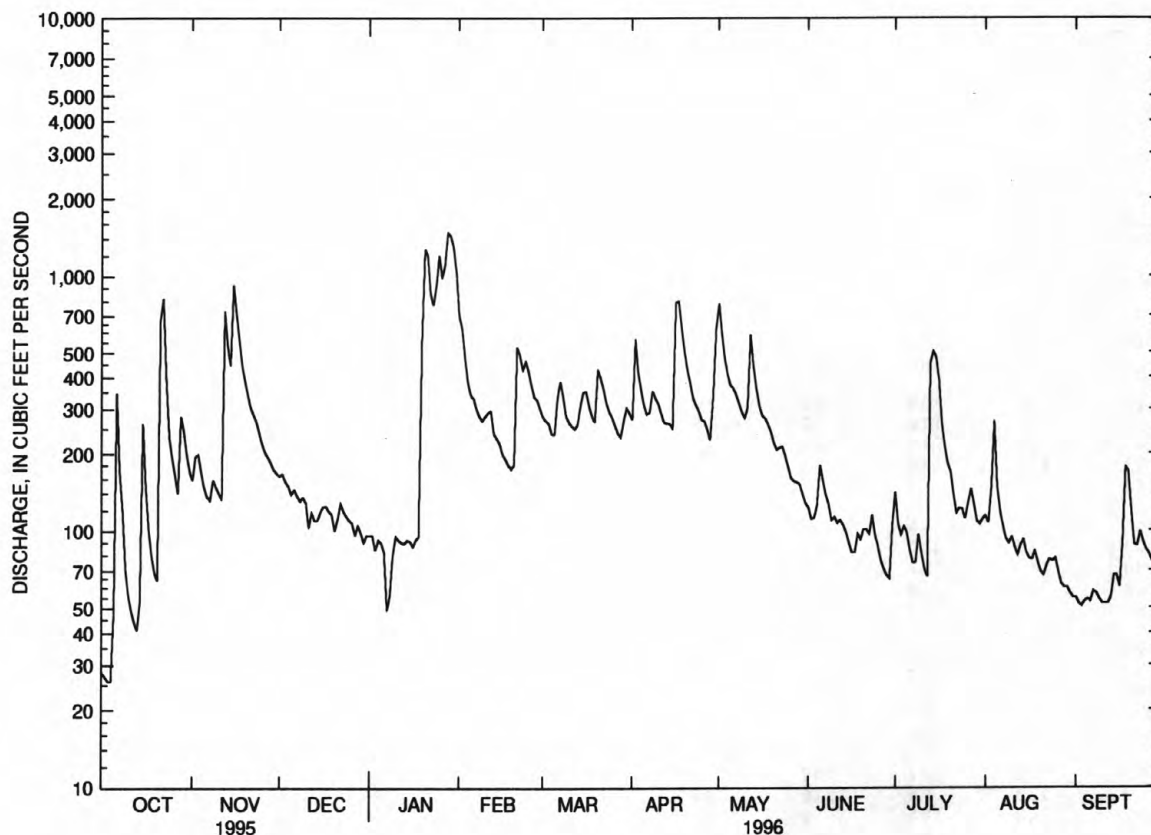
FOR 1996 WATER YEAR

WATER YEARS 1922 - 1996

ANNUAL TOTAL	48874			86937								
ANNUAL MEAN	134			238				157				
HIGHEST ANNUAL MEAN								285			1952	
LOWEST ANNUAL MEAN								45.8			1965	
HIGHEST DAILY MEAN	1070	Mar 9		1480	Jan 28			2040		Jan 25	1979	
LOWEST DAILY MEAN	20	Sep 6		26	Oct 3			12		Aug 18	1965	
ANNUAL SEVEN-DAY MINIMUM	21	Sep 3		53	Aug 31			13		Aug 15	1965	
INSTANTANEOUS PEAK FLOW				1510	Jan 28			2130		Jan 25	1979	
INSTANTANEOUS PEAK STAGE				4.92	Jan 28			5.97a		Jan 25	1979	
INSTANTANEOUS LOW FLOW				26	Oct 2			12		Aug 17	1965	
ANNUAL RUNOFF (CFSM)	1.26			2.24				1.48				
ANNUAL RUNOFF (INCHES)	17.15			30.51				20.13				
10 PERCENT EXCEEDS	248			471				329				
50 PERCENT EXCEEDS	110			155				112				
90 PERCENT EXCEEDS	28			67				36				

a From high-water mark.

e Estimated.



01445500 PEQUEST RIVER AT PEQUEST, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

PERIOD OF RECORD.--Water years 1958-80, 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 1995 TO SEPTEMBER 1996

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 1995													
20...	1230	337	434	8.2	5.5	751	11.7	94	2.2	170	40	190	
JAN 1996													
31...	1130	1040	356	8.1	1.5	750	13.2	96	<1.0	110	30	160	
APR 02...	1100	650	403	8.0	7.0	748	11.0	92	2.4	5400	320	160	
JUN 11...	1100	106	499	8.2	19.0	752	7.9	86	E1.8	230	80	230	
JUL 30...	1115	106	511	8.4	17.0	752	8.9	93	E1.5	2400	90	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)	ALKA-LINITY 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 1995													
20...	44	19	13	1.5	159	26	23	<0.1	8.5	236	235	11	
JAN 1996													
31...	36	16	13	1.7	123	17	23	0.1	5.7	190	192	30	
APR 02...	38	16	19	2.0	129	23	33	0.1	4.2	262	218	72	
JUN 11...	52	24	14	1.6	201	19	27	0.1	8.0	248	272	9	
JUL 30...	53	25	16	1.9	201	21	31	<0.1	8.4	298	282	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-SOLVED (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 1995													
20...	0.005	1.10	0.05	0.03	0.40	0.39	1.5	1.5	0.02	0.02	5.3	0.6	
JAN 1996													
31...	0.010	1.40	<0.03	<0.03	0.50	0.37	1.9	1.8	0.12	0.08	3.8	0.2	
APR 02...	0.012	1.30	<0.03	0.03	1.1	0.52	2.4	1.8	0.20	0.06	6.6	>4.0	
JUN 11...	0.033	1.20	0.08	0.09	0.50	0.38	1.7	1.6	0.07	0.03	3.9	0.7	
JUL 30...	0.032	1.20	0.11	0.06	0.40	0.33	1.6	1.5	0.02	0.02	4.0	0.5	

DELAWARE RIVER BASIN423

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 20...	1230	--	<1	<10	20	<1	<1	2
JUN 1996 11...	1100	11	1	<10	30	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1995 20...	360	<1	40	<0.1	<1	<1	<10
JUN 1996 11...	270	<1	40	<0.1	<1	<1	<10

DELAWARE RIVER BASIN

415

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 mi².

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

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

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

REMARKS.--Records good. 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 ft³/s, from rating curve extended above 170,000 ft³/s.

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	1940	7760	8940	3240	22100	15900	9220	40300	4070	4290	6700	2290
2	1920	8010	7940	3170	18700	13800	12000	41600	3820	5000	6610	2080
3	1890	8280	7120	3110	16400	12500	12200	31200	3410	4740	6540	2080
4	1940	8700	6720	3930	13500	10700	11200	25500	3670	5270	5360	2250
5	2380	7980	7360	3240	11100	10200	10100	21900	4390	4590	5050	2440
6	6230	6930	7680	3020	10500	10300	8890	20200	4050	4430	4910	2510
7	5390	6710	7470	3080	10300	11200	8370	19900	3640	4230	5290	3480
8	4270	6600	7180	3240	10400	11400	9240	18500	3720	3820	4630	3670
9	3360	6410	6760	3380	10400	9820	9930	16500	3390	4250	4340	4000
10	2530	6440	5400	3560	10600	8370	9820	15600	4330	4680	4620	3860
11	2090	5550	4060	3900	10200	7800	8980	17000	6810	4040	4290	3190
12	1710	13900	4290	3900	9380	8590	8390	25600	10700	3290	3120	2460
13	1790	26400	4920	4020	7710	8010	7960	34000	11000	8030	3570	2310
14	2130	21200	5010	4240	7240	9260	12200	30300	13500	21400	4500	2520
15	3330	24300	5070	3420	7120	10500	21600	24300	10900	22300	3720	2440
16	3880	30300	5910	3170	6650	13000	33100	20400	8050	18800	2870	2440
17	4680	24900	6080	4330	6270	13300	56600	18100	6730	21400	3200	2800
18	3440	19500	4950	4630	5870	11400	43200	16000	6470	16800	3100	4940
19	2680	16400	5190	12600	5000	12100	32100	13800	6550	13700	2880	10300
20	2300	14900	4500	111000	5800	14600	25300	12600	6590	12000	2690	7600
21	7690	13900	4440	69400	9770	19300	20300	12300	7020	10500	2650	5330
22	29100	12900	4920	35000	18800	18800	17200	11600	6170	8780	2290	4010
23	30400	11700	4990	25600	21700	16300	16000	10900	5810	8230	2230	3650
24	16400	9590	3740	21900	23000	13500	16000	9820	4640	7540	3230	4170
25	11400	8840	3510	30100	26100	11900	16100	8750	4860	6680	2860	4670
26	8790	8070	3600	28100	23300	11600	15300	6870	4670	8630	3190	4090
27	7120	7460	3650	34000	20200	11600	14400	5940	4320	11600	3000	4050
28	8680	7470	4670	85500	17800	11200	12300	5340	3950	10100	2970	3920
29	10800	7400	4680	62000	17000	11100	12300	5280	3710	8000	2480	5580
30	12000	8390	4100	42400	---	10700	19900	4960	3880	7420	2980	6570
31	9210	---	3870	29300	---	9640	---	4620	---	7150	2940	---
TOTAL	211470	366890	168720	651480	382910	368390	510200	549680	174820	281690	118810	115700
MEAN	6822	12230	5443	21020	13200	11880	17010	17730	5827	9087	3833	3857
MAX	30400	30300	8940	111000	26100	19300	56600	41600	13500	22300	6700	10300
MIN	1710	5550	3510	3020	5000	7800	7960	4620	3390	3290	2230	2080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1996, BY WATER YEAR (WY)

	MEAN	4620	7196	8322	8037	8357	13960	15950	9908	5900	4342	3679	3781
MAX	19570	21140	20590	21020	19930	42520	40720	21470	22280	16840	19260	13940	
(WY)	1956	1928	1974	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	

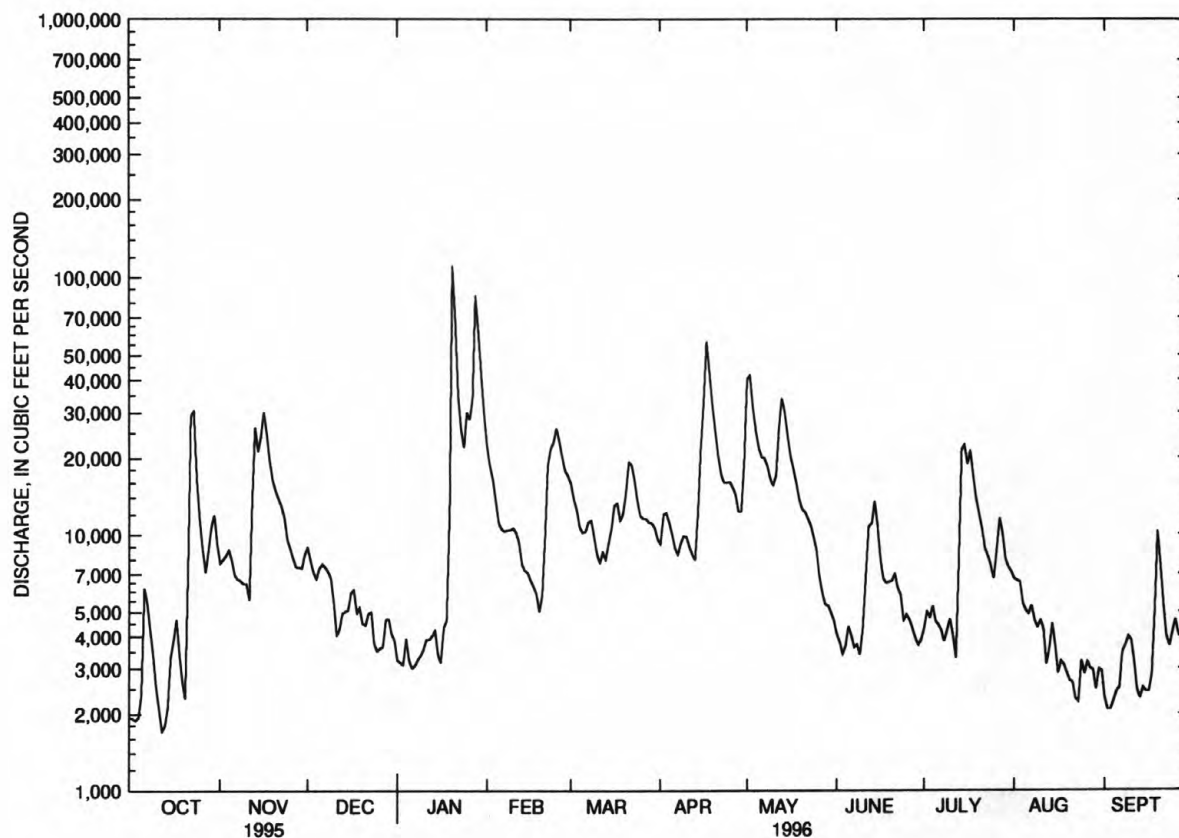
DELAWARE RIVER BASIN

01446500 DELAWARE RIVER AT BELVIDERE, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1923 - 1996	
ANNUAL TOTAL	2237320		3900760			
ANNUAL MEAN	6130		10660			
HIGHEST ANNUAL MEAN					7830	
LOWEST ANNUAL MEAN					14130	1928
HIGHEST DAILY MEAN	31200	Mar 10	111000	Jan 20	2990	1965
LOWEST DAILY MEAN	1600	Aug 11	1710	Oct 12	184000	Aug 19 1955
ANNUAL SEVEN-DAY MINIMUM	2000	Aug 24	2370	Aug 31	610	Aug 25 1954
INSTANTANEOUS PEAK FLOW			158000	Jan 20	782	Aug 14 1954
INSTANTANEOUS PEAK STAGE			22.96	Jan 20	273000a	Aug 19 1955
INSTANTANEOUS LOW FLOW			1600	Oct 12	30.21b	Aug 19 1955
10 PERCENT EXCEEDS	12200		21900		609	Sep 28 1943
50 PERCENT EXCEEDS	4590		7380		16600	
90 PERCENT EXCEEDS	2130		3010		5000	
					1930	

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

b From high-water mark in gage house.



01446500 DELAWARE RIVER AT BELVIDERE, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01447000 DELAWARE RIVER AT NORTHAMPTON STREET AT EASTON, PA

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

DRAINAGE AREA.--4,717 mi².

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

REMARKS.--For February 20, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

		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 1995	28...	1145	7610	135	7.9	4.5	749	12.0	94	E1.3	<20	10	44
FEB 1996	20...	1200	5520	179	7.7	3.0	760	13.3	99	--	--	--	56
APR	10...	1100	10100	130	7.9	7.0	748	12.4	104	E1.8	<20	10	43
JUN	25...	1200	4730	--	8.0	23.0	749	8.1	--	E2.0	70	30	61
AUG	06...	1200	5310	143	7.8	24.5	761	8.0	96	<1.0	40	40	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)	ALKA-LINITY 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 1995	28...	12	3.4	6.7	0.80	29	13	10	<0.1	4.0	72	70	1
FEB 1996	20...	15	4.4	14	1.0	38	13	21	<0.1	4.7	110	100	1
APR	10...	12	3.2	8.0	0.70	30	11	14	<0.1	1.5	72	71	3
JUN	25...	17	4.6	8.1	1.2	41	18	11	<0.1	3.7	102	92	9
AUG	06...	13	3.4	7.3	1.0	35	12	11	<0.1	2.5	66	73	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. TOTAL (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (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 1995	28...	0.005	0.57	<0.03	<0.03	0.20	0.14	0.77	0.71	0.03	<0.01	2.5	0.2
FEB 1996	20...	--	0.92	--	--	0.30	0.17	1.2	1.1	0.02	0.02	2.2	0.2
APR	10...	0.003	0.49	<0.03	<0.03	0.20	0.16	0.69	0.65	<0.01	<0.01	2.1	0.4
JUN	25...	0.010	0.81	<0.03	<0.03	0.20	0.17	1.0	0.98	<0.01	<0.01	3.0	0.2
AUG	06...	0.013	0.42	<0.03	<0.03	0.20	0.09	0.62	0.51	<0.01	<0.01	2.8	0.3

DELAWARE RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 25...	1200	19	<1	<10	30	<1	<1	2
DATE	TIME	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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
JUN 1996 25...	270		<1	50	<0.1	<1	<1	<10

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)	MERCURY DIS- SOLVED (UG/L) AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L) AS NI) (01065)	ZINC, DIS- SOLVED (UG/L) AS ZN) (01090)
JUN 1996 25...	1200	FIELD BLANK	<1	<1	<0.1	<1	<1

LAKES AND RESERVOIRS IN LEHIGH RIVER BASIN

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, 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 mi². 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.

COOPERATION.--Records provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 62,100 acre-ft, Sept. 28, 1985, elevation, 1,417.08 ft; minimum contents (after establishment of conservation pool), 980 acre-ft, July 6, 1982, elevation, 1,287.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 14,380 acre-ft, Oct. 2, elevation, 1,355.95 ft; minimum contents, 1,720 acre-ft, Jan. 20, elevation, 1,297.39 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 mi². PERIOD OF RECORD, October 1958 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by city of Bethlehem).

REMARKS.--Reservoir formed by an earthfill dam with ungated concrete spillway at elevation 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.

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, 176 acre-ft, Oct. 6, 1965, elevation, 902.40 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 18,660 acre-ft, Oct. 3, elevation, 997.07 ft; minimum contents, 1,880 acre-ft, Aug. 21, elevation, 932.15 ft.

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 mi². 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, 12,360 acre-ft, Dec. 8, elevation, 821.20 ft; minimum contents 8,800 acre-ft, Sept. 30, elevation 807.72 ft.

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 mi². 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.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

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, 42,280 acre-ft, July 10, elevation, 629.08 ft; minimum contents, 31,640 acre-ft, Sept. 15, elevation, 616.72 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)
01447780 FRANCIS E. WALTER RESERVOIR				01449400 PENN FOREST RESERVOIR		
Sept. 30.....	1,355.21	14,070	--	996.88	18,570	--
Oct. 31.....	1,302.36	2,240	-192	994.54	17,540	- 16.8
Nov. 30.....	1,308.99	2,960	+ 12.1	994.98	17,720	+ 3.0
Dec. 31.....	1,300.46	2,050	- 14.8	975.10	10,370	-120
CAL YR 1995	--	--	- 0.2	--	--	- 10.8
Jan. 31.....	1,300.38	2,040	- 0.2	969.78	8,840	- 24.9
Feb. 28.....	1,301.10	2,110	+ 1.3	954.95	5,340	- 63.0
Mar. 31.....	1,304.72	2,480	+ 6.0	950.00	4,400	- 15.3
Apr. 30.....	1,300.57	2,060	- 7.1	950.00	4,400	0
May 31.....	1,305.83	2,600	+ 8.8	950.28	4,460	+ 1.0
June 30.....	1,301.99	2,200	- 6.7	945.99	3,730	- 12.3
July 31.....	1,299.51	1,950	- 4.1	940.92	2,950	- 12.7
Aug. 31.....	1,300.15	2,020	+ 1.1	932.66	1,940	- 16.4
Sept. 30.....	1,300.81	2,080	+ 1.0	934.58	2,140	+ 3.4
WTR YR 1996	--	--	- 16.6	--	--	- 22.7

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

LEHIGH RIVER BASIN

LAKES AND RESERVOIRS IN LEHIGH RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)
01449700 WILD CREEK RESERVOIR				01449790 BELTZVILLE LAKE		
Sept. 30.....	818.58	11,690	--	627.97	41,220	--
Oct. 31.....	818.01	11,530	- 2.6	627.56	40,830	- 6.3
Nov. 30.....	819.31	11,860	+ 5.5	628.40	41,630	+13.4
Dec. 31.....	819.77	11,950	+ 1.5	627.40	40,680	-15.5
CAL YR 1995	--	--	+ 0.6	--	--	- 0.7
Jan. 31.....	817.79	11,470	- 7.8	627.22	40,510	- 2.8
Feb. 28.....	817.46	11,380	- 1.6	627.30	40,580	+ 1.3
Mar. 31.....	819.96	11,990	+ 9.9	627.94	41,190	+ 9.9
Apr. 30.....	819.71	11,940	- 0.8	628.11	41,350	+ 2.7
May 31.....	817.96	11,520	- 6.8	627.98	41,230	- 2.0
June 30.....	818.01	11,530	+ 0.2	627.84	41,100	- 2.2
July 31.....	817.88	11,500	- 0.5	627.94	41,190	+ 1.5
Aug. 31.....	815.12	10,730	-12.5	623.84	37,410	-61.5
Sept. 30.....	807.72	8,800	-32.4	617.17	31,980	-91.3
WTR YR 1996	--	--	- 4.0	--	--	-12.8

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

01453000 LEHIGH RIVER AT BETHLEHEM, PA

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

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

PERIOD OF RECORD.--October 1902 to January 1905, May 1909 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at South Bethlehem" prior to October 1913.

REVISED RECORDS.--WSP 261: 1903-5. WSP 321: 1910-11. WSP 1051: Drainage area. WSP 1141: 1929-34(M). WSP 1302: 1914(M), 1916(M), 1918, 1921, 1927-28. WSP 1432: 1903, 1919(M), 1920-21, 1929, 1933.

GAGE.--Water-stage recorder. Datum of gage is 210.94 ft above sea level. Prior to October 1928, nonrecording gage at New Street bridge 120 ft downstream at same datum. Oct. 1, 1928, to Sept. 30, 1962, water-stage recorder at site 4,250 ft downstream at datum 2.49 ft lower. Oct. 1, 1963, to Dec. 14, 1975, water-stage recorder at site 40 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Wild Creek Reservoir (station 01449700) since January 1941, Penn Forest Reservoir (station 01449400) since October 1958, Francis E. Walter Reservoir (station 01447780) since February 1961, and Beltzville Lake (station 01449790) since February 1971. Satellite telemetry at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	429	2390	2590	1270	7030	4120	3830	8390	1640	2340	2200	817
2	410	2650	2280	1280	5830	3740	6330	8320	1610	2120	1890	758
3	411	2690	2140	1300	5350	3490	5040	7400	1440	1910	1900	691
4	487	2410	2120	1140	4880	3200	4540	5530	1410	1780	1910	679
5	1290	2260	2130	1060	4380	2850	4010	4880	1690	1780	1710	690
6	2110	2160	2230	989	3690	3290	3740	4400	1600	1710	1640	702
7	1450	1930	2140	e830	2820	4070	3730	4110	1530	1530	2010	923
8	1170	1850	1910	e770	2940	3980	4000	3890	1530	1510	1560	1060
9	930	1770	1810	e850	3110	3340	3510	3960	1700	2290	1300	981
10	913	1630	1730	e800	3060	3110	3470	3710	1660	1850	1510	961
11	821	1610	e1480	e820	2910	3070	3180	3580	1850	1410	1480	829
12	692	6160	e1420	e850	2940	2850	3020	6300	2590	1260	1260	724
13	626	4970	1370	e900	2850	3010	3060	6190	2470	3940	1520	696
14	684	7580	1400	947	2460	3170	3200	5590	1810	6110	1600	717
15	1160	8010	1510	939	2320	3300	3210	4960	1580	7540	1290	712
16	1140	7480	1720	843	2160	3660	10400	4500	1520	6100	1240	678
17	1000	6270	1710	858	1990	3520	10400	3910	1550	4890	1320	1400
18	1010	4780	1600	1100	1910	3440	9780	3470	1550	4020	1340	1440
19	868	4340	e1630	12600	1780	3370	7720	3290	1520	3180	1120	1310
20	759	4030	1340	29500	1950	5600	5960	3010	1750	2910	977	1210
21	4070	3580	1330	13900	5180	6740	5240	2850	1730	2580	953	1080
22	7500	3330	1450	14200	6360	6060	4570	2680	1590	2410	984	1350
23	5380	3090	1440	12900	6490	4700	3970	2530	1910	2090	986	1270
24	5800	2950	1420	13400	6550	4070	3740	2500	2150	1880	1130	893
25	3890	2650	1420	12600	6400	3850	3850	2340	2120	1870	1160	830
26	3180	2490	1320	10400	6020	4110	3660	2220	1630	2270	967	942
27	2730	2420	1080	18200	6510	3310	3330	2150	1320	2620	886	925
28	3700	2260	1200	24700	5410	2990	3200	2120	1190	2510	858	1190
29	3100	2320	1130	19700	4600	3890	3580	1950	1170	2480	839	1460
30	2700	2580	1090	15800	---	4200	4570	1790	2080	2470	804	1320
31	2500	---	1230	11600	---	3800	---	1680	---	2340	789	---
TOTAL	62910	104640	50370	227046	119880	117900	141840	124200	50890	85700	41133	29238
MEAN	2029	3488	1625	7324	4134	3803	4728	4006	1696	2765	1327	975
MAX	7500	8010	2590	29500	7030	6740	10400	8390	2590	7540	2200	1460
MIN	410	1610	1080	770	1780	2850	3020	1680	1170	1260	789	678
CFSM	1.59	2.73	1.27	5.73	3.23	2.97	3.70	3.13	1.33	2.16	1.04	.76
IN.	1.83	3.04	1.47	6.60	3.49	3.43	4.13	3.61	1.48	2.49	1.20	.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1996, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1555	2346	2856	2671	2765	3841	3957	3103	2067	1654	1342	1373
MAX	5778	5294	6991	7898	5820	7708	10180	7041	7272	6362	6192	6907
(WY)	1956	1952	1984	1979	1951	1977	1993	1989	1972	1945	1955	1987
MIN	406	474	514	286	1132	1632	1428	1053	681	366	405	334
(WY)	1964	1965	1981	1981	1980	1981	1985	1941	1965	1965	1964	1964

LEHIGH RIVER BASIN

01453000 LEHIGH RIVER AT BETHLEHEM, PA--Continued

SUMMARY STATISTICS	FOR 1995* CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1941 - 1996	
ANNUAL TOTAL	702926		1155747			
ANNUAL MEAN	1926		3158		2459	
HIGHEST ANNUAL MEAN					3973	1952
LOWEST ANNUAL MEAN					1165	1965
HIGHEST DAILY MEAN	9460	Mar 9	29500	Jan 20	70400	Aug 19 1955
LOWEST DAILY MEAN	381	Sep 16	410	Oct 2	210	Jan 31 1981
ANNUAL SEVEN-DAY MINIMUM	444	Sep 15	732	Aug 31	216	Jan 26 1981
INSTANTANEOUS PEAK FLOW			44900	Jan 20	92000a	May 23 1942
INSTANTANEOUS PEAK STAGE			16.68	Jan 20	25.90b	May 23 1942
INSTANTANEOUS LOW FLOW			400	Oct 2,3	125	Jun 28 1965
ANNUAL RUNOFF (CFSM)	1.51		2.47		1.92	
ANNUAL RUNOFF (INCHES)	20.44		33.62		26.12	
10 PERCENT EXCEEDS	3600		6170		4860	
50 PERCENT EXCEEDS	1520		2180		1770	
90 PERCENT EXCEEDS	644		891		685	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903-1904, 1909-1940, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1532	1827	2184	2346	2430	4134	3815	2280	1753	1530	1239	1214
MAX	4808	5660	5287	5287	5913	11920	7547	3681	4255	5182	4599	6407
(WY)	1903	1927	1939	1915	1915	1936	1940	1924	1928	1935	1933	1933
MIN	308	370	470	677	668	1887	1499	1020	832	572	428	374
(WY)	1911	1910	1931	1925	1934	1911	1915	1926	1921	1912	1910	1932

SUMMARY STATISTICS WATER YEARS 1903 - 1904
1909 - 1940

ANNUAL MEAN	2189	
HIGHEST ANNUAL MEAN	3600	1928
LOWEST ANNUAL MEAN	1262	1931
HIGHEST DAILY MEAN	47900	Aug 24 1933
LOWEST DAILY MEAN	160	Oct 15 1910
ANNUAL SEVEN-DAY MINIMUM	260	Oct 13 1910
INSTANTANEOUS PEAK FLOW	64800	Aug 24 1933
INSTANTANEOUS PEAK STAGE	18.70	Aug 24 1933
INSTANTANEOUS LOW FLOW	160	Oct 15 1910
ANNUAL RUNOFF (CFSM)	1.71	
ANNUAL RUNOFF (INCHES)	23.25	
10 PERCENT EXCEEDS	4420	
50 PERCENT EXCEEDS	1500	
90 PERCENT EXCEEDS	548	

a From rating curve extended above 48,000 ft³/s.

b From floodmark, present site and datum.

DELAWARE RIVER BASIN

423

01455200 POHATCONG CREEK AT NEW VILLAGE, NJ

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

DRAINAGE AREA.--33.3 mi².

PERIOD OF RECORD.--Water years 1959, 1962, 1979 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 1995 TO SEPTEMBER 1996

		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 1995	02...	1130	E45	167	7.8	12.0	753	10.0	94	E1.1	5400	1000	60
FEB 1996	14...	1145	E60	236	7.8	1.0	736	13.1	95	2.0	3500	140	75
APR	02...	1130	E205	156	7.6	6.5	751	11.2	92	2.9	1100	340	43
JUN	11...	1130	31	253	7.6	18.5	751	8.0	87	E1.7	1300	330	93
AUG	07...	1115	22	283	8.5	21.5	756	10.5	120	E4.3	9200	490	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)	ALKA-LINITY 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 1995	02...	15	5.4	8.1	2.3	41	16	13	<0.1	13	110	98	--
FEB 1996	14...	18	7.4	12	1.6	47	16	22	<0.1	14	134	129	6
APR	02...	11	3.7	10	1.7	27	11	17	<0.1	8.6	84	83	34
JUN	11...	22	9.2	9.6	2.0	66	16	17	<0.1	15	--	141	10
AUG	07...	25	11	11	2.1	80	16	19	<0.1	13	150	157	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-SOLVED (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 1995	02...	0.021	--	0.08	0.09	--	--	--	--	--	--	--	--
FEB 1996	14...	0.009	2.20	0.26	0.23	0.60	0.36	2.8	2.6	0.07	0.06	1.3	0.4
APR	02...	0.012	0.92	0.09	0.10	0.70	0.43	1.6	1.3	0.12	0.05	4.7	2.3
JUN	11...	0.085	2.30	0.10	0.08	0.30	0.30	2.6	2.6	0.11	0.11	2.1	0.4
AUG	07...	0.048	2.70	0.03	<0.03	0.20	0.15	2.9	2.9	0.10	0.02	1.8	0.3

DELAWARE RIVER BASIN

01455200 POHATCONG CREEK AT NEW VILLAGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 11...	1130	12	<1	<10	20	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 11...	250	<1	30	<0.1	<1	<1	<10

DELAWARE RIVER BASIN

425

01456200 MUSCONETCONG RIVER AT BEATTYSTOWN, NJ

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

DRAINAGE AREA.--90.3 mi².

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 OCTOBER 1995 TO SEPTEMBER 1996

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 OF 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 TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)
NOV 1995 08...	1100	295	329	8.2	6.5	740	12.2	102	<1.0	170	30	92
JAN 1996 31...	1100	490	282	7.8	1.5	745	14.0	102	<1.0	<20	20	71
APR 03...	1100	390	343	8.1	8.0	749	12.0	103	E1.9	40	10	89
JUN 12...	1100	180	415	7.8	21.5	748	8.4	97	E1.6	2400	130	140
JUL 30...	1130	142	396	8.1	19.5	754	8.6	95	E1.3	330	100	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)	ALKA-LINITY 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 1995 08...	22	9.1	25	1.4	62	17	47	0.1	5.4	172	168	<1
JAN 1996 31...	17	6.9	22	1.1	48	13	45	<0.1	8.2	136	146	6
APR 03...	21	8.8	27	1.4	63	15	51	<0.1	5.1	174	170	7
JUN 12...	30	16	27	1.8	103	16	51	<0.1	8.1	234	219	15
JUL 30...	30	14	27	2.0	97	16	51	0.1	8.4	218	212	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-SOLVED (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 1995 08...	0.003	0.76	0.03	0.09	0.30	0.31	1.1	1.1	0.09	0.05	3.6	0.4
JAN 1996 31...	0.005	0.81	<0.03	<0.03	0.20	0.19	1.0	1.0	0.01	0.02	2.4	0.4
APR 03...	0.004	0.72	<0.03	<0.03	0.30	0.21	1.0	0.93	0.02	0.01	2.9	0.7
JUN 12...	0.018	1.60	<0.03	0.03	0.50	0.27	2.1	1.9	0.07	<0.01	2.9	1.5
JUL 30...	0.011	1.30	<0.03	0.04	0.30	0.29	1.6	1.6	<0.01	<0.01	3.1	0.5

DELAWARE RIVER BASIN

01456200 MUSCONETCONG RIVER AT BEATTYSTOWN, NJ--Continued

WATER QUALITY DATA, WATER OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 12...	1100	13	1	<10	20	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 12...		390	1	100	<0.1	1	<1	<10

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 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1051: 1944-45. WSP 1382: 1904-06, 1922, 1923-29(M), 1931(M), 1933-34(M), 1936(M), 1940, 1942(M), 1944-45(M), 1951-52(M). WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Sept. 29, 1932. Datum of gage is 274.83 ft above 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	1115	1,500	4.38	Jan. 24	2030	1,520	4.42
Oct. 21	0645	1,710	4.65	Jan. 27	2200	2,920	5.82
Oct. 21	1900	2,490	5.44	Apr. 16	1130	1,090	3.74
Nov. 12	0545	1,270	4.04	June 22	1815	1,770	4.72
Nov. 15	0315	1,240	3.99	July 13	1215	1,520	4.42
Jan. 19	2215	*3,690	*6.40	July 15	0615	1,060	3.69

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	84	311	376	135	798	451	436	842	160	211	215	91
2	75	399	373	137	736	436	771	724	153	168	194	92
3	76	376	362	142	692	414	651	628	148	155	179	89
4	75	369	358	133	666	386	570	608	170	162	191	90
5	242	348	340	122	619	389	511	585	296	164	220	89
6	1060	326	348	106	609	478	472	603	254	147	210	91
7	541	345	337	100	563	525	472	579	224	143	198	100
8	347	412	326	e150	557	476	520	489	208	159	178	103
9	271	389	329	257	574	424	502	439	199	285	172	104
10	224	349	319	118	563	399	494	387	218	234	165	94
11	196	360	e280	90	527	357	496	422	207	168	154	87
12	e160	947	e260	80	473	347	479	674	219	137	145	88
13	e120	801	e240	80	395	354	477	570	247	877	149	101
14	e170	785	e210	80	e400	373	464	490	211	795	151	137
15	e390	1040	194	79	e360	406	410	440	192	763	140	118
16	e320	882	186	71	e350	489	796	421	178	647	132	98
17	e280	752	182	73	e330	430	771	409	173	520	129	153
18	e215	670	174	80	e320	399	637	379	176	421	124	246
19	e170	628	174	1430	e310	390	583	362	179	380	119	246
20	179	570	162	2340	e360	617	512	335	183	342	116	181
21	1520	523	193	1350	698	589	496	302	177	282	115	153
22	778	479	180	934	679	517	489	266	333	245	111	145
23	562	441	171	762	619	480	415	249	211	237	105	150
24	454	427	164	995	632	452	429	243	184	227	116	136
25	381	407	158	1140	609	471	392	220	165	207	116	125
26	320	395	157	870	564	440	345	206	144	271	111	116
27	290	384	147	1640	524	408	321	205	133	239	106	106
28	420	376	150	2250	514	407	317	207	129	210	105	110
29	371	378	136	1590	481	524	431	207	126	199	101	228
30	323	375	130	1160	---	525	730	183	203	201	94	202
31	293	---	135	935	---	482	---	171	---	216	96	---
TOTAL	10907	15244	7251	19429	15522	13835	15389	12845	5800	9412	4457	3869
MEAN	352	508	234	627	535	446	513	414	193	304	144	129
MAX	1520	1040	376	2340	798	617	796	842	333	877	220	246
MIN	75	311	130	71	310	347	317	171	126	137	94	87

DELAWARE RIVER BASIN

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1996, BY WATER YEAR (WY)

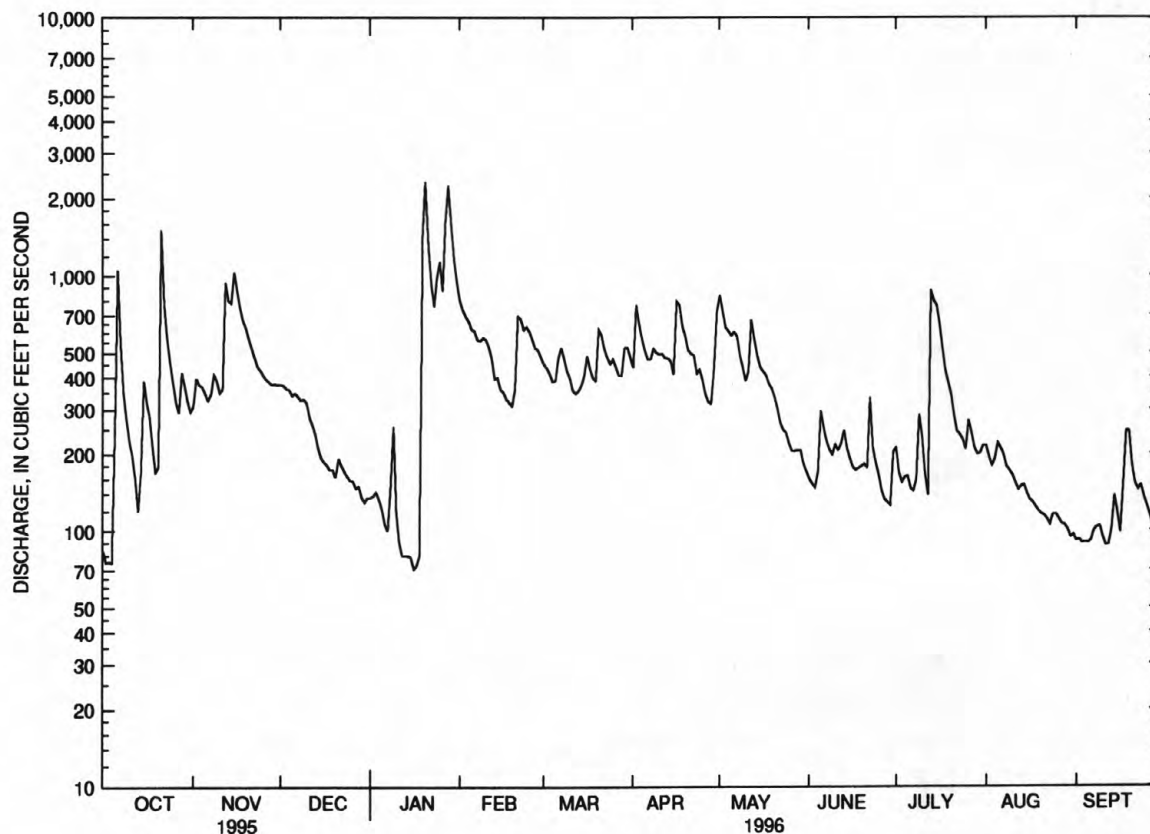
MEAN	174	230	265	266	279	349	355	274	197	163	151	157
MAX	770	701	686	924	582	935	1027	680	843	659	583	454
(WY)	1904	1928	1974	1979	1973	1936	1983	1989	1972	1975	1928	1960
MIN	41.2	61.2	57.3	73.7	99.4	127	103	98.1	56.8	38.1	38.5	37.3
(WY)	1964	1966	1966	1977	1923	1965	1985	1965	1965	1965	1965	1965

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1904 - 1996	
ANNUAL TOTAL	80125		133960			
ANNUAL MEAN	220		366		238	
HIGHEST ANNUAL MEAN					425	1928
LOWEST ANNUAL MEAN					82.6	1965
HIGHEST DAILY MEAN	1520	Oct 21	2340	Jan 20	5850	Oct 10 1903
LOWEST DAILY MEAN	52	Sep 3	71	Jan 16	27	Sep 8 1966
ANNUAL SEVEN-DAY MINIMUM	57	Aug 28	78	Jan 12	32	Aug 28 1966
INSTANTANEOUS PEAK FLOW			3690	Jan 19	7200a	Jan 25 1979
INSTANTANEOUS PEAK STAGE			6.40	Jan 19	8.50b	Jan 25 1979
INSTANTANEOUS LOW FLOW			50	Jan 7	8.1	Aug 2 1955
10 PERCENT EXCEEDS	399		675		460	
50 PERCENT EXCEEDS	164		318		181	
90 PERCENT EXCEEDS	69		111		77	

a From rating curve extended above 1,800 ft³/s on basis of slope-area measurement at gage height 6.95 ft.

b From floodmark.

c Estimated.



01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

PERIOD OF RECORD.--Water years 1963-80, 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 1995 TO SEPTEMBER 1996

		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 OF 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 1995	08...	1200	405	321	8.0	7.5	747	11.6	99	<1.0	490	240	99
JAN 1996	31...	1115	939	274	7.7	3.0	751	12.8	97	<1.0	150	60	86
APR	03...	1100	658	326	8.2	9.0	749	12.1	107	E1.5	20	<10	94
JUN	12...	1145	206	392	8.3	19.5	751	9.6	106	E1.4	2400	80	150
JUL	31...	1100	222	367	8.0	17.0	755	8.8	92	E1.3	9200	3000	140
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)	ALKA-LINITY 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 1995	08...	23	10	20	1.5	72	16	37	<0.1	7.4	176	163	3
JAN 1996	31...	20	8.8	18	1.2	60	13	33	<0.1	9.2	140	146	16
APR	03...	22	9.4	23	1.2	69	15	43	<0.1	6.6	178	168	12
JUN	12...	33	16	17	1.6	115	15	35	<0.1	9.4	190	207	13
JUL	31...	31	16	17	1.8	110	16	35	<0.1	9.0	210	202	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)
NOV 1995	08...	<0.003	1.20	<0.03	<0.03	0.30	0.19	1.5	1.4	0.07	0.06	3.0	0.4
JAN 1996	31...	0.004	1.60	<0.03	<0.03	0.20	0.13	1.8	1.7	0.03	<0.01	1.9	0.5
APR	03...	0.004	1.40	<0.03	<0.03	0.30	0.16	1.7	1.6	0.02	<0.01	2.5	0.7
JUN	12...	0.018	2.40	<0.03	0.06	0.30	0.18	2.7	2.6	0.03	<0.01	2.0	0.2
JUL	31...	0.005	2.20	<0.03	0.03	0.20	0.17	2.4	2.4	0.03	0.01	2.1	0.8

DELAWARE RIVER BASIN

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 08...	1200	12	<1	<10	40	<1	<1	1
JUN 1996 12...	1145	<10	<1	<10	20	<1	<1	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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
NOV 1995 08...	230	<1	20	<0.1	<1	<1	<10
JUN 1996 12...	210	<1	30	<0.1	<1	<1	<10

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)	MERCURY DIS- SOLVED (UG/L) AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L) AS NI) (01065)	ZINC, DIS- SOLVED (UG/L) AS ZN) (01090)
JUN 1996 12...	1145	FIELD BLANK	<1	<1	<0.1	<1	<1

DELAWARE RIVER BASIN

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01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'32", long 75°11'20", Warren County, Hydrologic Unit 02040105, at bridge on State Highway 13 in Riegelsville, 0.2 mi north of Mount Joy, and 0.2 mi upstream from mouth.

DRAINAGE AREA.--156 mi².

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 1995 TO SEPTEMBER 1996

		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 1995	08...	1130	318	315	8.3	7.0	750	11.8	99	<1.0	790	220	110
FEB 1996	01...	1130	760	264	7.6	0.5	766	15.3	106	3.6	170	90	96
APR 03...	1130	450	334	8.2	8.0	755	11.4	97	2.0	50	20	99	
JUN 13...	1100	258	375	8.0	19.5	756	8.0	88	E1.9	1700	320	150	
AUG 01...	1100	182	358	8.1	18.5	757	8.9	96	E1.9	1700	260	140	
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)	ALKA-LINITY LAB 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 1995	08...	24	11	19	1.5	76	17	37	<0.1	7.8	182	169	2
FEB 1996	01...	22	10	19	1.7	67	15	35	0.1	9.4	154	160	18
APR 03...	23	10	24	1.3	72	15	44	<0.1	6.9	188	174	10	
JUN 13...	33	16	18	1.7	113	17	35	<0.1	9.2	218	207	24	
AUG 01...	31	15	16	1.8	108	17	32	<0.1	9.5	192	196	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)
NOV 1995	08...	0.003	1.30	--	<0.03	0.40	0.32	1.7	1.6	0.07	0.06	2.9	0.4
FEB 1996	01...	0.005	1.70	<0.03	<0.03	0.40	0.33	2.1	2.0	0.21	0.18	2.9	0.7
APR 03...	0.004	1.40	<0.03	<0.03	0.30	0.19	1.7	1.6	0.03	<0.01	2.5	0.9	
JUN 13...	0.024	2.10	0.06	0.09	0.70	0.45	2.8	2.5	0.06	<0.01	2.1	0.8	
AUG 01...	0.011	2.10	0.04	0.04	0.40	0.38	2.5	2.5	0.03	<0.01	2.1	0.6	

DELAWARE RIVER BASIN

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 08...	1130	11	<1	<10	30	<1	<1	<1
JUN 1996 13...	1100	14	<1	<10	20	<1	<1	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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
NOV 1995 08...	230	<1	20	<0.1	<1	<1	<10
JUN 1996 13...	400	1	50	<0.1	<1	<1	<10

DELAWARE RIVER BASIN

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01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

LOCATION.--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. National Geodetic Vertical Datum of 1929. Water-quality samples are collected from the bridge and do not include flow of the Musconetcong River.

DRAINAGE AREA.--6,328 mi².

PERIOD OF RECORD.--Water years 1934, 1943, 1950, 1960-79, 1991 to current year.

REMARKS.--For February 20, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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, EC BROTH (31615)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	
NOV 1995													
29...	1200	10500	163	7.7	4.5	757	10.9	85	E1.0	110	<10	53	
FEB 1996													
20...	1100	8180	207	--	2.5	763	13.4	98	--	--	--	74	
APR													
09...	1145	15400	170	8.1	7.5	754	11.3	95	<1.0	50	<10	53	
JUN													
19...	1100	8070	159	7.6	22.0	758	7.7	89	E1.8	270	60	56	
AUG													
06...	1130	6720	181	8.2	24.0	760	7.6	91	<1.0	20	20	64	
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)	ALKA-LINITY 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 TUEENTS, 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 1995													
29...	14	4.4	8.4	1.1	32	16	13	<0.1	4.5	88	85	<1	
FEB 1996													
20...	19	6.4	10	1.4	47	19	17	<0.1	5.3	120	112	5	
APR													
09...	14	4.4	9.1	1.0	36	15	15	<0.1	2.8	90	87	<1	
JUN													
19...	15	4.5	7.5	1.4	38	14	12	<0.1	3.8	80	85	9	
AUG													
06...	17	5.2	8.7	1.4	45	17	13	<0.1	3.5	94	97	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-SOLVED (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 1995													
29...	0.007	0.91	<0.03	<0.03	0.16	0.14	1.1	1.0	0.04	0.03	2.2	0.2	
FEB 1996													
20...	--	1.40	--	--	0.14	0.20	1.5	1.6	0.05	0.05	2.0	0.3	
APR													
09...	0.007	0.87	<0.03	<0.03	0.20	0.31	1.1	1.2	0.03	0.03	2.0	0.4	
JUN													
19...	0.016	0.92	0.05	0.05	0.40	0.32	1.3	1.2	0.09	0.07	2.8	0.7	
AUG													
06...	0.007	0.87	0.08	<0.03	0.19	0.08	1.1	0.95	0.02	0.02	2.6	0.4	

DELAWARE RIVER BASIN

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 29...	1200	13	<1	<10	20	<1	<1	3
JUN 1996 19...	1100	<10	<1	<10	50	<1	<1	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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
NOV 1995 29...	90	<1	30	<0.1	2	<1	30
JUN 1996 19...	210	1	70	<0.1	<1	<1	10

DELAWARE RIVER BASIN

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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 estimated daily discharges, which are fair. 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 of gage. Satellite telemeter at station.

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	129	120	115	155	126	126	105	140	139	128	98	115
2	129	110	113	152	128	128	71	138	138	138	125	116
3	129	119	118	146	131	126	90	143	138	140	133	115
4	131	111	128	141	143	125	98	145	142	129	134	112
5	116	118	139	145	142	124	101	146	142	135	131	117
6	108	121	137	148	143	117	101	140	139	134	128	114
7	122	119	138	144	143	80	103	140	139	137	122	119
8	126	101	138	e145	144	107	99	137	141	138	111	112
9	127	122	141	e140	141	113	97	141	138	131	93	119
10	129	121	136	e135	134	117	81	141	140	129	110	117
11	129	114	137	e135	133	119	88	138	139	122	125	112
12	129	52	144	e135	128	119	97	124	156	111	126	110
13	131	106	149	e135	129	123	108	136	55	50	105	113
14	120	89	139	e135	130	126	107	141	106	100	98	114
15	100	75	145	e140	129	129	108	140	112	92	106	113
16	104	106	158	e140	131	128	49	143	131	105	106	114
17	106	112	152	e140	135	127	89	149	107	119	107	70
18	103	114	148	e140	139	128	135	152	102	115	115	105
19	107	113	151	e-20	138	116	134	146	114	113	113	122
20	116	113	140	e-50	134	96	137	144	110	117	102	122
21	94	92	150	e-20	109	101	139	141	121	124	110	121
22	114	114	159	e150	118	103	136	139	105	135	118	111
23	112	121	155	e145	119	104	134	139	66	142	120	123
24	112	118	154	e135	117	106	132	135	120	139	100	122
25	119	118	153	e130	116	104	133	134	107	140	107	127
26	117	115	152	e145	120	103	135	137	101	140	110	126
27	122	116	149	e125	131	102	138	142	104	137	111	125
28	92	115	145	e120	130	103	138	140	116	141	111	126
29	119	117	147	e145	126	108	142	144	119	141	113	114
30	118	118	150	e-20	---	96	147	142	113	139	116	139
31	120	---	154	e140	---	98	---	141	---	38	115	---
TOTAL	3630	3300	4434	3676	3787	3502	3372	4358	3600	3799	3519	3485
MEAN	117	110	143	119	131	113	112	141	120	123	114	116
MAX	131	122	159	155	144	129	147	152	156	142	134	139
MIN	92	52	113	-50	109	80	49	124	55	38	93	70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1996, BY WATER YEAR (WY)

	MEAN	132	130	127	126	129	117	127	142	141	144	142	140
MAX	155	151	143	137	143	141	141	145	150	156	154	152	155
(WY)	1991	1991	1996	1993	1995	1995	1995	1995	1993	1993	1992	1992	1992
MIN	115	107	103	103	99.5	91.4	95.8	133	120	123	114	116	116
(WY)	1992	1992	1992	1992	1992	1992	1992	1994	1996	1996	1996	1996	1996

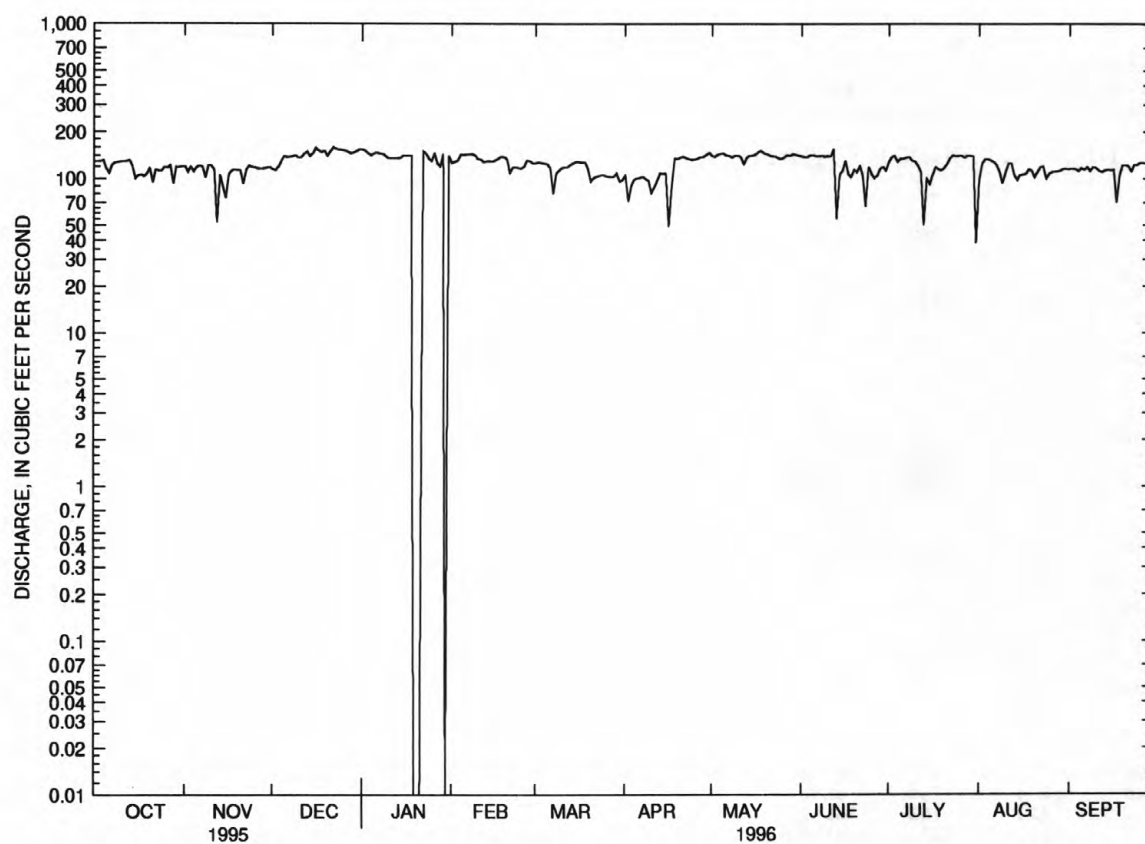
SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1990 - 1996

ANNUAL TOTAL	50593	44462											
ANNUAL MEAN	139	121							133				
HIGHEST ANNUAL MEAN									143		1991		
LOWEST ANNUAL MEAN									120		1992		
HIGHEST DAILY MEAN	161	Aug 20	159	Dec 22					222	Aug 22	1990		
LOWEST DAILY MEAN	52	Nov 12	-50	Jan 20					-57	Mar 10	1994		
ANNUAL SEVEN-DAY MINIMUM	93	Nov 11	67	Jan 15					67	Jan 15	1996		
10 PERCENT EXCEEDS	152		144						154				
50 PERCENT EXCEEDS	144		124						139				
90 PERCENT EXCEEDS	116		101						103				

e Estimated.

DELAWARE RIVER BASIN

01460440 DELAWARE AND RARITAN CANAL AT PORT MERCER, NJ--Continued



— 01460440 D&R CANAL AT PORT MERCER, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01461000 DELAWARE RIVER AT LUMBERVILLE, PA

LOCATION.--Lat 40°24'27", long 75°02'16", Bucks County, Hydrologic Unit 02040105, at pedestrian bridge at Lumberville, 1.4 mi upstream of Lockatong Creek.

DRAINAGE AREA.--6,598 mi².

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

REMARKS.--For February 21, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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)	
DEC 1995													
05...	1045	9260	164	7.9	4.5	766	12.4	95	<1.0	50	30	51	
FEB 1996													
21...	0945	18700	201	7.8	3.0	758	12.7	95	--	--	--	60	
APR													
10...	1100	16000	175	8.4	7.0	750	12.7	106	E1.6	<20	10	57	
JUN													
24...	1200	7680	188	7.8	22.0	758	7.6	87	E2.2	790	150	68	
AUG													
06...	1200	6510	184	8.0	23.5	765	8.8	103	<1.0	50	30	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)	ALKA-LINITY 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)
DEC 1995													
05...	13	4.6	8.5	1.1	37	16	13	<0.1	4.0	94	86	4	
FEB 1996													
21...	15	5.5	12	1.4	38	16	21	<0.1	5.9	114	105	38	
APR													
10...	15	4.8	9.9	1.0	38	15	17	<0.1	3.0	92	92	1	
JUN													
24...	18	5.6	8.7	1.4	45	17	13	<0.1	4.8	110	100	31	
AUG													
06...	17	5.5	9.4	1.5	47	17	13	<0.1	3.6	104	100	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, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (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)
DEC 1995													
05...	0.006	0.83	<0.03	<0.03	0.17	0.14	1.0	0.97	0.06	0.03	2.2	0.4	
FEB 1996													
21...	--	1.20	--	--	0.40	0.30	1.6	1.5	0.09	0.05	3.3	1.0	
APR													
10...	0.006	0.90	<0.03	<0.03	0.20	0.16	1.1	1.1	0.03	0.02	1.9	0.4	
JUN													
24...	0.015	1.10	<0.03	<0.03	0.30	0.17	1.4	1.3	0.04	0.02	2.8	0.3	
AUG													
06...	0.006	0.99	<0.03	0.06	0.30	0.15	1.3	1.1	0.03	0.02	2.7	0.3	

DELAWARE RIVER BASIN

01461000 DELAWARE RIVER AT LUMBERVILLE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (UG/L) AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU) (01042)
DEC 1995 05...	1045	<10	<1	<10	20	<1	<1	1
JUN 1996 24...	1200	24	<1	<10	60	<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 RECOV- ERABLE (UG/L) AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)
DEC 1995 05...	70	<1	30	<0.1	1	<1	20
JUN 1996 24...	250	2	30	<0.1	2	<1	20

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)	MERCURY DIS- SOLVED (UG/L) AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L) AS NI) (01065)	ZINC, DIS- SOLVED (UG/L) AS ZN) (01090)
JUN 1996 24...	1200	FIELD BLANK	<1	<1	<0.1	<1	<1

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1913 to current year. October 1912 to February 1913 monthly discharge only, published in WSP 1302. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 951: Drainage area. WSP 1302: 1913-20. WSP 1382: 1924, 1928.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Sept. 30, 1965, at datum 7.77 ft higher. Feb. 24, 1913 to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 450 ft downstream.

REMARKS.--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 ft³/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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 23	0645	51,100	14.35	Apr. 17	1045	73,100	16.17
Jan. 20	2345	*179,000	*22.20	May 2	0930	55,500	14.72
Jan. 28	1530	117,000	19.10				

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	2800	12600	12600	4820	36700	22700	15300	41800	6810	8600	12000	3960
2	2560	12800	11800	4530	29200	20200	26400	53800	6310	7710	10300	3420
3	2580	14000	10700	4890	25900	17900	22900	44200	5960	8020	9430	3090
4	2560	13000	9740	4770	22600	16200	19800	36200	5480	8170	9970	3040
5	3180	12800	9380	5220	20000	14600	17400	30800	6290	7890	7910	3120
6	12400	11100	10400	4660	16800	15700	15900	27600	6890	6970	7460	3370
7	12500	9900	10500	e5030	16100	19800	14500	26500	6200	6700	7470	3570
8	8130	10300	9920	e5140	14800	19800	16000	25500	5840	6260	7880	4850
9	6250	9360	9550	e5380	15400	16400	16100	23400	5830	7230	6700	5120
10	4880	8910	8840	e5670	16000	14200	16600	21500	5930	7850	6200	5190
11	3960	8640	7140	e6150	15600	13000	15400	21200	6900	7070	6670	4930
12	3270	21100	5980	e6190	15300	12900	14000	29000	13300	5980	5980	4190
13	2740	32700	6410	e6430	13500	13500	13000	39800	15700	12100	5430	3500
14	2760	34200	6770	e5600	11800	13600	13300	39200	15500	28300	6160	3390
15	6180	36200	6270	e5100	11200	14900	21700	34000	15500	35400	6470	3470
16	6510	40400	7200	e4500	10700	17000	41600	28600	12000	29700	5360	3430
17	6200	37600	8170	e5300	9970	19000	66100	25300	10800	28100	4640	4960
18	6370	29800	7540	e6100	9570	17400	59900	22200	9950	25200	4970	6260
19	4880	24900	6930	44400	8580	16400	46200	19600	9790	20300	4840	8420
20	3970	22100	6980	116000	8060	22900	36900	17600	10300	17400	4400	11600
21	14300	20300	6740	129000	15200	27000	30400	16200	9780	15000	4020	8400
22	34700	18600	6500	60400	26000	28700	25700	15600	9920	13300	3990	6890
23	45800	17400	6680	45500	31600	24700	22800	14700	12700	11500	3620	6270
24	29400	15300	6120	41600	32900	20800	21300	13700	8900	10900	4620	5420
25	20600	13600	5080	49600	34200	18200	21700	12600	8100	9830	5030	5670
26	15500	12200	4910	45900	33500	17000	21000	11400	7810	10000	4500	5850
27	12500	11300	4940	49400	30500	16500	19800	9470	6840	13600	4530	5320
28	16800	10700	5060	107000	26900	15800	17900	8850	6190	14800	4250	5280
29	17300	10600	5760	95600	24200	18000	16700	8220	5650	12200	4110	7380
30	17500	10700	5570	67000	---	19700	22400	7930	6600	10700	3620	8500
31	15100	---	4970	50500	---	17000	---	7380	---	14000	3990	---

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	344180	543110	235150	997380	582780	561500	728700	733850	263770	420780	186520	157860
MEAN	11100	18100	7585	32170	20100	18110	24290	23670	8792	13570	6017	5262
MAX	45800	40400	12600	129000	36700	28700	66100	53800	15700	35400	12000	11600
MIN	2560	8640	4910	4500	8060	12900	13000	7380	5480	5980	3620	3040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1996, BY WATER YEAR (WY)

MEAN	6819	10520	12460	12430	12810	20630	22450	14150	9020	7104	5958	5759
MAX	28710	27340	31070	34950	27550	60840	52680	31690	33460	25720	30290	22490
(WY)	1956	1928	1974	1979	1951	1936	1940	1989	1972	1928	1955	1933
MIN	1632	1868	2037	2539	3500	7715	6828	5074	2572	1548	1808	1762
(WY)	1942	1915	1923	1981	1920	1981	1985	1995	1965	1965	1965	1932

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

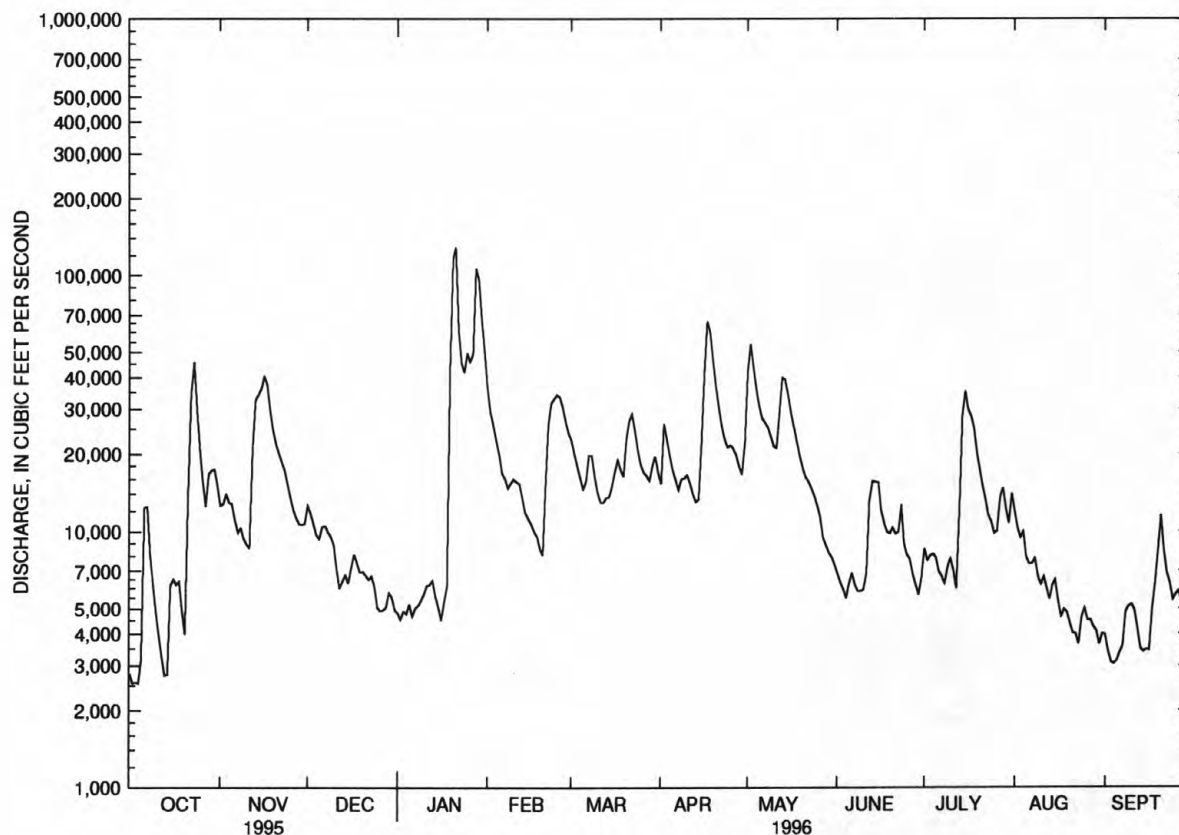
WATER YEARS 1913 - 1996

ANNUAL TOTAL	3304730	5755580	
ANNUAL MEAN	9054	15730	11660
HIGHEST ANNUAL MEAN			19810
LOWEST ANNUAL MEAN			4708
HIGHEST DAILY MEAN	46700	Mar 10	129000
LOWEST DAILY MEAN	2420	Sep 21	2560
ANNUAL SEVEN-DAY MINIMUM	2600	Aug 22	3370
INSTANTANEOUS PEAK FLOW			179000
INSTANTANEOUS PEAK STAGE			22.20
INSTANTANEOUS LOW FLOW			2930
10 PERCENT EXCEEDS	17900		32800
50 PERCENT EXCEEDS	6670		11100
90 PERCENT EXCEEDS	2900		4650

a From rating curve extended above 230,000 ft³/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.

February 1980 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.--The water-quality monitor was moved from the Trenton Water Filtration Plant to the Morrisville Water Filtration Plant and became the official record on Oct. 1, 1995. The Trenton and Morrisville monitors were run simultaneously from July 10 to Oct. 2, 1995. The differences in the daily maximum, minimum and mean specific conductance, pH, water temperature, and dissolved-oxygen concentration recorded at the two water-quality monitor locations were tested for statistical significance by using nonparametric statistics. At a significance level of less than 0.01, the median difference significantly exceeded the precision of the published data for the daily minimum and mean dissolved-oxygen concentrations, the daily maximum water temperature, and the daily minimum and maximum pH. The measurements at the Morrisville Water Filtration Plant were made by two different sondes (multi-parameter sensor). The effect of alternating the sondes on the recorded data was also tested by using nonparametric statistics. Results show that alternating the sondes had no significant effect on the recorded measurements.

Missing continuous water-quality records are the result of instrument malfunction, or of interruption of flow through the filtration plant. For Feb. 21, 1995, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved-solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved-solid constituents. 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 μ S/cm, Feb. 12, 1985; minimum, 63 μ S/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, but may have been lower during instrument malfunction, July 29 to Aug. 21, 1995.

EXTREMES FOR CURRENT WATER YEAR.--

SPECIFIC CONDUCTANCE: maximum, 252 μ S/cm, Aug. 25; minimum, 87 μ S/cm, Jan. 28, 29.

pH: maximum, 9.6, Apr. 13, June 2, 4; minimum, 6.8, Oct. 23.

WATER TEMPERATURE: maximum, 28.0° C, Aug. 23; minimum, 0.0° C, on many days during the winter months.

DISSOLVED-OXYGEN: maximum, 15.5 mg/L, June 1; minimum recorded, 4.9 mg/L, June 9, but may have been lower during period of instrument malfunction, July 10 to Aug. 1.

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 1995 TO SEPTEMBER 1996

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 (PER- CENT SATUR- ATION) (00300)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)
NOV 1995									
30...	1100	10600	159	8.0	3.5	0.70	754	11.5	88
FEB 1996									
21...	1200	16100	214	7.9	4.0	8.5	764	13.0	99
APR									
10...	1300	16500	186	8.6	6.5	1.4	754	12.7	104
JUN									
17...	1200	9470	159	7.5	23.5	3.0	763	7.3	86
AUG									
07...	1100	7600	186	8.1	26.0	1.0	766	8.5	104

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV 1995 30...	<20	<100	58	15	5.0	8.6	1.1	37	14
FEB 1996 21...	--	--	75	19	6.8	12	1.6	48	19
APR 10...	130	10	58	15	4.9	9.7	1.1	38	15
JUN 17...	170	20	49	13	4.1	6.9	1.2	34	12
AUG 07...	<20	100	65	17	5.5	8.9	1.5	49	17
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 1995 30...	13	<0.1	4.6	78	88	<1	0.006	0.92	0.05
FEB 1996 21...	20	<0.1	6.2	148	120	--	--	1.50	--
APR 10...	16	<0.1	3.4	96	92	2	0.005	0.92	0.04
JUN 17...	12	<0.1	3.5	78	77	18	0.008	0.79	<0.03
AUG 07...	14	<0.1	3.6	98	101	3	0.027	0.89	<0.03
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 1995 30...	<0.03	0.17	0.16	1.1	1.1	0.07	0.03	2.5	0.2
FEB 1996 21...	--	0.30	0.20	1.8	1.7	0.06	0.04	2.3	0.8
APR 10...	<0.03	0.30	0.19	1.2	1.1	0.02	0.01	2.2	0.3
JUN 17...	<0.03	0.50	0.19	1.3	0.98	0.09	0.04	2.7	0.6
AUG 07...	<0.03	0.30	<0.20	1.2	--	0.05	0.02	2.6	0.4
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 TOTAL RECOV-ERABLE (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 1995 30...	1100	--	--	--	--	--	--	2	
FEB 1996 21...	1200	--	--	--	--	--	--	2	
APR 10...	1300	--	--	--	--	--	--	2	
JUN 17...	1200	<10	<1	<10	60	<1	<1	3	
AUG 07...	1100	--	--	--	--	--	--	2	

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 1995 30...	--	2	--	<0.1	1	--	30
FEB 1996 21...	--	3	--	<0.1	2	--	30
APR 10...	--	<1	--	<0.1	1	--	40
JUN 17...	320	2	90	<0.1	<1	<1	20
AUG 07...	--	<1	--	<0.1	1	--	<10

[The following analyses are quality-assurance samples processed during the 1996 water year and are defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUN 1996 17...	1159	ISOKINETIC SAMPLER & CHURN BLANK	--	--	--	--	3
17...	1200	FIELD BLANK	<1	<1	<0.1	<1	3

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 TOTAL (UG/L) (39062)	CHLOR- DANE TRANS WATER TOTAL (UG/L) (39065)	P, P' DDD, TOTAL (UG/L) (39310)	P, P' DDE, TOTAL (UG/L) (39320)
NOV 1995 30...	<0.03	<0.03	<0.09	<0.04	<0.1	<0.1	<0.1	<0.1	<0.04
FEB 1996 21...	<0.03	<0.03	<0.09	<0.04	<0.1	<0.1	<0.1	<0.1	<0.04
APR 10...	<0.03	<0.03	<0.09	<0.04	<0.1	<0.1	<0.1	<0.1	<0.04
JUN 17...	<0.03	<0.03	<0.09	<0.04	<0.1	<0.1	<0.1	<0.1	<0.04
AUG 07...	<0.03	<0.03	<0.09	<0.04	<0.1	<0.1	<0.1	<0.1	<0.04

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 1995 30...	<0.1	<0.02	<0.1	<0.04	<0.6	<0.06	<0.2	<0.03	<0.8
FEB 1996 21...	<0.1	<0.02	<0.1	<0.04	<0.6	<0.06	<0.2	<0.03	<0.8
APR 10...	<0.1	<0.02	<0.1	<0.04	<0.6	<0.06	<0.2	<0.03	<0.8
JUN 17...	<0.1	<0.02	<0.1	<0.04	<0.6	<0.06	<0.2	<0.03	<0.8
AUG 07...	<0.1	<0.02	<0.1	<0.04	<0.6	<0.06	<0.2	<0.03	<0.8

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		AROCLOR	AROCLOR	AROCLOR	AROCLOR	AROCLOR	AROCLOR	AROCLOR	AROCLOR	
		1016	1221	1232	1242	1248	1254	1260		
		PCB	PCB	PCB	PCB	PCB	PCB	PCB		
DATE	LINDANE	TOX- APHENE, TOTAL (UG/L) (39340)	TOTAL (UG/L) (39400)	TOTAL (UG/L) (34671)	TOTAL (UG/L) (39488)	TOTAL (UG/L) (39492)	TOTAL (UG/L) (39496)	TOTAL (UG/L) (39500)	TOTAL (UG/L) (39504)	TOTAL (UG/L) (39508)
NOV 1995	30...0	<0.03	<2.0	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1
FEB 1996	21...0	<0.03	<2.0	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1
APR	10...0	<0.03	<2.0	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1
JUNP	17...0	<0.03	<2.0	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1
AUG	07...0	<0.03	<2.0	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1
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 1995	30...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
FEB 1996	21...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
APR	10...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
JUN	17...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
AUG	07...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
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 1995	30...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
FEB 1996	21...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
APR	10...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
JUN	17...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
AUG	07...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DATE	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	DI- CHLORO- DI- FLUROO- RIDE 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 1995	30...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
FEB 1996	21...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2
APR	10...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
JUN	17...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2.2	<0.2	<0.2
AUG	07...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.1	<0.2	<0.2

DELAWARE RIVER BASIN

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01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	228	224	226	152	145	150	164	150	158	189	180	186
2	227	223	225	158	152	154	150	143	145	195	187	192
3	228	224	226	166	158	162	149	143	147	217	195	201
4	229	223	226	164	161	163	156	148	152	214	204	209
5	223	207	218	163	154	160	---	---	---	223	209	217
6	228	192	208	157	154	156	---	---	---	211	207	210
7	226	185	196	160	157	159	153	149	151	221	211	216
8	200	194	199	169	160	165	---	---	---	225	221	224
9	207	200	204	170	163	166	153	148	150	225	222	224
10	208	205	206	172	169	170	157	148	152	222	213	216
11	215	207	209	171	164	168	173	156	161	230	214	224
12	231	215	222	174	134	151	180	173	175	232	213	221
13	241	231	237	174	111	137	187	180	185	213	198	203
14	246	241	244	111	103	107	187	180	183	198	194	195
15	244	216	233	121	107	114	183	176	179	195	185	190
16	239	223	233	121	109	115	193	179	184	192	183	186
17	237	228	232	109	108	109	194	184	189	203	192	197
18	236	204	221	116	109	113	193	181	185	204	191	201
19	204	197	200	124	116	120	191	183	187	202	124	176
20	211	202	207	127	124	125	184	174	181	223	99	152
21	211	142	188	131	127	129	185	178	182	99	90	94
22	198	131	165	131	127	129	192	180	184	---	---	---
23	131	100	110	130	129	129	191	186	189	110	106	109
24	109	99	103	134	129	131	191	178	183	118	110	114
25	116	109	111	139	134	138	189	179	183	133	115	127
26	130	116	123	141	139	140	195	189	193	124	117	120
27	140	130	136	147	141	145	196	193	194	124	115	120
28	150	137	142	151	147	149	195	191	193	131	87	104
29	160	149	156	151	149	150	193	184	189	92	87	89
30	161	144	154	158	149	153	184	178	182	98	89	94
31	145	136	140	---	---	---	183	179	181	109	98	103
MONTH	246	99	190	174	103	142	196	143	176	232	87	170
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	121	109	115	129	125	127	169	162	166	---	---	---
2	133	121	128	136	128	130	167	140	154	110	92	98
3	137	132	134	145	136	139	164	158	160	98	92	95
4	145	137	139	145	142	143	164	161	163	107	98	103
5	152	145	148	150	145	148	165	160	162	---	---	---
6	161	152	158	160	150	154	167	163	165	---	---	---
7	167	158	163	168	160	164	168	164	167	---	---	---
8	172	161	167	165	159	163	172	168	170	---	---	---
9	177	169	173	166	160	162	173	167	170	---	---	---
10	188	177	182	168	163	166	169	166	167	---	---	---
11	180	170	174	180	164	173	169	165	167	---	---	---
12	176	171	173	187	175	183	173	169	170	134	117	126
13	178	171	176	182	178	180	176	173	175	132	100	112
14	184	175	181	188	180	185	181	176	179	115	93	98
15	196	182	188	185	174	179	178	129	157	105	93	97
16	208	189	200	175	170	173	---	---	---	116	104	111
17	201	184	197	177	154	165	---	---	---	127	116	120
18	208	196	201	157	153	154	---	---	---	128	121	125
19	207	200	203	160	157	159	---	---	---	129	124	126
20	218	206	210	162	149	154	---	---	---	136	128	132
21	229	205	215	164	138	152	---	---	---	142	136	138
22	227	164	202	138	126	131	---	---	---	143	140	141
23	164	140	146	130	125	127	---	---	---	148	143	145
24	140	130	135	138	128	131	---	---	---	152	148	151
25	132	120	129	144	138	141	---	---	---	156	148	153
26	120	116	117	150	144	146	---	---	---	156	151	154
27	121	115	118	151	144	147	---	---	---	164	153	159
28	123	115	119	147	143	145	---	---	---	177	162	171
29	129	122	126	154	146	149	---	---	---	184	175	180
30	---	---	---	169	154	164	---	---	---	185	183	184
31	---	---	---	170	162	166	---	---	---	200	184	191
MONTH	229	109	163	188	125	155	181	129	166	200	92	135

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	204	199	201	222	192	209	160	130	152	244	231	239
2	215	204	209	220	205	210	170	158	165	232	231	231
3	218	214	215	205	198	200	172	165	168	242	231	235
4	220	211	216	198	186	190	172	165	168	247	242	245
5	228	216	222	193	189	192	188	171	176	247	243	245
6	232	228	231	199	189	192	191	188	189	251	247	249
7	231	225	228	200	198	199	198	188	191	251	247	249
8	233	227	230	199	189	193	198	189	193	251	232	246
9	235	229	233	197	191	195	194	182	185	232	218	226
10	233	228	230	209	197	202	190	182	184	219	202	213
11	235	227	232	205	192	195	202	190	196	202	197	199
12	---	---	---	198	192	194	204	193	198	202	196	199
13	---	---	---	231	159	190	197	189	193	207	195	200
14	144	123	137	192	135	166	221	197	210	227	206	215
15	123	114	118	135	117	125	225	207	216	242	227	234
16	133	123	128	121	113	117	208	204	206	243	239	241
17	145	132	140	120	110	117	217	205	212	239	212	224
18	160	143	153	116	108	112	234	217	227	244	221	229
19	173	160	167	123	113	116	234	223	229	245	210	231
20	174	163	169	138	123	129	227	222	225	210	155	174
21	181	174	178	140	135	137	229	221	224	159	155	157
22	177	166	172	144	140	142	233	229	232	168	158	161
23	174	158	165	151	142	147	242	233	239	188	167	175
24	184	165	176	158	151	155	243	236	241	196	188	193
25	190	184	188	165	153	160	252	241	249	197	190	194
26	191	187	189	175	164	170	---	---	---	190	183	185
27	189	181	184	175	159	170	---	---	---	193	185	187
28	190	185	188	159	135	145	---	---	---	199	193	197
29	193	190	192	142	135	138	228	219	222	195	186	191
30	233	174	198	150	142	147	232	228	231	208	174	194
31	---	---	---	162	122	145	244	232	238	---	---	---
MONTH	235	114	189	231	108	164	252	130	206	251	155	212

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.7	7.6	8.2	7.5	7.5	7.5	8.2	8.0	8.1	8.5	8.1	8.3
2	8.8	7.6	8.2	7.5	7.5	7.5	8.1	8.0	8.1	8.4	8.0	8.2
3	8.8	7.7	8.2	7.5	7.4	7.5	8.2	8.1	8.1	8.4	7.8	8.2
4	8.5	7.6	7.9	7.6	7.5	7.5	8.2	8.0	8.1	8.6	8.1	8.3
5	7.7	7.4	7.5	7.6	7.6	7.6	---	---	---	8.6	8.2	8.4
6	7.4	7.2	7.3	7.6	7.5	7.6	---	---	---	8.6	8.1	8.3
7	7.3	7.2	7.3	7.6	7.6	7.6	8.2	8.1	8.1	8.3	8.0	8.2
8	7.4	7.3	7.3	7.6	7.6	7.6	---	---	---	8.0	7.9	8.0
9	7.9	7.3	7.5	7.7	7.6	7.7	8.0	8.0	8.0	8.0	7.9	7.9
10	8.3	7.4	7.7	7.7	7.6	7.7	8.1	8.0	8.0	8.0	7.9	7.9
11	8.4	7.6	7.9	7.7	7.6	7.7	8.1	8.0	8.1	8.2	7.9	8.1
12	8.5	7.6	7.9	7.6	7.3	7.4	8.2	8.1	8.1	8.3	8.1	8.2
13	8.5	7.6	8.0	7.5	7.3	7.4	8.1	8.0	8.1	8.2	8.1	8.2
14	8.2	7.6	7.8	7.3	7.2	7.3	8.1	8.0	8.1	8.3	8.1	8.2
15	7.8	7.4	7.6	7.4	7.3	7.3	8.1	7.9	8.0	8.4	8.2	8.3
16	7.8	7.5	7.7	7.4	7.3	7.4	8.0	7.9	8.0	8.5	8.2	8.3
17	8.1	7.6	7.8	7.3	7.3	7.3	8.1	8.0	8.1	8.5	8.3	8.4
18	8.0	7.7	7.8	7.4	7.3	7.3	8.2	8.0	8.1	8.6	8.3	8.4
19	8.2	7.6	7.8	7.4	7.4	7.4	8.2	8.1	8.1	8.4	7.6	8.1
20	8.2	7.6	7.8	7.4	7.4	7.4	8.3	8.2	8.2	8.0	7.2	7.7
21	7.7	7.1	7.4	7.5	7.4	7.4	8.2	8.1	8.2	7.6	7.3	7.4
22	7.4	7.1	7.2	7.8	7.4	7.6	8.3	8.1	8.2	---	---	---
23	7.1	6.8	6.9	7.9	7.8	7.8	8.4	8.2	8.3	7.6	7.5	7.6
24	7.0	6.9	6.9	8.0	7.9	7.9	8.4	8.2	8.3	7.6	7.5	7.5
25	7.1	7.0	7.0	8.0	7.9	8.0	8.4	8.1	8.3	7.7	7.5	7.6
26	7.2	7.1	7.2	8.1	8.0	8.0	8.4	8.2	8.3	7.6	7.6	7.6
27	7.3	7.2	7.3	8.1	8.0	8.1	8.5	8.2	8.3	7.7	7.6	7.6
28	7.3	7.2	7.2	8.2	8.1	8.1	8.5	8.2	8.4	7.7	7.4	7.6
29	7.4	7.3	7.3	8.2	8.1	8.2	8.4	8.2	8.3	7.4	7.3	7.4
30	7.4	7.3	7.3	8.2	8.1	8.2	8.4	8.2	8.3	7.5	7.4	7.4
31	7.5	7.2	7.3	---	---	---	8.5	8.1	8.3	7.6	7.5	7.5
MONTH	8.8	6.8	7.6	8.2	7.2	7.6	8.5	7.9	8.2	8.6	7.2	8.0

DELAWARE RIVER BASIN

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01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.0	17.0	18.0	11.5	11.0	11.0	4.5	4.0	4.0	2.5	1.5	2.0
2	19.5	17.5	18.5	12.0	11.0	11.5	4.0	3.5	4.0	3.0	2.5	2.5
3	20.0	18.5	19.0	13.0	12.0	12.5	4.5	3.5	4.0	2.5	1.5	2.0
4	20.0	19.5	19.5	13.0	11.0	12.0	5.0	4.5	5.0	1.5	.0	.5
5	20.0	19.5	19.5	11.0	9.5	10.5	---	---	---	.5	.0	.0
6	20.5	19.5	20.0	10.0	8.5	9.0	---	---	---	.0	.0	.0
7	20.5	19.0	19.5	8.5	8.0	8.0	4.0	3.5	4.0	.0	.0	.0
8	19.0	18.5	19.0	8.0	7.5	8.0	---	---	---	.0	.0	.0
9	18.5	17.5	18.0	7.5	6.0	7.0	3.0	2.0	2.5	.0	.0	.0
10	18.5	16.5	17.5	6.5	6.0	6.0	2.0	.5	1.0	.0	.0	.0
11	18.5	17.0	18.0	8.5	6.0	7.0	.5	.0	.0	.0	.0	.0
12	19.0	17.0	18.0	9.0	7.5	8.0	.0	.0	.0	.5	.0	.0
13	19.0	17.5	18.5	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0
14	18.5	18.0	18.0	6.5	6.0	6.0	.5	.0	.0	.0	.0	.0
15	18.0	16.5	17.5	6.0	5.0	5.5	1.5	.5	1.0	.0	.0	.0
16	16.5	14.5	15.5	5.0	5.0	5.0	2.0	1.5	1.5	.0	.0	.0
17	14.5	13.5	14.0	5.0	4.5	4.5	2.5	1.5	2.0	.0	.0	.0
18	14.0	13.0	13.5	4.5	4.5	4.5	1.5	1.5	1.5	.0	.0	.0
19	14.5	13.0	13.5	5.0	4.5	5.0	1.5	.0	1.0	2.0	.0	.5
20	15.5	13.5	14.5	5.5	5.0	5.0	.0	.0	.0	1.5	.0	.5
21	16.5	15.0	16.0	6.0	5.0	5.5	.0	.0	.0	.5	.0	.5
22	15.0	13.5	14.0	6.0	5.0	5.5	.5	.0	.0	---	---	---
23	13.5	12.5	13.0	5.5	5.0	5.0	1.5	.0	1.0	1.5	1.0	1.5
24	13.0	12.0	12.5	5.0	5.0	5.0	2.0	1.5	1.5	2.0	1.5	2.0
25	13.0	12.5	13.0	5.0	4.5	4.5	2.0	1.5	1.5	2.5	2.0	2.0
26	13.0	12.0	12.5	4.5	4.0	4.0	1.5	.5	1.0	2.0	1.5	1.5
27	12.5	11.5	12.0	4.5	4.0	4.0	.5	.0	.5	3.0	1.5	2.5
28	13.5	12.5	13.0	5.5	4.5	5.0	1.0	.0	.5	3.0	1.5	2.5
29	13.0	12.5	13.0	5.5	4.5	4.5	1.0	.5	.5	2.0	1.5	1.5
30	12.5	12.0	12.0	4.5	4.0	4.5	1.0	.5	1.0	2.0	1.5	2.0
31	12.0	11.5	11.5	---	---	---	1.5	.5	1.0	2.0	1.5	2.0
MONTH	20.5	11.5	15.9	13.0	4.0	6.7	5.0	.0	1.4	3.0	.0	.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	1.0	1.5	5.0	4.0	4.0	8.5	7.5	8.0	---	---	---
2	1.0	1.0	1.0	4.0	3.0	3.0	8.5	7.5	8.0	12.0	11.0	11.5
3	1.0	.5	.5	3.5	3.0	3.0	9.0	7.5	8.5	11.5	11.5	11.5
4	.5	.0	.0	3.0	2.0	2.5	9.5	8.5	9.0	11.5	11.5	11.5
5	.5	.0	.0	4.0	2.0	3.0	9.5	8.5	9.0	12.5	11.0	11.5
6	.5	.0	.0	4.0	3.5	4.0	9.0	8.0	8.5	12.5	12.0	12.0
7	.5	.0	.5	4.0	3.0	4.0	9.0	8.0	8.5	12.5	11.5	12.0
8	1.5	.5	1.0	3.0	2.0	2.5	9.0	7.5	8.5	12.5	11.5	12.0
9	2.5	1.5	2.0	2.0	1.0	1.0	8.5	7.0	7.5	13.0	12.5	12.5
10	3.0	2.0	2.5	1.5	.0	1.0	7.5	6.5	7.0	14.0	12.5	13.0
11	3.0	2.5	3.0	2.5	.5	1.5	9.0	7.0	8.0	15.5	13.5	14.5
12	3.0	2.0	2.5	3.5	2.0	3.0	11.0	8.5	9.5	15.0	14.0	14.5
13	2.0	1.0	1.0	4.5	2.5	4.0	12.5	10.5	11.5	14.5	12.5	13.5
14	1.5	.5	1.0	6.0	4.0	5.0	12.0	11.5	12.0	12.5	11.5	12.0
15	2.0	1.5	1.5	6.5	5.5	6.0	11.5	10.0	10.5	12.0	11.0	11.5
16	2.0	.5	1.0	7.0	6.0	6.5	---	---	---	11.5	11.5	11.5
17	1.5	.0	.5	7.0	5.5	6.0	---	---	---	13.0	11.5	12.5
18	2.0	1.0	1.5	6.5	5.0	5.5	---	---	---	14.0	12.5	13.0
19	2.0	1.0	1.5	6.5	5.5	6.0	---	---	---	16.5	14.0	15.0
20	3.0	2.0	2.5	6.5	6.0	6.5	---	---	---	19.0	16.0	17.5
21	4.0	3.0	3.5	6.0	5.5	6.0	---	---	---	21.5	18.5	20.0
22	4.0	3.5	4.0	6.0	5.5	5.5	---	---	---	21.5	20.0	21.0
23	3.5	3.0	3.5	5.5	5.0	5.0	---	---	---	21.5	20.0	21.0
24	4.5	3.5	4.0	6.0	4.0	5.0	---	---	---	21.0	20.0	20.5
25	5.5	4.0	4.5	7.5	5.0	6.0	---	---	---	20.5	19.0	20.0
26	5.0	4.5	4.5	8.5	7.0	7.5	---	---	---	20.0	18.0	18.5
27	5.0	4.5	5.0	8.5	7.0	8.0	---	---	---	18.0	17.0	17.5
28	5.5	4.5	5.0	8.0	6.5	7.0	---	---	---	17.0	16.0	16.5
29	5.0	4.5	5.0	6.5	5.5	6.0	---	---	---	16.0	15.5	16.0
30	---	---	---	6.5	5.0	6.0	---	---	---	17.0	15.0	16.0
31	---	---	---	8.0	6.0	7.0	---	---	---	18.0	16.0	17.0
MONTH	5.5	.0	2.2	8.5	.0	4.7	12.5	6.5	8.9	21.5	11.0	14.9

DELAWARE RIVER BASIN

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01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	19.5	17.0	18.5	22.0	20.5	21.5	22.5	21.0	21.5	26.0	24.0	25.0
2	20.5	18.0	19.5	23.5	21.5	22.5	23.5	21.5	22.5	26.5	23.5	25.0
3	19.5	18.5	19.0	24.0	23.0	23.5	23.0	22.5	23.0	27.0	24.0	25.5
4	21.0	18.5	19.5	23.5	22.5	23.0	23.5	22.0	22.5	26.5	25.0	25.5
5	22.0	20.0	21.0	24.0	22.0	22.5	25.0	23.0	24.0	26.5	24.5	25.5
6	22.0	20.5	21.0	24.5	22.5	23.5	26.0	24.0	25.0	26.0	24.5	25.0
7	23.5	20.5	22.0	25.5	23.5	24.5	26.5	25.0	25.5	26.0	24.0	25.0
8	25.0	22.0	23.5	26.0	24.5	25.0	27.0	25.5	26.0	26.5	25.0	25.5
9	25.0	23.5	24.5	27.0	24.5	26.0	26.0	24.5	25.5	27.0	25.0	26.0
10	25.0	24.0	24.5	26.0	25.0	25.5	26.5	24.0	25.0	27.0	25.5	26.5
11	25.0	24.0	24.5	26.0	24.0	25.0	25.5	24.0	25.0	26.0	24.5	25.5
12	---	---	---	25.0	24.0	24.5	24.5	22.5	23.5	24.5	23.0	24.0
13	---	---	---	24.0	22.0	23.0	22.5	21.0	21.5	23.0	22.5	23.0
14	25.0	23.5	24.5	22.5	21.5	22.0	23.5	21.0	22.0	23.0	21.0	22.0
15	25.0	23.0	24.5	21.5	21.5	21.5	25.0	22.5	23.5	22.5	20.5	21.5
16	25.0	23.5	24.5	22.5	21.0	22.0	25.0	23.0	24.0	22.0	20.5	21.0
17	25.0	23.5	24.5	23.5	21.5	22.5	26.0	23.0	24.5	20.5	18.5	19.5
18	24.5	23.5	24.0	23.5	22.5	23.0	26.5	24.0	25.5	19.0	18.0	18.5
19	24.0	21.5	23.0	24.0	23.0	23.5	27.0	24.5	25.5	19.5	18.0	18.5
20	22.0	21.0	21.5	24.0	22.5	23.0	26.5	24.5	25.5	19.5	18.0	18.5
21	23.5	21.5	22.5	23.5	22.0	23.0	25.5	24.5	25.0	19.0	18.0	18.5
22	23.5	22.5	23.0	23.5	21.5	22.0	26.5	24.0	25.5	19.0	18.0	18.5
23	23.5	22.0	23.0	21.5	21.0	21.5	28.0	25.5	26.5	18.0	17.0	17.5
24	24.0	22.0	23.0	23.0	21.0	21.5	27.5	26.0	27.0	17.0	16.5	17.0
25	24.5	23.5	24.0	23.5	22.0	23.0	27.5	25.0	26.5	17.5	16.0	16.5
26	24.5	23.0	23.5	24.0	22.5	23.5	---	---	---	18.0	16.0	17.0
27	24.5	22.5	23.5	24.5	23.0	23.5	---	---	---	18.0	17.0	17.5
28	25.5	23.5	24.0	24.0	22.5	23.5	---	---	---	18.5	17.0	18.0
29	24.5	23.5	24.0	24.0	22.5	23.0	27.0	24.5	25.5	18.5	17.5	18.0
30	23.5	20.5	22.0	22.5	21.5	22.0	27.0	24.0	25.5	18.5	17.0	17.5
31	---	---	---	21.5	21.0	21.0	27.0	24.5	25.5	---	---	---
MONTH	25.5	17.0	22.7	27.0	20.5	23.1	28.0	21.0	24.6	27.0	16.0	21.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	12.1	8.6	10.1	12.0	11.8	11.9	12.8	12.2	12.5	14.0	13.3	13.6
2	12.1	8.5	10.0	11.8	11.4	11.6	13.1	12.7	12.9	13.5	13.0	13.2
3	12.2	8.3	9.9	11.4	11.1	11.2	13.2	12.8	13.0	13.4	12.6	13.0
4	10.5	8.0	8.9	11.5	11.0	11.3	12.8	12.5	12.7	14.4	13.1	13.8
5	8.6	7.6	8.0	12.0	11.5	11.8	---	---	---	14.8	14.0	14.4
6	7.8	7.6	7.7	12.3	11.8	12.1	---	---	---	15.2	14.3	14.7
7	7.8	7.6	7.7	12.4	12.2	12.3	13.2	12.8	13.0	14.9	14.2	14.5
8	8.6	7.8	8.1	12.3	12.0	12.2	---	---	---	14.2	13.7	14.0
9	9.8	8.2	8.9	12.8	12.2	12.6	13.8	13.3	13.5	14.0	13.7	13.8
10	11.8	8.6	9.9	13.2	12.7	13.0	14.0	13.5	13.8	14.1	13.9	14.0
11	12.1	10.2	10.9	13.0	12.1	12.8	14.6	14.0	14.3	14.0	13.6	13.9
12	12.3	10.1	11.0	12.1	11.4	11.7	14.8	14.6	14.7	13.7	13.4	13.6
13	12.6	10.0	11.1	12.4	11.9	12.2	14.8	14.7	14.7	13.4	13.1	13.3
14	11.7	10.0	10.5	12.6	12.4	12.5	14.7	14.2	14.4	13.8	13.1	13.5
15	10.6	9.8	10.1	12.6	12.5	12.6	14.2	13.7	14.0	13.9	13.5	13.6
16	11.3	10.1	10.8	12.9	12.6	12.8	13.7	13.3	13.5	13.9	13.5	13.8
17	12.5	11.0	11.7	13.2	12.9	13.1	13.4	13.1	13.3	14.2	13.8	14.0
18	12.7	11.6	12.1	13.2	13.1	13.1	13.5	13.2	13.4	14.2	13.8	14.0
19	13.1	11.8	12.3	13.1	12.9	13.0	13.4	13.2	13.3	13.9	12.8	13.4
20	13.0	11.5	12.1	12.9	12.6	12.8	13.8	13.4	13.6	13.5	13.1	13.3
21	11.5	10.3	10.8	12.6	12.3	12.5	14.0	13.7	13.8	13.8	13.1	13.6
22	11.5	10.8	11.0	12.5	12.0	12.3	13.9	13.7	13.8	---	---	---
23	11.7	11.3	11.5	12.3	12.0	12.2	13.7	13.4	13.6	14.0	13.8	13.9
24	12.0	11.7	11.9	12.4	12.2	12.3	13.5	13.2	13.4	13.9	13.5	13.7
25	11.9	11.8	11.9	12.6	12.3	12.4	13.6	13.1	13.4	13.8	13.5	13.6
26	12.1	11.8	12.0	12.6	12.4	12.5	13.7	13.2	13.5	14.2	13.8	14.1
27	12.2	11.9	12.1	12.6	12.3	12.4	14.0	13.6	13.8	14.3	13.5	14.0
28	12.0	11.5	11.6	12.3	12.1	12.2	14.1	13.7	13.9	13.9	13.2	13.6
29	11.7	11.5	11.6	12.4	12.0	12.2	14.1	13.7	13.9	13.9	13.3	13.6
30	12.3	11.7	12.1	12.5	12.2	12.4	14.2	13.6	13.9	13.9	13.1	13.5
31	12.4	11.9	12.2	---	---	---	14.2	13.6	13.9	13.7	13.4	13.6
MONTH	13.1	7.6	10.7	13.2	11.0	12.3	14.8	12.2	13.6	15.2	12.6	13.8

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	14.2	13.5	13.8	13.6	13.1	13.3	13.3	11.7	12.4	---	---	---
2	---	---	---	13.4	13.2	13.4	12.1	11.6	11.8	10.2	10.1	10.2
3	---	---	---	13.4	13.3	13.3	12.4	11.6	12.1	10.2	10.1	10.1
4	---	---	---	13.8	13.4	13.7	13.5	11.8	12.5	10.3	10.0	10.2
5	---	---	---	13.8	13.2	13.6	13.3	11.6	12.3	---	---	---
6	---	---	---	13.2	12.8	13.0	14.3	11.7	13.0	---	---	---
7	---	---	---	13.0	12.8	12.9	13.0	11.8	12.5	---	---	---
8	---	---	---	13.6	13.0	13.3	14.4	11.7	13.0	---	---	---
9	14.3	14.0	14.2	14.3	13.6	14.0	13.2	12.0	12.7	---	---	---
10	14.1	13.9	14.1	14.6	14.2	14.4	14.4	12.1	13.2	---	---	---
11	13.9	13.6	13.8	14.5	13.9	14.3	15.2	12.3	13.6	---	---	---
12	14.0	13.6	13.8	14.0	13.4	13.8	15.2	11.9	13.5	---	---	---
13	---	---	---	13.7	13.1	13.4	15.0	11.4	13.0	---	---	---
14	---	---	---	13.2	12.6	13.0	13.8	10.8	12.2	---	---	---
15	---	---	---	12.7	12.3	12.5	13.2	11.0	12.0	10.9	10.6	10.8
16	---	---	---	12.7	12.1	12.4	---	---	---	10.7	10.4	10.6
17	---	---	---	12.8	12.1	12.5	---	---	---	10.7	10.3	10.5
18	---	---	---	13.3	12.6	12.9	---	---	---	10.4	10.0	10.2
19	---	---	---	12.7	12.1	12.5	---	---	---	10.4	9.5	10.0
20	14.9	14.5	14.7	12.1	11.8	11.9	---	---	---	10.0	9.0	9.5
21	14.5	14.0	14.2	12.1	11.9	12.0	---	---	---	9.9	8.4	9.1
22	14.2	14.0	14.1	12.4	12.1	12.3	---	---	---	10.1	8.4	9.2
23	14.4	14.2	14.4	12.8	12.4	12.6	---	---	---	10.7	8.4	9.5
24	14.2	13.8	14.1	13.5	12.7	13.0	---	---	---	10.9	8.5	9.7
25	13.9	13.5	13.7	13.5	12.4	12.9	---	---	---	11.5	8.5	9.9
26	13.7	13.5	13.6	13.2	12.0	12.6	---	---	---	10.5	8.5	9.5
27	13.6	13.2	13.5	13.6	11.8	12.6	---	---	---	11.4	8.7	9.9
28	13.4	13.1	13.3	13.2	11.9	12.6	---	---	---	11.5	9.0	10.2
29	13.3	13.1	13.2	12.9	12.0	12.5	---	---	---	12.0	9.5	10.7
30	---	---	---	13.8	12.4	13.0	---	---	---	13.5	9.6	11.5
31	---	---	---	13.9	12.3	13.0	---	---	---	14.9	9.7	12.2
MONTH	14.9	13.1	13.9	14.6	11.8	13.0	15.2	10.8	12.7	14.9	8.4	10.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	15.5	9.8	12.7	9.8	8.0	8.8	---	---	---	10.4	7.7	9.0
2	15.1	9.8	12.5	9.7	8.7	9.1	9.2	8.5	8.8	10.6	7.8	9.0
3	12.3	9.2	10.2	9.9	8.2	9.0	8.9	8.4	8.6	11.2	7.6	9.3
4	13.5	7.6	10.6	9.4	8.3	8.9	9.0	8.3	8.5	10.0	7.9	9.0
5	11.8	8.5	10.3	10.5	8.5	9.4	9.2	8.2	8.6	10.4	7.9	9.1
6	11.5	7.3	9.4	11.4	8.7	10.0	9.4	8.1	8.7	8.9	7.8	8.3
7	11.2	6.4	8.6	11.0	8.5	9.7	9.4	8.1	8.7	9.6	7.6	8.5
8	10.9	6.4	8.6	10.2	8.0	9.0	9.7	8.0	8.8	9.2	7.5	8.3
9	8.4	4.9	6.8	10.6	7.8	9.0	8.9	7.9	8.5	9.7	7.4	8.4
10	8.8	5.3	6.9	---	---	---	9.7	7.9	8.8	9.6	7.5	8.5
11	8.3	5.2	6.6	---	---	---	9.8	8.1	8.9	8.3	7.4	7.9
12	---	---	---	---	---	---	8.9	8.2	8.6	8.6	7.5	8.0
13	---	---	---	---	---	---	9.0	8.3	8.6	8.9	7.7	8.2
14	9.2	6.9	8.0	---	---	---	9.8	8.5	9.1	9.3	7.9	8.6
15	8.9	7.7	8.2	---	---	---	10.1	8.3	9.2	9.6	8.1	8.8
16	9.0	7.7	8.3	---	---	---	10.0	8.2	9.0	9.4	8.2	8.7
17	9.2	7.7	8.3	---	---	---	10.0	8.0	8.9	8.6	8.3	8.4
18	8.8	7.6	8.1	---	---	---	10.2	8.0	9.0	9.0	8.4	8.7
19	8.2	7.7	8.0	---	---	---	10.3	7.7	8.9	9.2	8.5	8.9
20	8.5	7.9	8.2	---	---	---	10.5	8.0	9.1	9.3	8.6	8.9
21	9.5	8.0	8.6	---	---	---	10.2	7.9	9.0	9.7	8.7	9.1
22	9.2	8.1	8.5	---	---	---	10.6	8.1	9.3	9.2	8.6	8.9
23	8.4	7.6	7.9	---	---	---	10.6	7.9	9.2	9.4	8.6	9.0
24	8.3	7.5	7.9	---	---	---	9.7	7.6	8.5	9.7	8.9	9.3
25	8.9	7.9	8.4	---	---	---	10.1	7.4	8.6	9.8	9.0	9.4
26	9.8	8.1	8.9	---	---	---	---	---	---	9.9	9.1	9.5
27	10.9	8.3	9.5	---	---	---	---	---	---	9.8	9.1	9.4
28	11.3	8.3	9.7	---	---	---	---	---	---	9.6	9.0	9.2
29	11.5	8.2	9.9	---	---	---	10.1	7.6	8.7	9.4	8.7	9.0
30	9.7	8.0	8.5	---	---	---	10.6	7.9	9.1	9.7	8.6	9.1
31	---	---	---	---	---	---	10.3	8.0	9.1	---	---	---
MONTH	15.5	4.9	8.9	11.4	7.8	9.2	10.6	7.4	8.8	11.2	7.4	8.8

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 Trenton Water Filtration Plant, Trenton, NJ, and the water-quality monitor at the Morrisville Water Filtration Plant, Morrisville, PA.

August 3, 1995 (Water Year 1995)

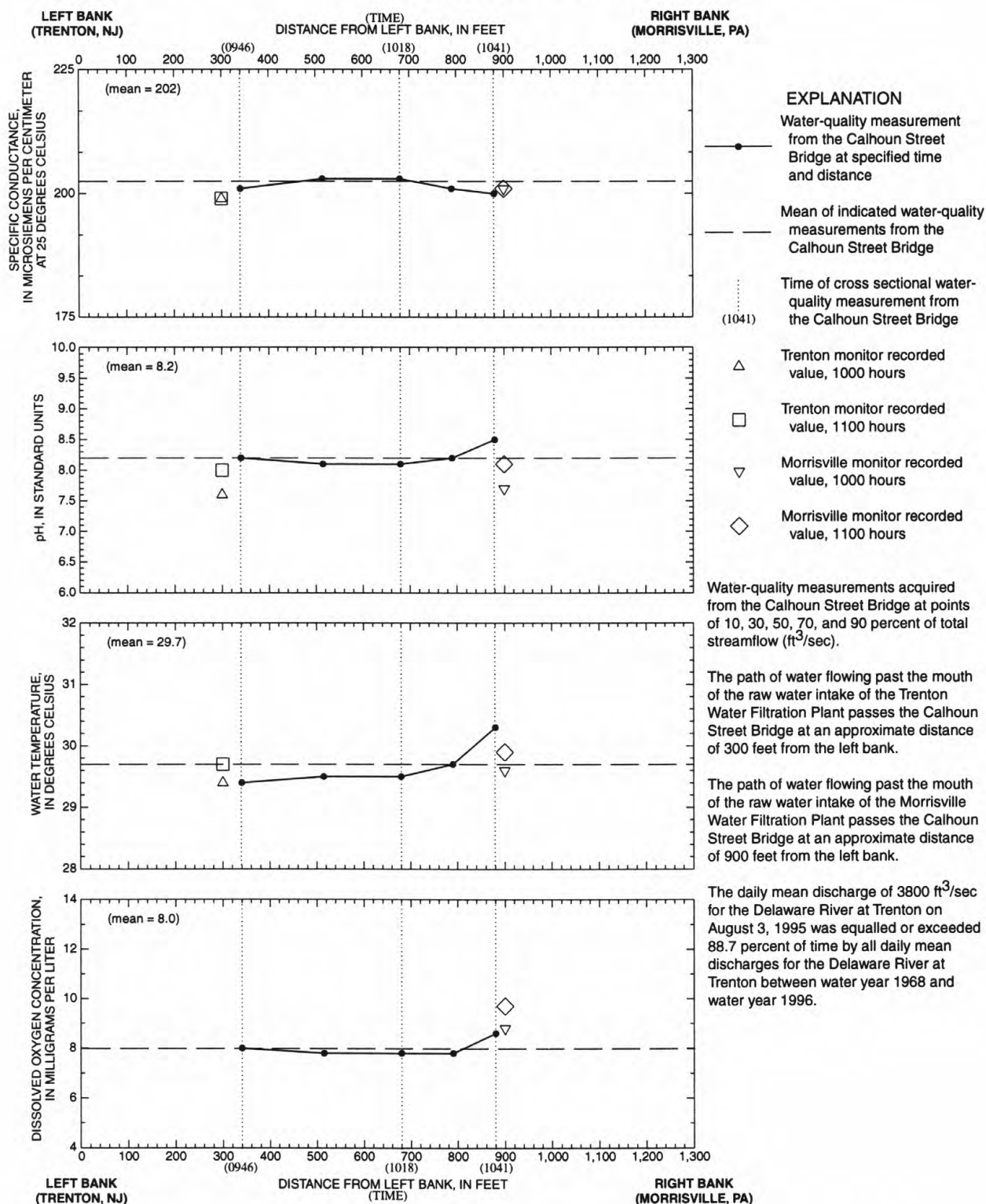


Figure 15. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, August 3, 1995.

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 (Water Year 1997)

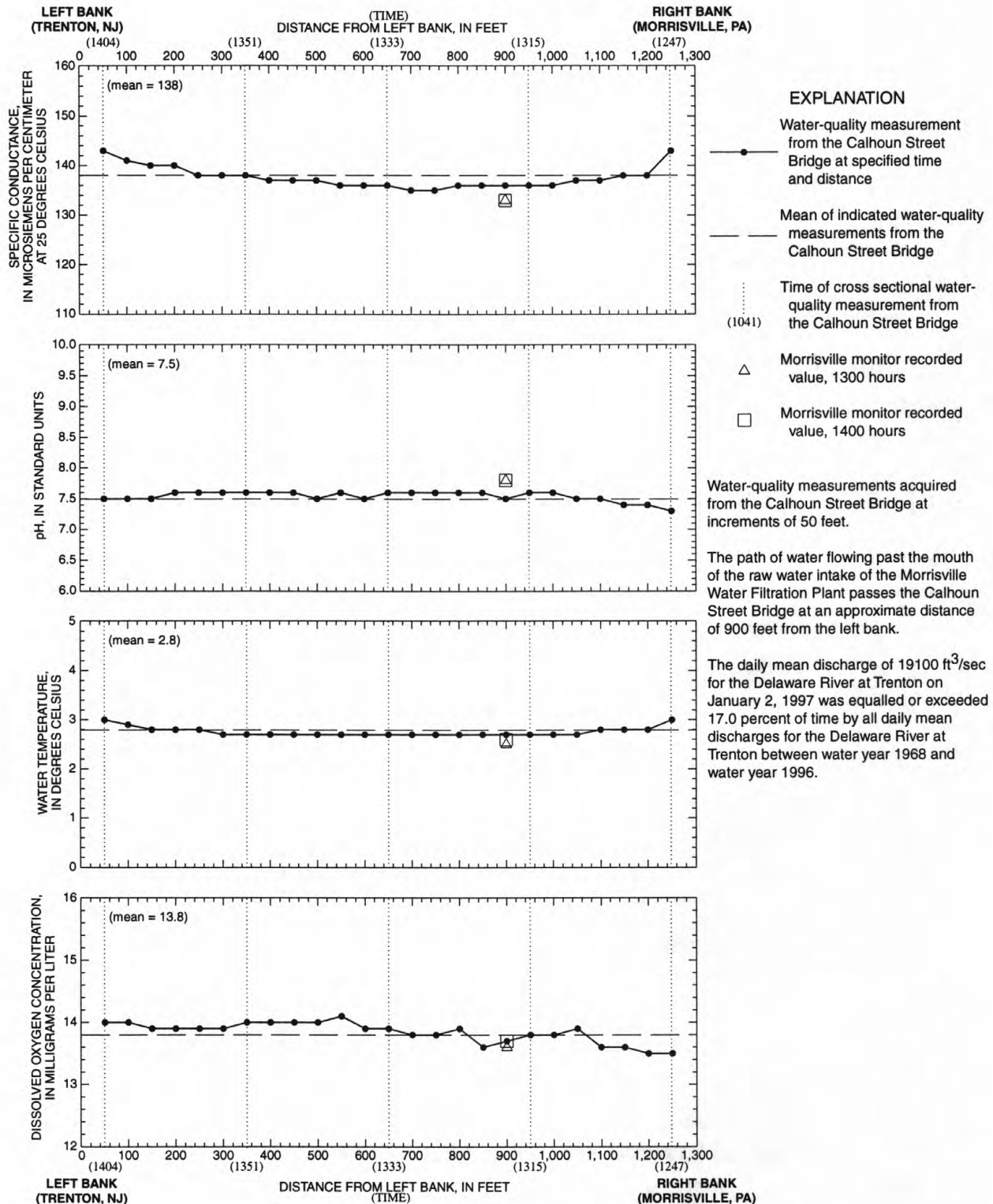
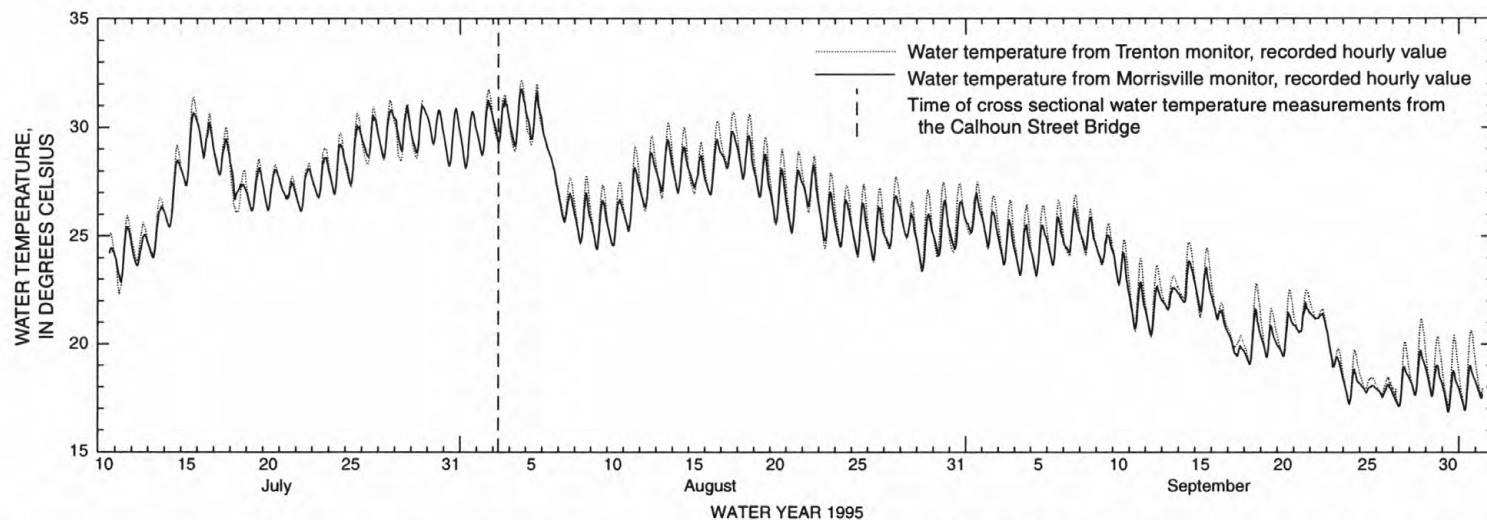
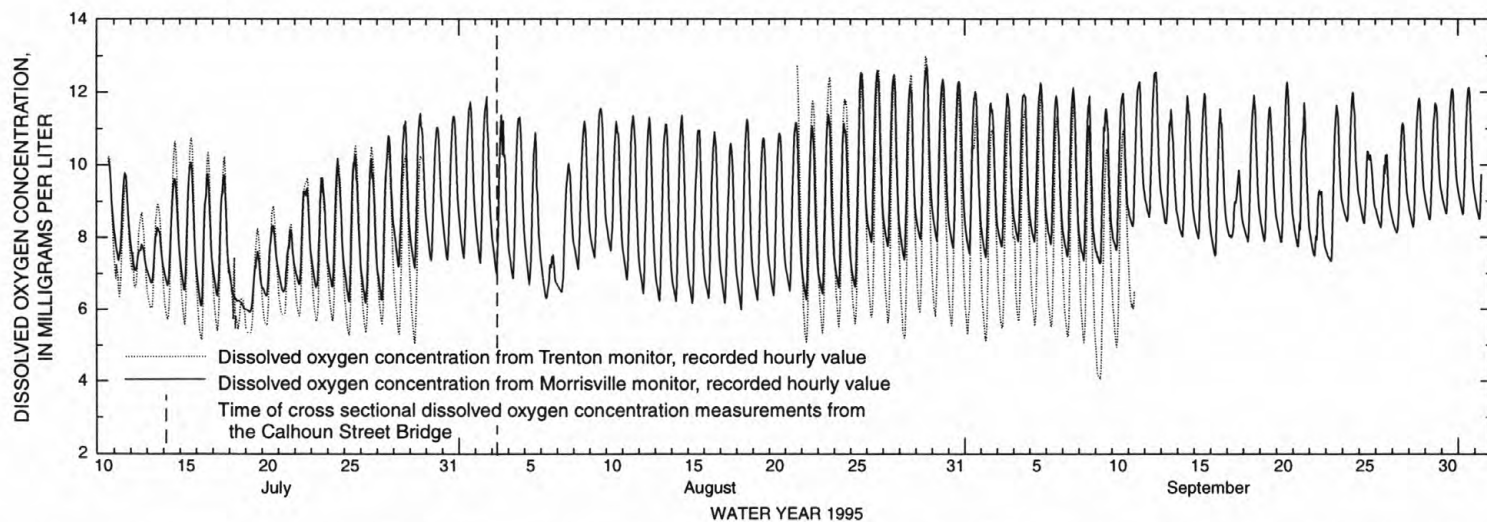


Figure 16. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, January 2, 1997.

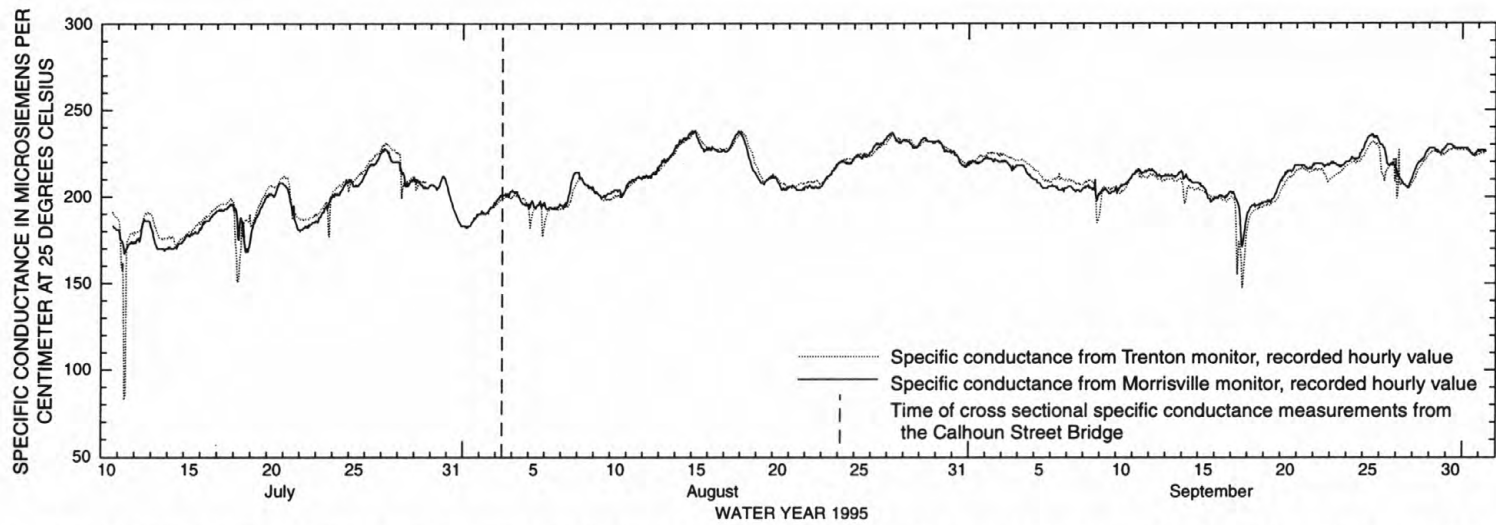


Recorded hourly water temperature measurements from the water-quality monitor at the Trenton Filtration Plant, Trenton, NJ, and the water-quality monitor at the Morrisville Filtration Plant, Morrisville, PA; and time of cross sectional water temperature measurements from the Calhoun Street Bridge.

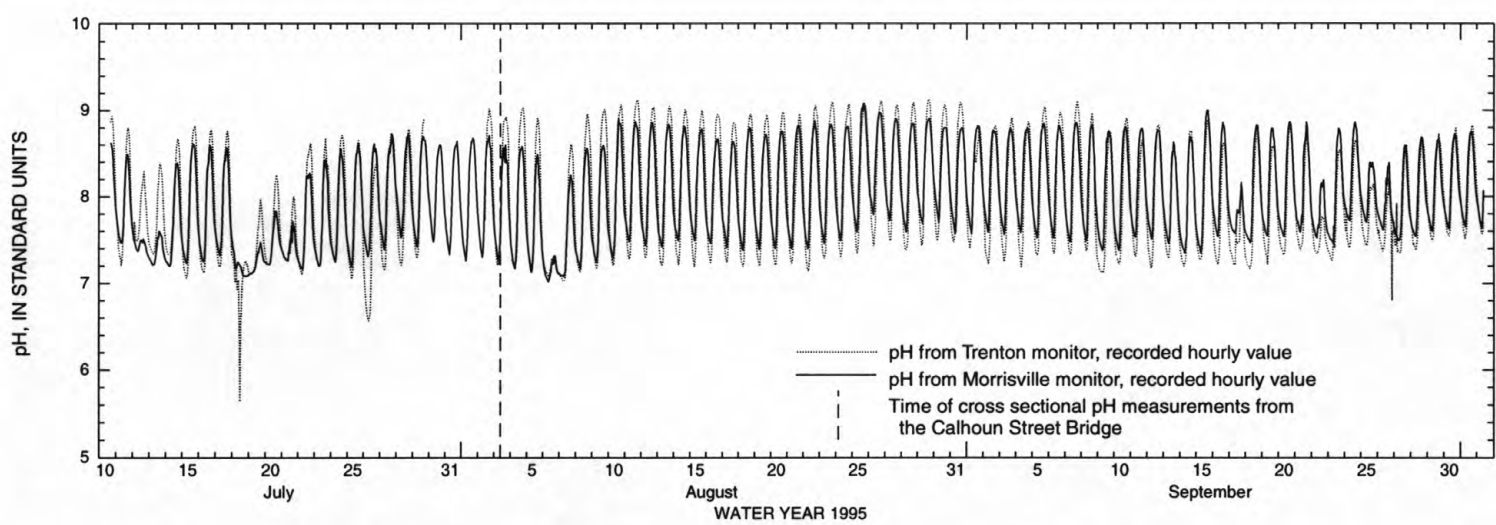


Recorded hourly dissolved oxygen concentration measurements from the water-quality monitor at the Trenton Filtration Plant, Trenton, NJ, and the water-quality monitor at the Morrisville Filtration Plant, Morrisville, PA; and time of cross sectional dissolved oxygen concentration measurements from the Calhoun Street Bridge.

Figure 17. Recorded Trenton monitor and Morrisville, PA monitor values at Delaware River at Trenton, July 10-October 2, 1996.



Recorded hourly specific conductance measurements from the water-quality monitor at the Trenton Filtration Plant, Trenton, NJ, and the water-quality monitor at the Morrisville Filtration Plant, Morrisville, PA; and time of cross sectional specific conductance measurements from the Calhoun Street Bridge.



Recorded hourly pH measurements from the water-quality monitor at the Trenton Filtration Plant, Trenton, NJ, and the water-quality monitor at the Morrisville Filtration Plant, Morrisville, PA; and time of cross sectional pH measurements from the Calhoun Street Bridge.

Figure 17. Recorded Trenton monitor and Morrisville, PA monitor values at Delaware River at Trenton, July 10-October 2, 1996--Continued.

DELAWARE RIVER BASIN

455

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 of dam at Lake Mercer, 1.9 mi south of Clarksville, 2.0 mi upstream from Shipetaukin Creek, and 7.6 mi upstream of mouth.

DRAINAGE AREA.--34.3 mi².

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.

GAGE.--Water-stage recorder. Datum of gage is 49.28 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Regulation from flood-control dams and ponds upstream. Diversions for irrigation upstream of station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached a stage of 10.9 ft, discharge, 1,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 480 ft³/s, Jan. 21, gage height, 7.23 ft; minimum daily (period Oct. 1995, or Apr. 1 to Sept. 1996), 12 ft³/s, Oct. 4.

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	---	---	---	---	---	e95	54	17	73	101	15
2	15	---	---	---	---	---	e139	50	16	72	83	14
3	13	---	---	---	---	---	e177	47	16	67	68	13
4	12	---	---	---	---	---	e155	48	18	59	56	13
5	22	---	---	---	---	---	e116	45	19	51	45	13
6	36	---	---	---	---	---	e93	45	19	43	37	13
7	34	---	---	---	---	---	e89	44	19	37	32	13
8	31	---	---	---	---	---	e84	50	18	33	28	14
9	26	---	---	---	---	---	e83	55	17	30	25	19
10	22	---	---	---	---	---	e104	54	17	27	23	26
11	20	---	---	---	---	---	e127	52	16	23	20	25
12	18	---	---	---	---	---	e122	58	34	23	19	22
13	17	---	---	---	---	---	e114	58	278	110	45	20
14	16	---	---	---	---	---	e99	52	132	142	73	19
15	26	---	---	---	---	---	e88	45	71	114	75	18
16	27	---	---	---	---	---	e137	41	45	113	65	17
17	24	---	---	---	---	---	e173	39	43	86	52	48
18	22	---	---	---	---	---	e163	37	171	63	43	92
19	21	---	---	---	---	---	e137	35	167	54	37	83
20	19	---	---	---	---	---	e109	33	245	59	33	64
21	31	---	---	---	---	---	e98	30	169	48	28	49
22	47	---	---	---	---	---	e80	28	126	39	25	41
23	46	---	---	---	---	---	e66	25	273	35	22	40
24	42	---	---	---	---	---	e62	22	249	32	26	36
25	36	---	---	---	---	---	e55	20	171	29	26	32
26	31	---	---	---	---	---	e49	18	112	31	23	29
27	27	---	---	---	---	---	e46	18	82	33	21	26
28	37	---	---	---	---	---	e42	17	64	29	20	24
29	44	---	---	---	---	---	e39	17	50	26	18	35
30	38	---	---	---	---	---	e43	18	54	24	17	38
31	32	---	---	---	---	---	---	17	---	60	16	---
TOTAL	849	---	---	---	---	---	2984	1172	2728	1665	1202	911
MEAN	27.4	---	---	---	---	---	99.5	37.8	90.9	53.7	38.8	30.4
MAX	47	---	---	---	---	---	177	58	278	142	101	92
MIN	12	---	---	---	---	---	39	17	16	23	16	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1996, BY WATER YEAR (WY)

	MEAN	35.6	43.0a	74.1a	79.4a	69.8a	85.9a	67.0	43.9	41.3	33.4	30.6	31.2
MAX	87.1	112a	142a	151a	136a	204a	115	72.2	90.9	142	77.4	96.9	
(WY)	1976	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	

DELAWARE RIVER BASIN

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ--Continued

SUMMARY STATISTICS

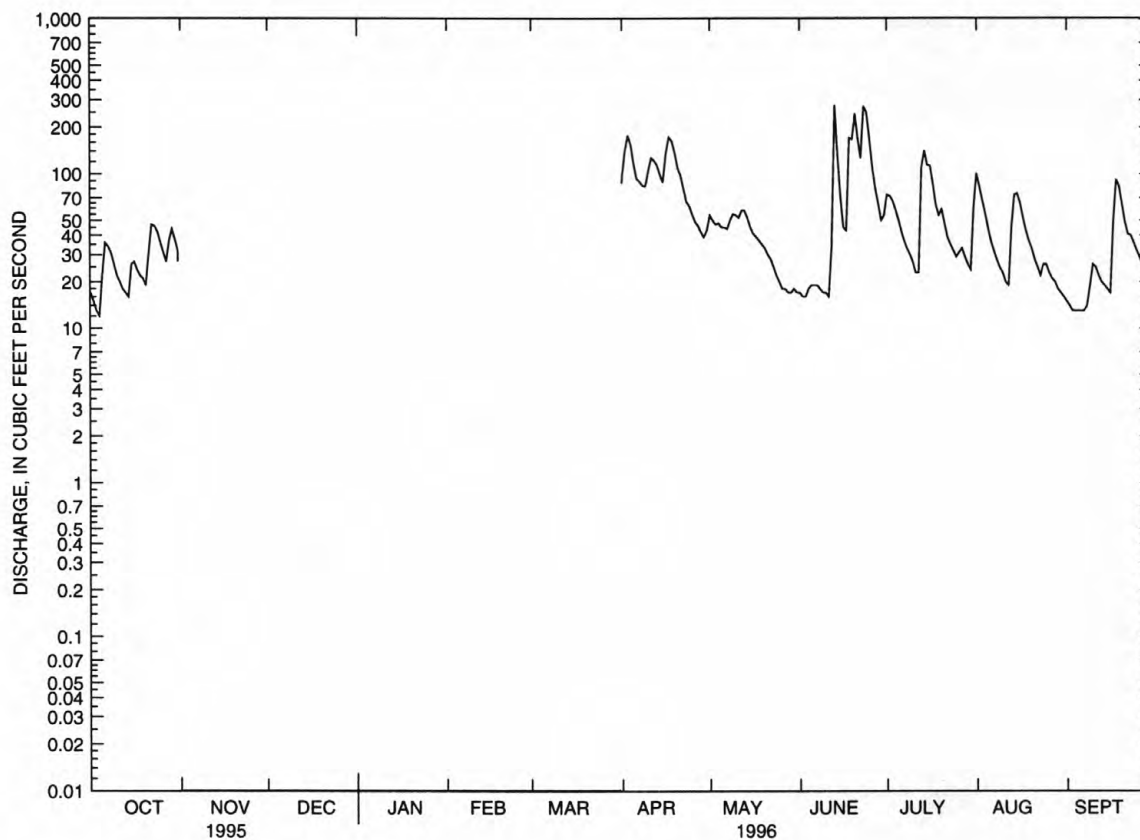
WATER YEARS 1973 - 1996

ANNUAL MEAN	52.0a	
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.

c Estimated.



01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ--Continued

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, 1.9 south of Clarksville, 2.0 mi upstream from Shipetaukin Creek, and 7.6 mi upstream of mouth.

DRAINAGE AREA.--34.3 mi².

PERIOD OF RECORD.--Water years 1963, 1965, 1967, 1979 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 1995 TO SEPTEMBER 1996

		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 BROTH (MG/L) (00310)	COLI-FORM, FECAL, EC (MPN) (31615)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	
NOV 1995	21...	1330	77	139	7.2	6.5	755	11.1	91	2.1	1700	180	37
FEB 1996	14...	1030	66	139	7.1	3.0	745	12.0	91	E1.4	50	10	32
APR 1996	16...	1345	E137	146	7.0	11.5	747	10.0	94	3.0	110	70	33
JUN 1996	12...	1000	16	142	6.9	24.0	758	6.6	79	E1.4	110	50	39
AUG 1996	08...	1000	28	110	7.0	26.0	764	8.0	98	5.4	50	20	32
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)	ALKA-LINITY 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 1995	21...	8.2	4.0	6.7	3.3	12	19	13	0.2	5.1	80	69	5
FEB 1996	14...	7.1	3.4	9.4	2.4	7.0	16	18	0.1	6.1	84	73	3
APR 1996	16...	7.5	3.4	11	2.3	7.7	18	21	0.1	2.9	94	75	14
JUN 1996	12...	8.6	4.3	9.0	2.3	16	16	17	0.1	1.1	88	70	6
AUG 1996	08...	7.4	3.4	6.4	2.5	19	9.6	13	0.1	4.4	72	59	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-SOLVED (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 1995	21...	0.005	0.50	<0.03	<0.03	0.30	0.20	0.80	0.70	0.02	<0.01	4.8	0.5
FEB 1996	14...	0.007	1.30	0.05	0.06	0.50	0.34	1.8	1.6	0.03	0.03	3.4	0.4
APR 1996	16...	0.008	0.94	<0.03	<0.03	0.70	0.48	1.6	1.4	0.06	0.02	4.3	1.5
JUN 1996	12...	0.009	0.49	0.09	0.06	0.60	0.37	1.1	0.86	0.03	<0.01	4.0	0.9
AUG 1996	08...	0.004	0.19	0.04	0.06	1.0	0.53	1.2	0.72	0.03	<0.01	5.4	2.5

DELAWARE RIVER BASIN

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 12...	1000	<10	<1	<10	30	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 12...	370	<1	70	<0.1	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 mi².

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records fair. Records include water diverted from outside the basin since February 1954 for municipal supply which returns to Assunpink Creek through Ewing-Lawrence Sewerage Authority Treatment Plant, 2.4 mi above station (records given herein). In addition there is an average inflow of about 2.0 ft³/s from industrial use of water that originates outside the basin. Some diversion for irrigation in headwater area during summer months. Flow regulated by several flood-control reservoirs upstream of gage since mid-1970's. Several measurements of water temperature were made during the year. National Weather Service gage-height telemeter at station.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 21	1615	1,160	6.44	June 17	2245	1,120	6.32
Oct. 28	0815	1,080	6.21	June 19	1845	1,060	6.17
Nov. 12	0400	1,250	6.69	June 23	0045	2,060	8.70
Jan. 19	2130	2,730	10.39	July 13	1300	1,560	7.44
Jan. 27	1830	1,580	7.50	July 31	1545	2,220	9.12
Mar. 7	1900	960	5.89	Aug. 13	0915	931	5.81
Apr. 16	1130	1,250	6.68	Sept. 17	0930	1,260	6.70
June 13	0445	*3,230	*11.69				

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	54	127	127	82	263	142	286	259	61	295	662	70
2	50	231	130	141	209	151	664	168	57	212	380	68
3	47	171	116	220	187	148	428	206	89	192	247	66
4	45	127	107	164	168	132	308	183	108	175	193	65
5	340	101	94	127	154	141	229	148	77	150	156	63
6	224	93	115	106	157	397	191	175	69	130	127	64
7	132	146	94	92	142	623	194	148	65	114	110	70
8	101	158	85	101	145	607	231	243	61	114	100	87
9	80	107	159	95	231	426	232	204	62	107	102	112
10	71	100	160	91	264	309	433	173	72	96	95	99
11	61	153	112	87	243	256	382	190	59	80	79	86
12	55	782	95	95	219	235	297	269	455	127	80	80
13	47	456	86	117	178	217	251	178	1940	1130	523	90
14	66	459	90	114	162	197	224	143	625	658	315	115
15	221	606	102	116	152	186	197	125	410	517	213	78
16	99	489	224	111	146	174	798	133	224	442	168	81
17	74	386	202	112	137	159	511	125	355	304	138	813
18	67	306	175	129	133	149	381	117	654	214	124	533
19	61	282	172	1460	123	168	296	119	671	256	119	354
20	55	226	153	1350	159	375	230	115	655	213	97	237
21	687	178	127	811	512	234	195	107	474	150	85	184
22	317	144	118	694	373	192	174	92	620	128	80	271
23	169	131	113	606	292	165	167	83	1050	130	86	230
24	116	156	107	687	275	146	179	75	607	122	246	180
25	92	136	100	675	218	136	144	67	417	112	142	148
26	80	124	96	489	183	127	135	63	249	209	108	128
27	86	115	88	834	163	117	132	68	191	141	118	127
28	593	107	84	782	170	122	115	66	161	112	93	132
29	248	152	81	602	155	431	114	86	138	100	83	390
30	172	134	77	468	---	343	236	74	452	99	78	194
31	134	---	77	376	---	239	---	64	---	965	74	---
TOTAL	4644	6883	3666	11934	5913	7444	8354	4266	11128	7794	5221	5215
MEAN	150	229	118	385	204	240	278	138	371	251	168	174
MAX	687	782	224	1460	512	623	798	269	1940	1130	662	813
MIN	45	93	77	82	123	117	114	63	57	80	74	63
(t)	15.8	19.0	16.1	25.0	22.4	22.8	24.2	18.3	21.2	20.3	17.4	15.6

DELAWARE RIVER BASIN

01464000 ASSUNPINK CREEK AT TRENTON, NJ--Continued

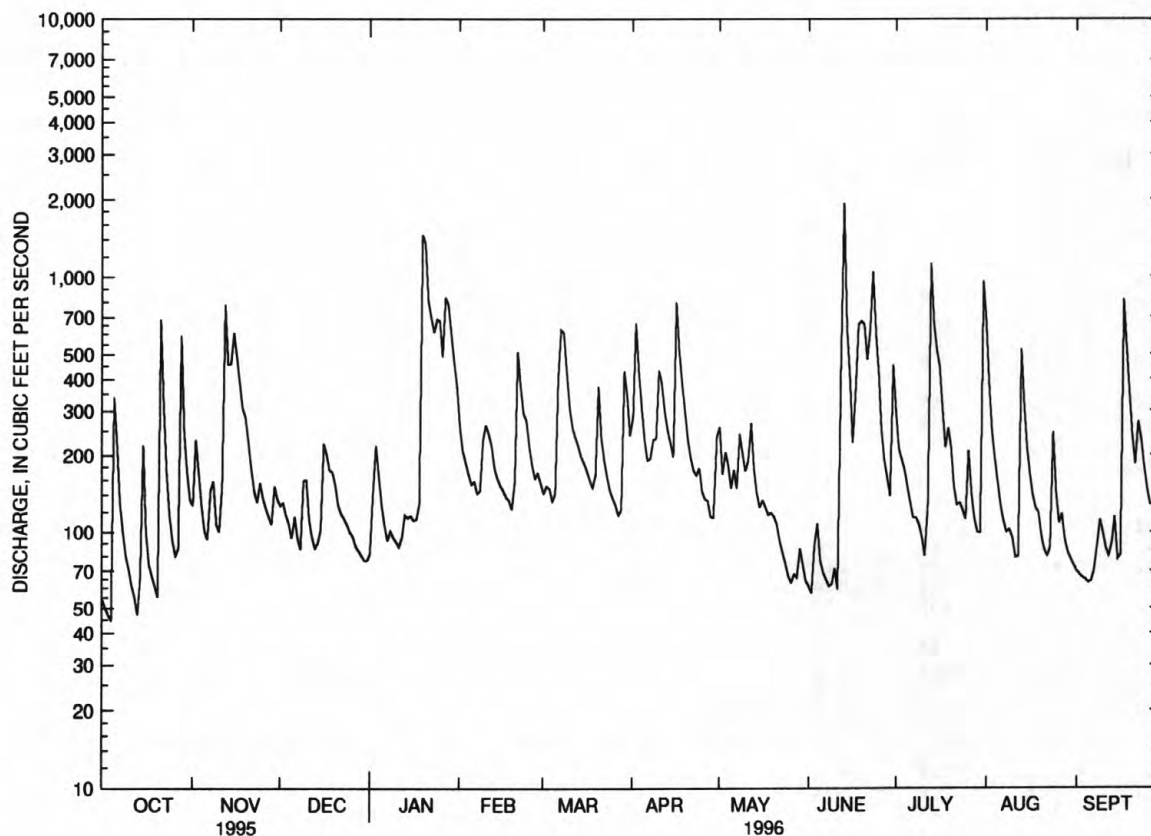
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996, BY WATER YEAR (WY)

MEAN	78.3	115	145	166	184	210	180	129	99.8	101	92.5	90.5
MAX	257	331	386	498	395	554	494	340	371	545	355	327
(WY)	1928	1973	1984	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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1924 - 1996	
ANNUAL TOTAL	40316		82462			
ANNUAL MEAN	110		225		132	
HIGHEST ANNUAL MEAN					233	
LOWEST ANNUAL MEAN					69.2	
HIGHEST DAILY MEAN	782	Nov 12	1940	Jun 13	4050	Jul 21 1975
LOWEST DAILY MEAN	16	Sep 3	45	Oct 4	4.0	Jul 21 1929
ANNUAL SEVEN-DAY MINIMUM	17	Sep 1	66	Jun 5	9.6	Aug 25 1944
INSTANTANEOUS PEAK FLOW			3230	Jun 13	5450	Jul 21 1975
INSTANTANEOUS PEAK STAGE			11.69	Jun 13	14.61a	Jul 21 1975
INSTANTANEOUS LOW FLOW			38	Oct 14	1.0	Aug 21 1931
10 PERCENT EXCEEDS	224		496		271	
50 PERCENT EXCEEDS	77		148		87	
90 PERCENT EXCEEDS	32		76		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.



01464000 ASSUNPINK CREEK AT TRENTON, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01464000 ASSUNPINK CREEK AT TRENTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-75, 1977-80, 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 1995 TO SEPTEMBER 1996

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, EC BROTH (MPN) (31615)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV 1995													
21...	0945	182	235	7.6	7.5	755	10.7	90	E1.8	790	130	66	
FEB 1996													
14...	1330	168	493	7.2	3.0	745	11.9	91	E1.6	1100	700	75	
APR													
17...	1330	490	202	7.2	10.0	756	10.2	91	2.2	1700	300	48	
JUN													
13...	1000	2290	98	6.9	20.0	757	6.5	72	5.2	>24000	3000	25	
AUG													
08...	1300	101	305	7.5	22.5	765	7.6	88	<1.0	1100	120	85	
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)	ALKA-LINITY LAB (MG/L AS CAC03) (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, SUB-PENDEDED (MG/L) (00530)
NOV 1995													
21...	16	6.4	15	3.5	35	26	23	0.2	9.2	134	128	6	
FEB 1996													
14...	19	6.6	60	3.1	29	24	100	0.2	9.2	260	251	1	
APR													
17...	12	4.3	17	2.3	20	19	29	0.1	5.5	132	107	24	
JUN													
13...	7.1	1.8	5.9	3.2	13	11	9.1	<0.1	2.5	68	52	94	
AUG													
08...	20	8.6	20	3.9	51	26	34	0.2	9.4	172	167	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-SOLVED (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 SUB-PENDEDED TOTAL (MG/L AS C) (00689)
NOV 1995													
21...	0.009	1.80	0.08	0.09	0.50	0.34	2.3	2.1	0.20	0.15	4.5	0.7	
FEB 1996													
14...	0.011	2.60	0.16	0.15	0.50	0.44	3.1	3.0	0.22	0.19	3.4	0.5	
APR													
17...	0.011	1.40	0.05	0.06	0.70	0.47	2.1	1.9	0.16	0.05	5.4	3.4	
JUN													
13...	0.022	0.75	0.21	0.21	1.4	0.59	2.2	1.3	0.35	0.04	6.7	3.7	
AUG													
08...	0.018	3.10	0.08	0.11	0.70	0.49	3.8	3.6	0.30	0.23	4.2	0.9	

DELAWARE RIVER BASIN

01464000 ASSUNPINK CREEK AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 21...	0945	19	<1	<10	60	<1	<1	4
JUN 1996 13...	1000	40	2	<10	20	<1	4	12

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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1995 21...	640	2	80	<0.1	3	<1	20
JUN 1996 13...	5600	23	140	<0.1	5	<1	60

DELAWARE RIVER BASIN

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01464500 CROSSWICKS CREEK AT EXTONTVILLE, NJ

LOCATION.--Lat 40°08'15", long 74°36'02", Mercer County, Hydrologic Unit 02040201, on right bank upstream from highway bridge in Extontville, 0.5 mi upstream from Pleasant Run, and 0.7 mi downstream from Mercer-Monmouth County line.

DRAINAGE AREA.--81.5 mi².

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 24.94 ft above 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 15	1800	1,150	8.46	June 20	1815	777	7.09
Jan. 20	0200	*3,510	*12.46	June 23	1930	1,210	8.60
Jan. 28	1245	863	7.45	July 14	1000	836	7.34

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	25	58	167	84	165	104	189	130	51	350	e451	48
2	24	71	150	94	e161	105	607	105	49	208	e226	45
3	23	108	121	208	e151	120	450	103	98	168	e126	41
4	22	81	101	212	e144	106	216	135	160	173	e105	39
5	64	68	88	171	e129	109	181	115	115	149	e93	38
6	179	58	88	e106	e122	231	161	151	86	116	e80	36
7	80	55	86	e91	e115	487	152	157	69	98	e76	52
8	52	107	80	e126	e116	520	189	163	58	64	e74	41
9	41	95	90	e159	194	295	183	179	51	54	e69	92
10	35	72	165	e127	250	203	279	186	49	61	e73	104
11	32	68	123	e97	206	184	597	157	54	53	e69	74
12	29	408	123	e96	187	184	339	210	52	49	e58	64
13	26	402	82	e129	151	182	214	174	60	270	e241	65
14	27	226	75	e133	128	169	182	132	66	728	e397	66
15	97	939	94	e125	126	165	160	104	49	270	e225	58
16	92	709	153	e122	122	179	343	101	42	e536	e148	51
17	49	270	242	e118	138	156	438	123	70	e324	e144	292
18	39	180	174	e134	115	142	212	108	406	e176	e149	510
19	35	156	152	1320	108	134	177	99	273	e157	e141	220
20	33	128	163	2650	133	269	158	90	694	e170	119	150
21	93	110	182	844	313	214	143	80	391	e120	96	123
22	223	97	155	336	278	175	127	70	202	e100	83	107
23	109	86	107	212	204	151	114	61	894	e101	74	128
24	74	92	92	227	190	135	119	61	612	e101	68	124
25	62	97	90	323	172	125	105	59	194	e90	77	104
26	56	87	90	210	151	116	98	55	140	e90	65	88
27	49	79	96	281	135	104	105	59	115	e122	60	78
28	75	77	85	791	129	96	95	59	97	e84	131	71
29	137	162	84	395	125	248	89	65	86	e74	90	122
30	85	209	85	225	---	417	95	64	149	e71	68	141
31	67	---	83	192	---	216	---	55	---	e177	54	---
TOTAL	2034	5355	3666	10338	4658	6041	6517	3410	5432	5304	3930	3172
MEAN	65.6	178	118	333	161	195	217	110	181	171	127	106
MAX	223	939	242	2650	313	520	607	210	894	728	451	510
MIN	22	55	75	84	108	96	89	55	42	49	54	36
CFSM	.81	2.19	1.45	4.09	1.97	2.39	2.67	1.35	2.22	2.10	1.56	1.30
IN.	.93	2.44	1.67	4.72	2.13	2.76	2.97	1.56	2.48	2.42	1.79	1.45

DELAWARE RIVER BASIN

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1996, BY WATER YEAR (WY)

MEAN	87.6	129	158	175	179	201	173	131	97.6	102	94.7	89.3
MAX	207	406	356	452	416	476	388	319	251	390	299	284
(WY)	1972	1973	1973	1978	1979	1994	1983	1984	1968	1989	1971	1971
MIN	32.9	36.7	46.2	62.1	82.9	86.1	68.3	60.8	39.8	25.8	25.4	28.3
(WY)	1966	1966	1966	1981	1992	1985	1985	1955	1965	1955	1966	1995

SUMMARY STATISTICS

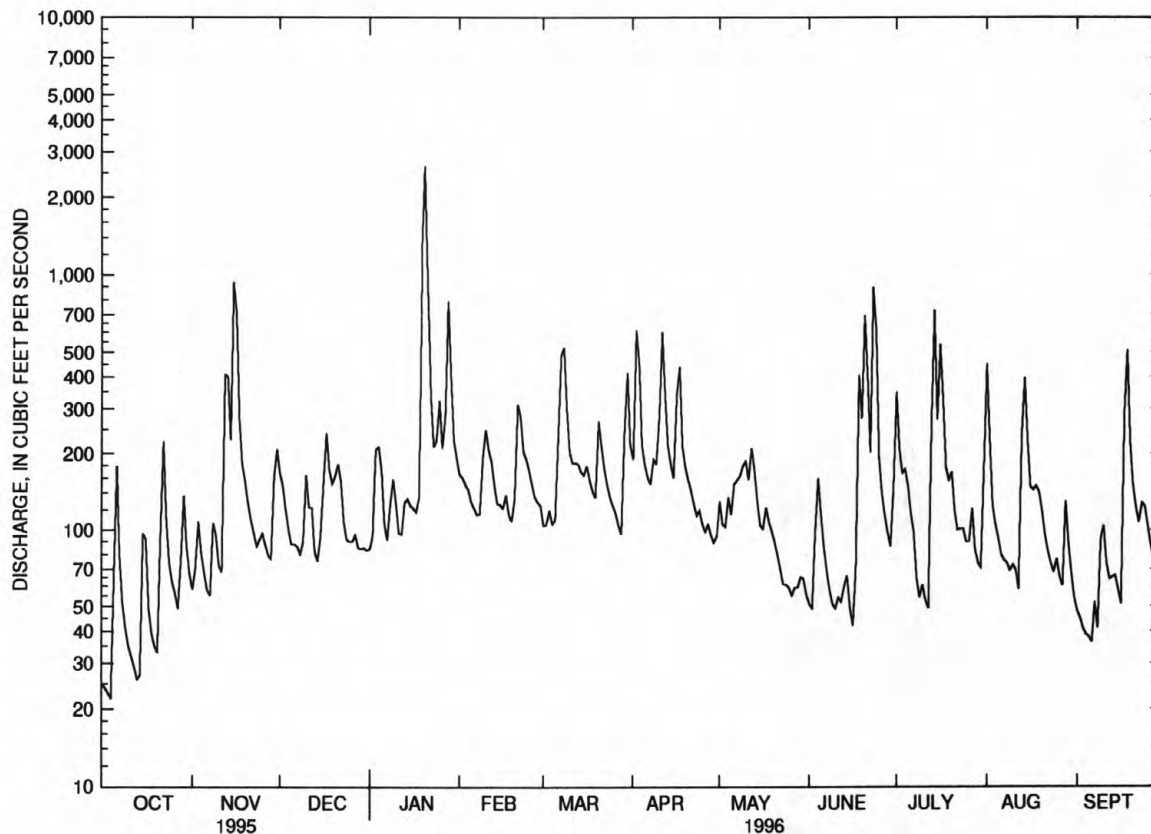
FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1940 - 1996

ANNUAL TOTAL	30174	59857	
ANNUAL MEAN	82.7	164	134
HIGHEST ANNUAL MEAN			225
LOWEST ANNUAL MEAN			69.9
HIGHEST DAILY MEAN	939	Nov 15	2650
LOWEST DAILY MEAN	11	Sep 3	22
ANNUAL SEVEN-DAY MINIMUM	12	Sep 3	35
INSTANTANEOUS PEAK FLOW			3510
INSTANTANEOUS PEAK STAGE			12.46
INSTANTANEOUS LOW FLOW			22
ANNUAL RUNOFF (CFSM)	1.01	2.01	1.65
ANNUAL RUNOFF (INCHES)	13.77	27.32	22.40
10 PERCENT EXCEEDS	154	280	250
50 PERCENT EXCEEDS	68	118	93
90 PERCENT EXCEEDS	21	54	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 current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1966 to June 1970.

SUSPENDED-SEDIMENT DISCHARGE: February 1965 to June 1970.

REMARKS.--For February 22, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

		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,MP WATER TOTAL (COL / 100 ML) (31649)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 1995	21...	1330	110	172	7.0	6.5	755	10.7	88	<1.1	60	10	46
FEB 1996	22...	1200	266	177	7.1	4.5	757	11.0	86	--	--	--	43
APR	17...	1030	498	127	7.1	10.0	755	9.0	80	E1.4	230	220	37
JUN	13...	1400	60	181	7.3	22.0	755	6.7	77	E1.7	2400	700	57
AUG	08...	1000	E74	156	7.3	22.0	762	6.9	79	<1.0	1300	220	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)	ALKA- LINITY LAB AS (MG/L 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 1995	21...	14	2.6	5.9	2.7	15	27	12	0.2	9.4	102	85	9
FEB 1996	22...	13	2.6	12	2.7	13	19	24	0.1	7.4	128	92	17
APR	17...	11	2.2	7.1	2.3	15	18	13	0.2	6.2	68	71	18
JUN	13...	18	3.0	8.0	3.0	32	20	17	0.2	11	--	101	16
AUG	08...	14	2.8	6.7	2.9	26	18	14	0.2	11	100	87	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 SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (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 1995	21...	0.006	0.46	0.05	0.08	0.50	0.26	0.96	0.72	0.06	<0.01	4.6	1.2
FEB 1996	22...	--	0.78	--	--	0.50	0.58	1.3	1.4	0.12	0.10	4.8	0.9
APR	17...	0.008	0.55	0.16	0.03	0.60	0.36	1.2	0.91	0.16	0.01	5.5	2.5
JUN	13...	0.014	0.42	0.03	0.04	0.40	0.22	0.82	0.64	0.17	<0.01	4.7	1.8
AUG	08...	0.009	0.46	0.03	<0.03	0.50	0.20	0.96	0.66	0.11	0.03	7.1	2.1

DELAWARE RIVER BASIN

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 13...	1400	19	1	<10	30	<1	2	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 13...	5800	2	60	<0.1	3	<1	10

DELAWARE RIVER BASIN

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01464515 DOCTORS CREEK AT ALLENTOWN, NJ

LOCATION.--Lat 40°10'37", long 74°35'57", Monmouth County, Hydrologic Unit 02040201, at bridge on Breza Road in Allentown, and 0.8 mi downstream from Conines Millpond dam.

DRAINAGE AREA.--17.4 mi².

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

REMARKS.--For February 15, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 1995	21...	1000	44	175	7.3	6.0	754	11.0	89	E1.0	700	150	44
FEB 1996	15...	1130	49	184	6.8	2.0	753	12.4	91	--	--	--	51
APR 1996	16...	1045	155	173	7.3	11.5	747	9.5	89	E1.8	1300	320	46
JUN 1996	13...	1100	23	186	7.2	23.0	755	6.7	79	3.0	5400	600	54
AUG 1996	08...	1330	23	162	7.3	24.0	762	6.7	80	E1.2	460	60	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)	ALKA-LINITY 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 1995	21...	11	4.0	6.7	4.1	15	20	15	0.2	8.6	88	83	7
FEB 1996	15...	12	5.1	13	3.1	13	22	27	0.1	9.1	110	107	5
APR 1996	16...	11	4.4	11	2.7	14	20	24	0.2	3.8	104	90	21
JUN 1996	13...	13	5.3	9.5	2.9	25	18	20	0.2	6.9	116	94	7
AUG 1996	08...	11	4.4	7.7	3.4	24	14	17	0.2	8.3	90	84	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-SOLVED (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 1995	21...	0.014	0.86	0.10	0.15	0.50	0.31	1.4	1.2	0.07	<0.01	3.0	0.9
FEB 1996	15...	--	1.80	--	--	0.70	0.67	2.5	2.5	0.06	0.02	2.0	0.7
APR 1996	16...	0.010	1.10	<0.03	0.05	0.60	0.42	1.7	1.5	0.11	0.02	2.4	1.5
JUN 1996	13...	0.030	0.63	0.52	0.57	1.0	0.81	1.6	1.4	0.09	<0.01	3.3	0.8
AUG 1996	08...	0.018	0.59	0.50	0.53	1.0	0.68	1.6	1.3	0.06	<0.01	3.7	0.6

DELAWARE RIVER BASIN

01464515 DOCTORS CREEK AT ALLENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1996 13...	1100	12	<1	<10	30	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
JUN 1996 13...	1200		<1	90	<0.1	3	<1	<10

DELAWARE RIVER BASIN

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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 mi².

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 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, e7.9 ft, Jan. 21; minimum recorded, -4.30 ft, Dec. 12.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.56	6.67	6.17	e7.9	6.15	7.84	7.40	6.86	6.45	7.13	7.03	6.88
high tide	Date	21	14,15	20	21	15	20	16	2	12	13	1	25
Minimum	Elevation	-3.51	-3.32	-4.30	e-2.0	-3.96	-4.21	-3.96	-2.76	-2.99	-2.86	-2.81	-2.60
low tide	Date	30	29	12	6	13	4	24	30	28	21	30	30
Mean high tide		5.23	5.22	4.53	---	---	5.12	5.67	5.71	5.54	5.64	5.53	5.78
Mean water level		1.76	1.75	1.07	---	---	1.59	2.17	2.10	1.82	1.92	1.82	2.21
Mean low tide		-2.00	-2.00	-2.67	---	---	-2.21	-1.58	-1.81	-2.22	-2.11	-2.24	-1.73

e Estimated.

DELAWARE RIVER BASIN

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ

LOCATION.--Lat 39°56'22", long 74°45'50", Burlington County, Hydrologic Unit 02040202, at bridge on Lumberton-Vincentown Road at Vincentown, 2.9 mi southeast of Lumberton, and 3.1 mi upstream from Southwest Branch.

DRAINAGE AREA.--64.5 mi².

PERIOD OF RECORD.--Water years 1925, 1959-62, 1975 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 1995 TO SEPTEMBER 1996

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 1995													
27...	1015	77	127	4.4	4.5	756	10.7	83	81.6	14	<10	31	
JAN 1996													
31...	1200	152	94	4.8	3.0	760	11.2	83	<1.0	22	30	21	
MAR													
26...	1215	80	95	5.7	11.0	765	9.6	87	<1.0	2	<10	24	
JUN													
06...	1025	82	72	5.7	20.5	767	6.4	71	<1.0	170	30	17	
JUL													
25...	1150	76	76	6.0	23.5	762	6.1	72	<1.0	240	10	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)	ALKA-LINITY LAB 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 1995													
27...	8.3	2.6	5.5	1.8	--	29	9.6	<0.1	7.5	82	--	--	6
JAN 1996													
31...	5.6	1.8	4.7	1.4	1.2	16	9.1	<0.1	4.9	60	47	47	2
MAR													
26...	6.5	1.8	5.3	1.4	3.0	17	9.8	<0.1	3.8	72	50	50	3
JUN													
06...	4.3	1.4	4.8	1.5	2.8	11	8.5	<0.1	4.6	42	39	39	8
JUL													
25...	5.6	1.5	5.0	1.5	5.2	8.7	9.1	<0.1	6.4	100	43	43	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-SOLVED (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 1995													
27...	0.005	0.54	0.08	0.06	0.40	0.37	0.94	0.91	0.05	0.03	9.9	9.9	0.6
JAN 1996													
31...	0.005	0.71	<0.03	<0.03	0.50	0.37	1.2	1.1	0.05	0.03	9.9	9.9	0.3
MAR													
26...	0.004	0.54	0.04	<0.03	0.40	0.26	0.94	0.80	0.02	0.04	7.9	7.9	0.4
JUN													
06...	0.006	0.26	0.14	0.14	0.70	0.47	0.96	0.73	0.13	<0.01	10	10	1.4
JUL													
25...	0.016	0.39	0.11	0.12	1.0	0.62	1.4	1.0	0.15	0.04	22	22	1.3

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

DELAWARE RIVER BASIN

01466500-MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ
(Hydrologic bench-mark station)

LOCATION.--Lat 39°53'05", long 74°30'20", Burlington County, Hydrologic Unit 02040202, on right bank in Lebanon State Forest, 25 ft upstream from Butterworth Road Bridge, 3.4 mi upstream from confluence with Cooper Branch, and 7.0 mi southeast of Browns Mills.

DRAINAGE AREA.--2.35 mi².

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 117.73 ft above 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 20	0630	*7.7	*1.74	No peak greater than base discharge.			

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	.75	.88	1.4	1.3	e2.7	1.9	2.9	2.5	1.8	2.4	2.3	1.4
2	.74	1.0	1.4	1.3	e2.7	1.9	3.4	2.4	1.8	2.2	2.0	1.4
3	.70	.97	1.3	1.6	e2.8	1.9	3.5	2.5	2.2	2.2	1.9	1.4
4	.67	.93	1.3	1.5	e2.6	1.9	3.0	2.5	2.4	2.1	1.8	1.4
5	.88	.91	1.3	1.4	e2.4	1.9	2.7	2.4	2.2	2.0	1.7	1.4
6	.91	.91	1.3	1.4	e2.3	2.4	2.5	2.6	2.0	1.9	1.7	1.4
7	.81	.97	1.3	1.4	e2.3	e3.0	2.5	2.5	1.9	1.8	1.7	1.4
8	.75	1.1	1.3	1.4	e2.2	e3.3	2.6	2.6	1.9	1.8	1.6	1.4
9	.65	.99	1.4	1.4	e2.5	e2.9	2.6	2.8	1.8	1.8	1.6	1.4
10	.57	.96	1.3	1.4	e2.6	e2.5	3.3	2.7	1.8	1.9	1.6	1.4
11	.54	1.0	1.3	1.4	e2.6	e2.4	3.8	2.7	1.8	1.8	1.6	1.4
12	.51	1.4	1.3	1.4	e2.5	e2.3	4.0	2.9	1.8	1.7	1.6	1.4
13	.50	1.2	1.3	1.4	e2.5	e2.4	3.6	2.6	1.8	3.5	3.0	1.4
14	.53	1.5	1.3	1.4	e2.2	2.5	3.1	2.5	1.8	4.4	2.7	1.4
15	1.1	1.9	1.3	1.5	e2.1	2.6	2.8	2.4	1.7	3.6	2.4	1.4
16	.91	1.6	1.4	1.5	e2.2	2.5	3.6	2.5	1.7	3.0	2.1	1.4
17	.82	1.5	1.4	1.5	e2.1	2.4	4.0	2.5	1.9	2.5	2.1	2.5
18	.78	1.5	1.3	1.5	e2.1	2.3	3.5	2.4	2.5	2.3	1.9	2.3
19	.74	1.5	1.4	3.0	e2.0	2.4	3.1	2.4	2.6	2.4	1.7	1.8
20	.72	1.5	1.3	7.1	e2.3	2.6	2.9	2.3	3.1	2.3	1.7	1.6
21	1.1	1.4	1.3	5.7	e2.7	2.5	2.7	2.2	3.0	2.1	1.6	1.6
22	1.0	1.4	1.3	5.2	e2.6	2.5	2.6	2.2	2.7	1.9	1.6	1.6
23	.89	1.4	1.3	2.6	e2.5	2.3	2.6	2.1	3.0	2.0	1.5	1.6
24	.85	1.4	1.3	2.7	e2.4	2.2	2.5	2.0	2.5	1.9	1.6	1.5
25	.83	1.4	1.3	2.7	e2.4	2.2	2.4	2.0	2.4	1.8	1.5	1.5
26	.83	1.4	1.3	2.4	2.3	2.1	2.4	1.9	2.2	1.9	1.5	1.4
27	.80	1.4	1.3	3.1	2.1	2.1	2.4	2.0	2.1	1.8	1.6	1.4
28	1.1	1.3	1.3	3.6	2.1	2.1	2.4	2.0	2.0	1.7	1.5	1.4
29	.96	1.5	1.3	3.6	2.0	2.9	2.4	2.0	1.9	1.7	1.5	1.6
30	.89	1.4	1.3	3.0	---	2.9	2.4	2.0	2.2	1.7	1.5	1.5
31	.87	---	1.3	e2.9	---	3.0	---	1.9	---	2.0	1.4	---
TOTAL	24.70	38.22	40.9	73.3	68.8	74.8	88.2	73.0	64.5	68.1	55.5	45.7
MEAN	.80	1.27	1.32	2.36	2.37	2.41	2.94	2.35	2.15	2.20	1.79	1.52
MAX	1.1	1.9	1.4	7.1	2.8	3.3	4.0	2.9	3.1	4.4	3.0	2.5
MIN	.50	.88	1.3	1.3	2.0	1.9	2.4	1.9	1.7	1.7	1.4	1.4
CFSM	.34	.54	.56	1.01	1.01	1.03	1.25	1.00	.91	.93	.76	.65
IN.	.39	.61	.65	1.16	1.09	1.18	1.40	1.16	1.02	1.08	.88	.72

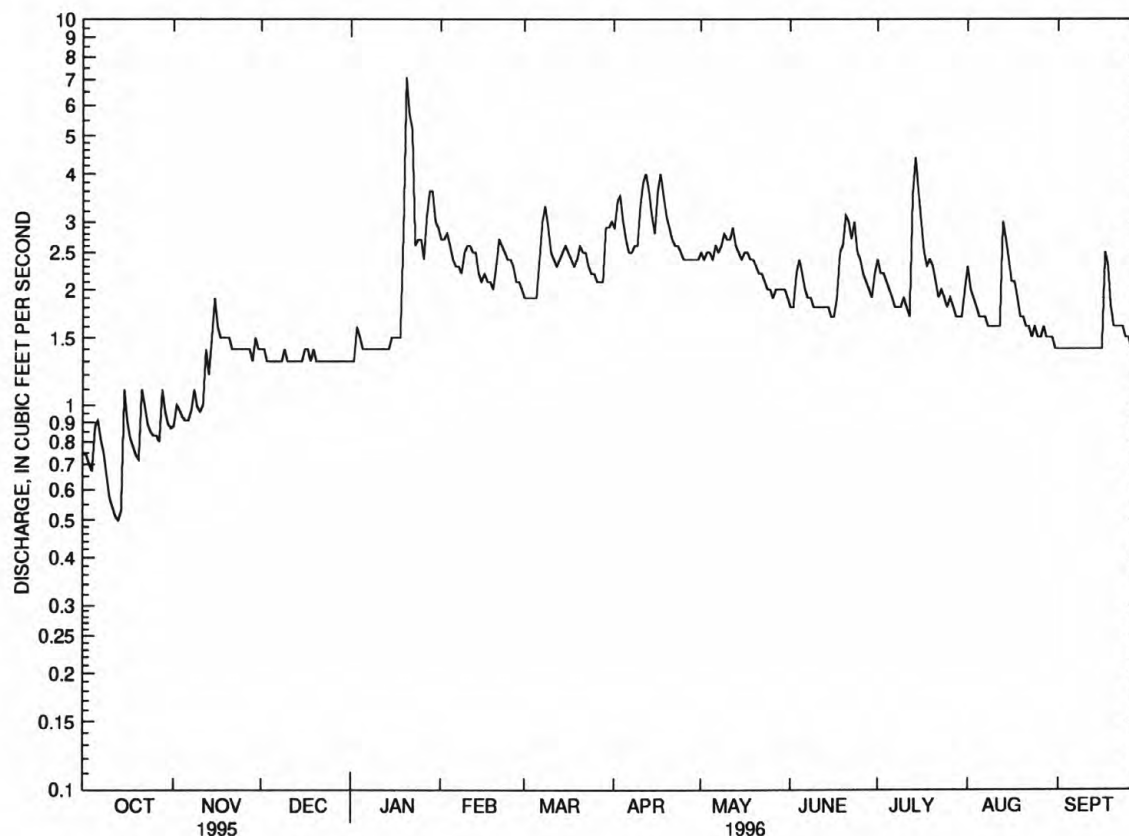
01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1996, BY WATER YEAR (WY)

MEAN	1.58	1.75	2.07	2.31	2.42	2.90	2.94	2.62	2.19	1.89	1.86	1.67
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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1954 - 1996
ANNUAL TOTAL	425.89	715.72	
ANNUAL MEAN	1.17	1.96	2.18
HIGHEST ANNUAL MEAN			3.85
LOWEST ANNUAL MEAN			1.17
HIGHEST DAILY MEAN	3.5 Apr 13	7.1 Jan 20	20 Feb 28 1958
LOWEST DAILY MEAN	.50 Oct 13	.50 Oct 13	.50 Oct 13 1995
ANNUAL SEVEN-DAY MINIMUM	.58 Oct 8	.58 Oct 8	.58 Oct 8 1995
INSTANTANEOUS PEAK FLOW		7.7 Jan 20	35 Aug 25 1958
INSTANTANEOUS PEAK STAGE		1.74 Jan 20	2.33 Aug 25 1958
INSTANTANEOUS LOW FLOW		.49 Oct 13	---
ANNUAL RUNOFF (CFSM)	.50	.83	.93
ANNUAL RUNOFF (INCHES)	6.74	11.33	12.61
10 PERCENT EXCEEDS	1.5	2.9	3.7
50 PERCENT EXCEEDS	1.2	1.9	1.8
90 PERCENT EXCEEDS	.78	1.0	1.1

e Estimated.



01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to September 1996 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1968 to September 1992.

PH: October 1984 to September 1992.

WATER TEMPERATURE: October 1960 to September 1992.

DISSOLVED OXYGEN: October 1984 to September 1992.

REMARKS.--Chemical analyses are from samples collected as water flows over the weir at the gaging station. All discharge record represents flow at a point 785 ft downstream of the gaging station. Discharges at the weir may be about 1 ft³/s less than published discharges. Field analysis of alkalinity was not attempted if the pH of the sample water was 4.5 or less.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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, (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MP (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
DEC 1995 12...	1050	1.3	73	3.7	4.0	0.30	768	5.9	45	K2	K2
AUG 1996 20...	0957	1.7	37	4.2	16.0	0.40	767	2.7	27	K2	K1

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)
DEC 1995 12...	6	0.93	0.97	2.2	0.40	12	3.5	<0.1	5.0	24
AUG 1996 20...	2	0.31	0.31	1.6	0.10	2.8	3.3	<0.1	3.8	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 DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC 1995 12...	<0.01	<0.05	<0.015	<0.20	<0.01	<0.01	<0.01	3.6	2	0.01	100
AUG 1996 20...	<0.01	<0.05	0.03	<0.20	<0.01	<0.01	<0.01	8.1	6	0.03	59

DELAWARE RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
DEC 1995 12...	1050	210	23	<3	74	<4	25	<10	<1
AUG 1996 20...	0957	170	10	<3	320	<4	7	<10	<1

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L) (75990)
DEC 1995 12...	<1	<1.0	13	<6	--	--	--	--
AUG 1996 20...	<1	<1.0	5	<6	0.22	0.04	<0.01	0.008

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	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)	NITRO- SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
AUG 1996 20...	0957	FIELD BLANK	0	0.01	0.001	<0.03	<0.02	<0.001	0.004	<0.002

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	BARIUM, DIS- SOLVED (UG/L AS BA) (01 5)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
AUG 1996 20...	<0.001	<0.3	<0.2	<0.2	<0.2	<2	<0.3	<0.2	<0.2	0.26

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
AUG 1996 20...	3.1	<0.3	<0.1	<0.2	<0.5	<0.2	<0.1	<0.1	3.26	<0.2

01467000 NORTH BRANCH RANOCAS 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 mi².

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder above concrete dams. Datum of gage is 31.19 ft above 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 of 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 20	2045	*747	*2.64	July 16	1030	670	2.54

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	34	72	188	99	295	164	345	174	119	288	207	110
2	32	80	173	119	275	163	436	153	113	279	205	75
3	33	91	152	192	258	164	423	152	149	251	186	89
4	34	85	140	199	242	159	387	182	216	307	167	91
5	68	75	131	184	219	163	344	186	212	262	149	101
6	90	73	123	166	207	216	314	213	184	210	130	113
7	70	90	113	143	193	285	296	214	153	173	123	103
8	58	112	103	152	187	380	307	229	128	158	117	64
9	48	95	105	168	212	403	306	246	116	159	109	82
10	36	84	130	164	229	359	365	262	108	141	105	93
11	41	85	132	146	243	321	411	270	110	126	98	88
12	41	182	113	144	240	293	416	341	107	128	95	100
13	41	187	103	172	227	257	387	304	118	311	222	111
14	43	201	104	174	213	228	334	254	114	502	325	66
15	78	312	107	175	202	223	327	210	105	509	337	78
16	68	369	133	172	192	232	388	197	96	644	281	82
17	57	353	154	169	190	235	391	205	106	562	306	294
18	53	280	150	188	182	220	371	195	189	403	312	363
19	51	229	157	419	171	215	328	193	331	349	261	310
20	53	198	165	686	186	251	294	178	492	318	202	254
21	99	172	159	675	237	253	272	154	420	243	170	205
22	119	150	142	474	256	249	251	144	370	208	149	186
23	93	132	133	399	262	226	231	139	474	193	133	181
24	76	132	125	370	250	205	221	130	501	178	141	156
25	67	134	117	382	227	191	208	120	371	161	132	135
26	60	128	112	337	205	178	196	114	286	159	122	130
27	56	122	107	354	190	164	185	112	225	150	148	118
28	74	115	104	416	181	157	174	117	192	138	163	109
29	94	163	99	416	172	248	171	124	162	127	152	144
30	98	184	96	374	---	330	171	131	213	120	137	150
31	84	---	95	330	---	367	---	128	---	139	118	---
TOTAL	1949	4685	3965	8558	6343	7499	9250	5771	6480	7896	5502	4181
MEAN	62.9	156	128	276	219	242	308	186	216	255	177	139
MAX	119	369	188	686	295	403	436	341	501	644	337	363
MIN	32	72	95	99	171	157	171	112	96	120	95	64
CFSM	.53	1.32	1.08	2.34	1.85	2.05	2.61	1.58	1.83	2.16	1.50	1.18
IN.	.61	1.48	1.25	2.70	2.00	2.36	2.92	1.82	2.04	2.49	1.73	1.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1996, BY WATER YEAR (WY)

MEAN	118	151	172	199	214	247	238	194	143	123	133	117
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

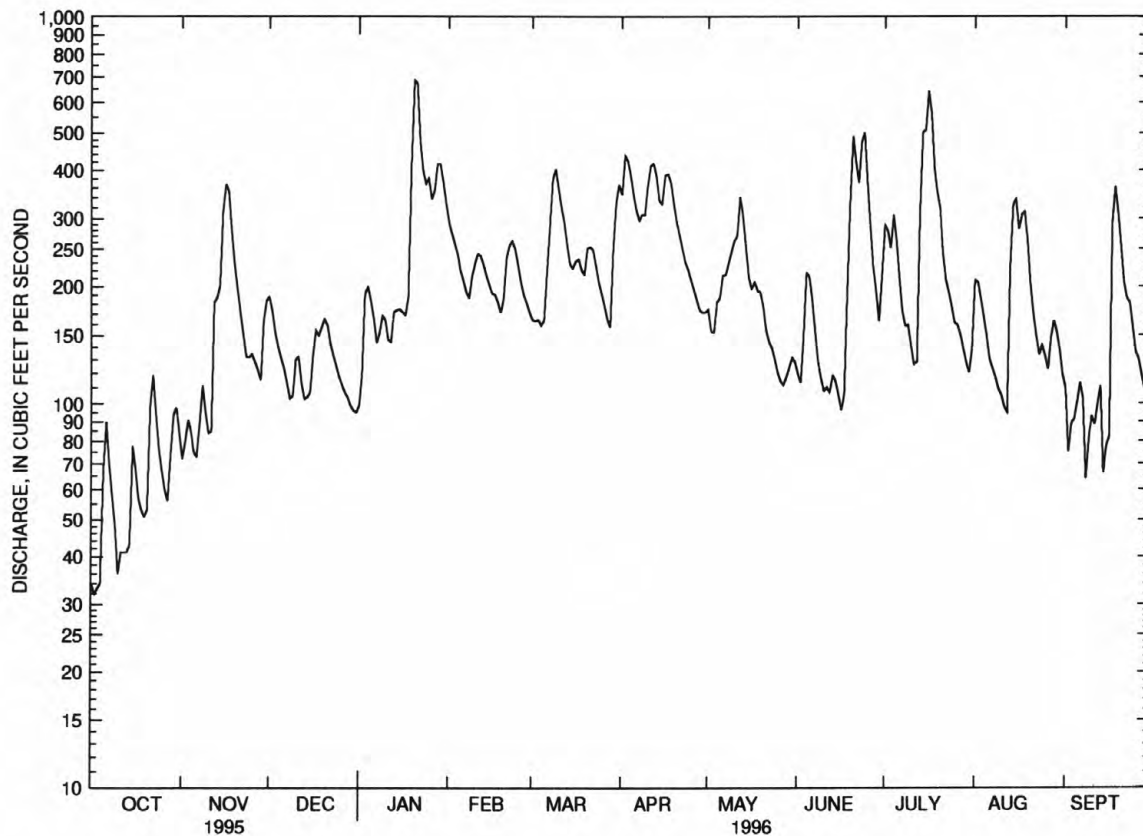
DELAWARE RIVER BASIN

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

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1922 - 1996	
ANNUAL TOTAL	35278		72079			
ANNUAL MEAN	96.7		197			
HIGHEST ANNUAL MEAN					171	
LOWEST ANNUAL MEAN					286	1978
HIGHEST DAILY MEAN	369	Nov 16	686	Jan 20	92.3	1995
LOWEST DAILY MEAN	29	Aug 26	32	Oct 2	1690	Aug 21 1939
ANNUAL SEVEN-DAY MINIMUM	30	Aug 21	44	Oct 8	9.0	Sep 29 1932
INSTANTANEOUS PEAK FLOW			747	Jan 20	27	Oct 2 1922
INSTANTANEOUS PEAK STAGE			2.64	Jan 20	1730	Aug 21 1939
INSTANTANEOUS LOW FLOW			32	Oct 1	10.77a	Aug 21 1939
ANNUAL RUNOFF (CFSM)	.82		1.67		9.0	Sep 29 1932
ANNUAL RUNOFF (INCHES)	11.12		22.72		1.45	
10 PERCENT EXCEEDS	164		360		19.64	
50 PERCENT EXCEEDS	91		172		311	
90 PERCENT EXCEEDS	35		85		140	
					63	

a From high-water mark, site and datum then in use.



— 01467000 N B RANOCAS CREEK AT PEMBERTON, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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

WATER-QUALITY RECORDS

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

COOPERATION.--Analyses of fecal coliform 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 1995 TO SEPTEMBER 1996

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 AS CACO3 (00900)	
NOV 1995													
21...	1115	170	81	4.6	6.0	755	11.4	92	E1.1	4	10	11	
JAN 1996													
31...	0900	334	74	4.1	3.5	758	11.5	87	<1.0	<2	<10	6	
MAR													
26...	0915	180	69	4.6	9.5	764	10.2	89	E1.5	11	<10	9	
JUN													
05...	1025	214	56	4.8	18.0	763	7.4	78	E1.3	70	50	8	
JUL													
25...	0910	164	50	4.9	21.0	761	6.8	76	<1.0	22	30	8	
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)	ALKA-LINITY 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 1995													
21...	2.6	1.2	4.5	1.4	--	15	7.3	<0.1	4.9	38	--	--	<1
JAN 1996													
31...	1.3	0.58	2.6	0.60	--	11	5.6	<0.1	3.0	34	--	--	<1
MAR													
26...	2.1	0.91	4.3	0.80	--	11	6.9	<0.1	3.5	48	--	--	1
JUN													
05...	2.0	0.80	4.3	0.80	<1.0	7.8	7.1	<0.1	4.1	60	--	--	7
JUL													
25...	1.8	0.73	4.2	0.90	1.2	6.2	6.4	<0.1	4.7	66	26	26	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-SOLVED (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 1995													
21...	0.004	<0.05	0.12	0.08	0.20	0.13	--	--	<0.01	<0.01	6.3	6.3	0.6
JAN 1996													
31...	<0.003	0.073	<0.03	<0.03	0.30	0.22	0.37	0.29	0.01	<0.01	9.3	9.3	0.3
MAR													
26...	0.003	0.063	0.04	<0.03	0.30	0.15	0.36	0.21	<0.01	0.02	6.4	6.4	0.4
JUN													
05...	0.003	0.088	0.06	0.04	0.50	0.28	0.59	0.37	0.06	<0.01	7.9	7.9	3.1
JUL													
25...	0.008	0.077	0.09	0.08	0.70	0.26	0.78	0.34	0.05	<0.01	12	12	3.9

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

DELAWARE RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER-QUALITY QUALITY-CONTROL DATA

[The following analysis is a quality-assurance sample processed during the 1996 water year and is defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUN 1996 05...	1025	FIELD BLANK	<1	<1	<0.1	<1	<1

DELAWARE RIVER BASIN

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01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ

LOCATION.--Lat 39°57'07", long 74°58'10", Burlington County, Hydrologic Unit 02040202, at bridge on Kings Highway, 200 ft downstream from outlet of Strawbridge Lake, 0.6 mi northwest of Moorestown Mall, 0.8 mi southeast of Lenola, and 1.8 mi southwest of Moorestown.

DRAINAGE AREA.--12.8 mi².

PERIOD OF RECORD.--Water years 1976 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 1995 TO SEPTEMBER 1996

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 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 1995													
02...	1152	14	306	6.8	14.5	762	7.4	73	<1.0	330	550	97	
JAN 1996													
29...	1108	14	291	6.9	3.5	769	11.5	86	<1.0	70	110	68	
APR													
03...	1135	16	277	6.8	10.0	770	9.6	84	2.8	170	110	64	
JUN													
05...	1000	6.4	315	7.0	20.5	764	7.8	87	3.6	1100	250	77	
JUL													
23...	1000	5.7	274	7.0	22.0	757	6.2	71	11.5	220	90	72	
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)	ALKA-LINITY LAB 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 1995													
02...	28	6.6	12		5.2	19	70	22	0.3	11	188	168	9
JAN 1996													
29...	19	5.1	21		3.9	14	45	41	0.1	8.4	156	155	17
APR													
03...	18	4.7	22		3.5	16	44	38	0.2	8.0	164	150	27
JUN													
05...	21	5.9	23		4.3	18	50	45	0.2	7.8	194	170	23
JUL													
23...	20	5.4	17		4.6	24	41	32	0.2	9.6	170	146	34
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-SOLVED (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (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 1995													
02...	0.011	0.37	0.12	0.10	0.50	0.32	0.87	0.69	0.06	0.02		3.0	0.9
JAN 1996													
29...	0.006	0.71	0.12	0.14	0.40	0.28	1.1	0.99	<0.01	<0.01		3.4	1.4
APR													
03...	0.008	0.50	0.10	0.13	0.80	0.50	1.3	1.0	0.16	<0.01		4.7	2.8
JUN													
05...	0.031	0.33	0.32	0.30	1.0	0.54	1.3	0.87	0.14	<0.01		3.4	1.9
JUL													
23...	0.016	0.32	0.26	0.27	1.0	0.50	1.3	0.82	0.22	<0.01		4.8	0.1

DELAWARE RIVER BASIN

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ

LOCATION.--Lat 39°56'30", long 75°00'05", Camden County, Hydrologic Unit 02040202, on left bank on downstream wingwall of bridge on Mill Road in Cherry Hill, 1.1 mi south of Maple Shade and 3.8 mi upstream from confluence with the North Branch Pennsauken Creek.

DRAINAGE AREA.--8.98 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NJ-82-2: Drainage area. 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 fair. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 21	1300	354	6.80	June 30	1645	337	7.55
Nov. 12	0215	302	6.27	July 13	1300	377	7.82
Jan. 19	1515	*606	*9.11	Aug. 13	0915	352	7.65
June 20	0200	397	7.95	Sept. 17	0545	340	7.57

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

1	3.0	5.3	11	11	10	8.7	51	30	5.7	63	140	5.6
2	2.9	18	8.6	70	9.9	17	89	12	5.5	13	15	5.3
3	2.8	6.2	7.4	87	11	14	19	22	16	16	9.5	5.5
4	2.8	4.9	7.1	17	9.5	9.9	14	12	16	16	8.0	5.6
5	102	4.7	6.7	9.6	9.9	12	13	12	7.8	7.6	7.1	6.8
6	15	4.4	12	8.9	9.4	69	12	34	5.7	6.5	6.6	10
7	6.0	21	6.8	7.9	9.1	73	23	13	5.3	5.9	6.2	8.7
8	4.1	21	6.2	22	14	45	26	44	5.0	47	6.1	6.1
9	3.4	5.3	37	14	47	19	46	44	4.8	19	6.8	7.6
10	3.2	4.7	17	11	21	15	60	17	5.9	7.7	6.6	5.6
11	3.0	27	8.0	9.2	15	16	19	26	4.9	6.2	5.4	5.4
12	3.0	157	6.6	33	12	16	14	43	6.4	7.0	7.1	6.4
13	2.9	13	6.0	65	9.5	15	12	13	23	229	189	6.7
14	21	79	8.5	23	11	13	11	11	5.7	31	25	5.5
15	99	53	13	19	10	28	11	9.6	4.9	14	11	4.9
16	6.4	12	72	14	9.4	14	131	26	4.4	13	13	7.7
17	4.0	8.1	21	15	9.8	11	25	15	41	8.0	37	189
18	3.6	7.7	10	34	9.4	10	15	11	42	7.2	9.1	30
19	3.2	9.8	18	434	8.8	19	13	10	129	52	8.2	10
20	3.7	6.1	11	74	29	42	12	9.0	117	13	6.7	7.3
21	210	6.4	8.5	19	85	15	12	8.5	15	7.4	6.4	6.5
22	26	6.2	7.7	15	25	12	11	7.7	9.0	6.6	6.4	37
23	6.9	5.6	7.5	15	18	10	14	7.1	8.0	6.9	5.9	10
24	5.5	20	7.7	36	17	9.3	20	6.7	6.4	6.2	64	6.9
25	4.7	6.4	7.4	23	13	9.1	11	6.5	6.7	5.9	9.1	6.6
26	4.3	5.5	6.8	13	12	9.0	11	5.9	5.5	55	6.6	5.7
27	5.3	5.3	6.9	124	11	8.4	11	6.8	5.3	12	28	5.6
28	104	6.3	6.8	50	11	17	9.5	6.5	5.4	7.5	20	13
29	10	94	6.9	17	9.5	123	11	17	5.2	6.4	7.2	75
30	5.5	16	7.1	14	---	25	39	7.6	153	18	6.2	9.6
31	4.8	---	7.5	13	---	15	---	6.3	---	48	5.8	---
TOTAL	682.0	639.9	374.7	1317.6	476.2	719.4	765.5	500.2	675.5	762.0	689.0	515.6
MEAN	22.0	21.3	12.1	42.5	16.4	23.2	25.5	16.1	22.5	24.6	22.2	17.2
MAX	210	157	72	434	85	123	131	44	153	229	189	189
MIN	2.8	4.4	6.0	7.9	8.8	8.4	9.5	5.9	4.4	5.9	5.4	4.9
CFSM	2.45	2.38	1.35	4.73	1.83	2.58	2.84	1.80	2.51	2.74	2.48	1.91
IN.	2.83	2.65	1.55	5.46	1.97	2.98	3.17	2.07	2.80	3.16	2.85	2.14

DELAWARE RIVER BASIN

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996, BY WATER YEAR (WY)

MEAN	13.2	17.5	21.6	22.7	19.9	23.6	22.2	19.4	15.3	18.1	16.5	14.1
MAX	26.0	48.8	40.8	50.5	44.7	46.5	49.8	47.0	33.4	46.5	58.2	38.8
(WY)	1990	1973	1978	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

SUMMARY STATISTICS

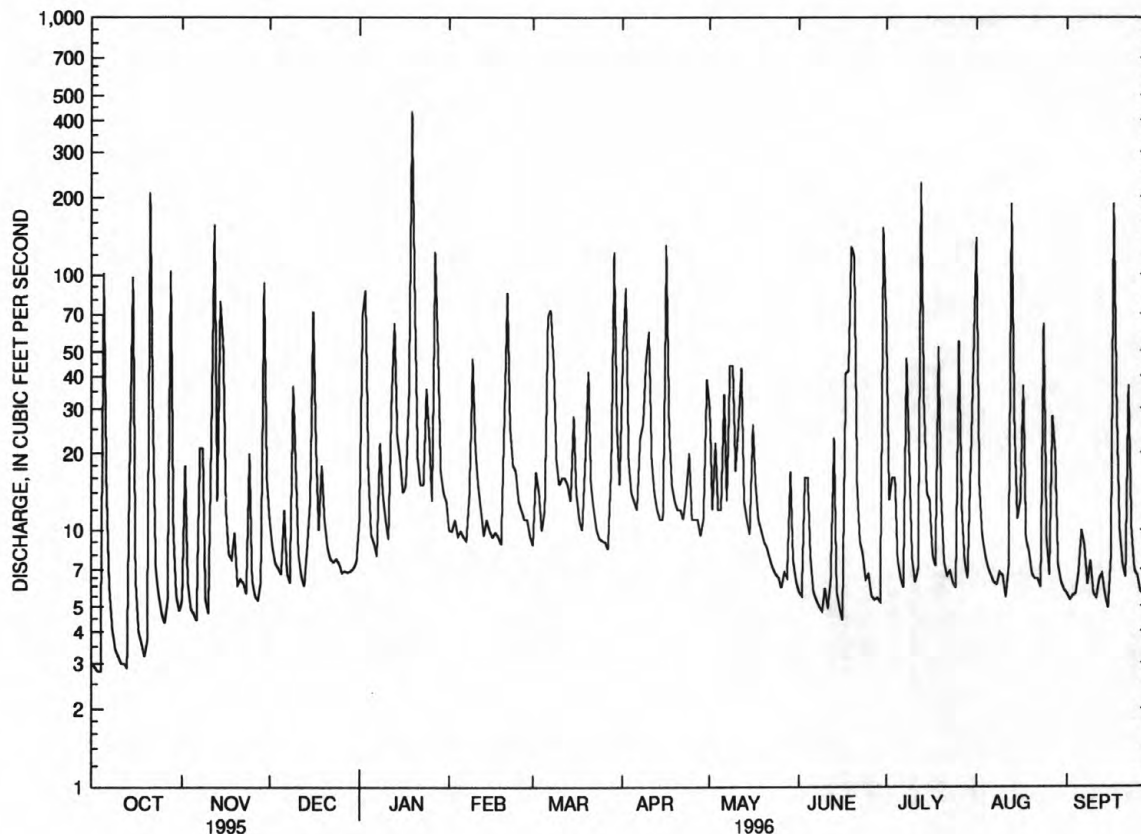
FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1968 - 1996

ANNUAL TOTAL	4987.3	8117.6	
ANNUAL MEAN	13.7	22.2	18.8
HIGHEST ANNUAL MEAN			27.3
LOWEST ANNUAL MEAN			11.6
HIGHEST DAILY MEAN	210	Oct 21	434
LOWEST DAILY MEAN	2.4	Sep 4	2.8
ANNUAL SEVEN-DAY MINIMUM	2.5	Aug 30	3.7
INSTANTANEOUS PEAK FLOW			606
INSTANTANEOUS PEAK STAGE			9.11
INSTANTANEOUS LOW FLOW			2.7
ANNUAL RUNOFF (CFSM)	1.52	2.47	2.09
ANNUAL RUNOFF (INCHES)	20.66	33.63	28.37
10 PERCENT EXCEEDS	24	49	35
50 PERCENT EXCEEDS	6.9	10	9.7
90 PERCENT EXCEEDS	2.9	5.4	5.0

a From high-water marks.



01467081 S B PENNSAUKEN CREEK AT CHERRY HILL, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1975 to current year.

COOPERATION.--Analyses of fecal coliform 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 1995 TO SEPTEMBER 1996

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) (MG/L) (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 AS CACO3) (00900)
NOV 1995 01...	1020	4.6	364	7.4	13.0	770	8.1	76	E2.0	800	500	94
JAN 1996 31...	0952	13	419	7.2	4.5	756	10.8	84	E1.4	490	70	92
APR 03...	0910	19	340	7.1	7.5	770	9.8	81	3.4	170	50	73
JUN 03...	0942	5.3	402	7.4	16.0	769	7.2	72	3.6	4900	500	97
JUL 24...	0920	6.4	340	7.3	19.5	760	7.2	79	E1.5	2300	<1000	89
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)	ALKA- LINITY 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 AT 105 DEG.C, SUS- PENDE (MG/L) (00530)
NOV 1995 01...	26	7.0	24	8.3	50	50	30	0.2	13	204	197	2
JAN 1996 31...	25	7.1	35	5.9	32	49	60	0.1	11	218	222	8
APR 03...	20	5.5	30	4.4	26	43	50	0.2	10	208	185	42
JUN 03...	26	7.7	33	8.4	51	46	50	0.3	13	214	230	28
JUL 24...	24	7.1	23	7.3	48	40	35	0.2	13	218	189	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- PENDE TOTAL (MG/L AS C) (00689)
NOV 1995 01...	0.154	1.50	1.10	1.20	1.5	1.6	3.0	3.1	0.19	0.06	4.1	0.5
JAN 1996 31...	0.055	1.90	0.76	0.75	1.3	1.2	3.2	3.1	0.23	0.05	4.8	0.4
APR 03...	0.034	1.40	0.43	0.43	1.2	0.73	2.6	2.1	0.24	<0.01	4.5	1.3
JUN 03...	0.172	3.20	0.34	0.31	1.1	0.76	4.3	4.0	0.54	0.03	3.9	0.5
JUL 24...	0.223	2.30	0.26	0.24	0.70	0.59	3.0	2.9	0.27	0.07	4.0	0.4

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	PH	OXYGEN	NITRO-	NITRO-	PHOS-		ARSENIC	BERYL-	BORON,	CADMIUM	
		SED	DEMAND,	GEN,NH4	GEN,NH4	PHORUS		TOTAL	LUM,	TOTAL	TOTAL	
		BED MAT	CHEM-	TOTAL	+ ORG.	TOTAL		IN BOT-	TOTAL	RECOV-	RECOV-	
		(STD	ICAL	IN BOT.	TOT IN	IN BOT.	ARSENIC	TOM MA-	RECOV-	ERABLE	ERABLE	
		UNITS)	(HIGH	MAT.	BOT MAT	MAT.	TOTAL	TERIAL	ERABLE	ERABLE	ERABLE	
		(70310)	(MG/L)	(MG/KG	(MG/KG	(MG/KG	(UG/L	AS AS)	AS G)	AS BE)	AS B)	AS CD)
		(00340)		(00611)	(00626)	(00668)	(01002)	(01003)	(01012)	(01022)	(01027)	
NOV 1995												
01...	1020	--	14	--	--	--	<1	--	<10	140	<1	
01...	1020	6.7	--	2.9	120	280	--	2	--	--	--	
JUN 1996												
03...	0942	--	24	--	--	--	1	--	<10	110	<1	

DATE	CADMIUM	CHRO-	CHRO-	COBALT,	COPPER,	IRON,	LEAD,
	RECOV.	MIUM,	MIUM,	RECOV.	RECOV.	RECOV.	RECOV.
	FM BOT-	TOTAL	RECOV.	FM BOT-	TOTAL	FM BOT-	TOTAL
	TOM MA-	RECOV-	FM BOT-	TOM MA-	RECOV-	TOM MA-	RECOV-
TERIAL	ERABLE	TOM MA-	TERIAL	ERABLE	TERIAL	ERABLE	TERIAL
(UG/G	(UG/L	TERIAL	(UG/G	(UG/L	(UG/G	(UG/L	(UG/G
AS CD)	AS CR)	(UG/G)	AS CO)	AS CU)	AS CU)	AS FE)	AS FE)
(01028)	(01034)	(01029)	(01038)	(01042)	(01043)	(01045)	(01170)
(01051)	(01052)						
NOV 1995							
01...	--	<1	--	--	1	--	720
01...	<1	--	5	<5	--	6	--
JUN 1996							
03...	--	2	--	--	4	--	3400
							3
							--

DATE	MANGA- NESE, TOTAL RECOVER- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/G) AS HG) (71921)	NICKEL, RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS NI) (01067)	NICKEL, RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/G) AS NI) (01068)	SELE- NIUM, TOTAL FM BOT- TOM MA- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, TOTAL FM BOT- TOM MA- ERABLE (UG/G) AS SE) (01148)	ZINC, RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. TOTAL FM BOT- TOM MA- ERABLE (UG/G) AS ZN) (01093)	
	NOV 1995										
	01...	80	--	<0.1	--	5	--	<1	--	20	--
	01...	--	19	--	0.02	--	<10	--	<1	--	40
	JUN 1996										
03...	50	--	<0.1	--	6	--	<1	--	20	--	

[illegible][illegible]

01467150 COOPER RIVER AT HADDONFIELD, NJ

LOCATION.--Lat 39°54'11", long 75°01'19", Camden County, Hydrologic Unit 02040202, on right bank of Wallworth Lake in Pennypacker Park, 200 ft upstream from bridge on State Highway 41 (Kings Highway) in Haddonfield, 0.6 mi upstream from North Branch Cooper River, and 7.7 mi upstream from mouth.

DRAINAGE AREA.--17.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WRD-NJ 1969: 1967(M). WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 9.29 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are fair. 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 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 19	1600	*885	*3.27	July 13	1315	560	2.81
June 19	2145	759	3.10	Aug. 13	1045	529	2.76
June 30	2000	548	2.79	Sept. 17	0515	522	2.75

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	7.9	17	25	e19	21	21	73	52	12	111	151	10
2	7.3	27	16	74	19	30	159	23	11	32	27	10
3	7.3	13	14	110	20	29	37	40	22	26	18	10
4	7.1	11	13	40	20	22	26	27	21	25	16	10
5	119	10	13	22	17	25	22	25	17	17	15	10
6	38	10	18	16	16	96	21	50	14	14	13	12
7	15	24	13	13	16	120	30	26	12	13	13	13
8	11	30	12	19	24	82	39	77	11	111	12	11
9	9.6	16	35	19	64	38	62	75	10	36	13	11
10	8.6	12	32	17	40	28	99	37	13	19	12	10
11	8.2	26	16	15	31	29	39	44	10	13	11	12
12	8.2	176	13	33	26	29	28	67	11	16	14	14
13	7.8	33	13	58	20	25	24	28	41	323	271	12
14	23	80	15	36	20	24	23	23	14	79	52	11
15	152	70	20	30	21	41	22	20	11	37	24	10
16	25	28	69	24	20	32	199	40	9.5	51	17	14
17	16	16	42	24	21	24	59	32	33	27	32	301
18	10	14	23	37	20	23	30	22	73	18	16	56
19	9.4	14	30	562	19	37	25	19	208	79	14	22
20	9.3	13	27	194	42	76	24	18	204	35	14	15
21	182	12	18	43	131	31	23	17	33	18	13	13
22	59	12	e16	29	47	24	22	17	18	15	12	43
23	20	12	e15	26	33	22	24	14	15	15	12	21
24	17	27	e16	49	30	21	31	12	13	15	63	15
25	11	16	e15	40	26	21	23	12	13	14	15	14
26	10	13	e14	26	24	21	21	12	11	63	12	12
27	9.9	12	e14	167	26	20	21	14	11	21	12	12
28	101	12	e14	98	25	24	18	14	11	14	13	17
29	26	106	e13	38	22	168	20	23	10	13	12	97
30	13	38	e14	29	---	51	61	16	225	30	11	24
31	13	---	e15	24	---	27	---	14	---	78	11	---
TOTAL	961.6	900	623	1931	861	1261	1305	910	1117.5	1378	941	842
MEAN	31.0	30.0	20.1	62.3	29.7	40.7	43.5	29.4	37.2	44.5	30.4	28.1
MAX	182	176	69	562	131	168	199	77	225	323	271	301
MIN	7.1	10	12	13	16	20	18	12	9.5	13	11	10
CFSM	1.82	1.76	1.18	3.66	1.75	2.39	2.56	1.73	2.19	2.61	1.79	1.65
IN.	2.10	1.97	1.36	4.23	1.88	2.76	2.86	1.99	2.45	3.02	2.06	1.84

DELAWARE RIVER BASIN

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996, BY WATER YEAR (WY)

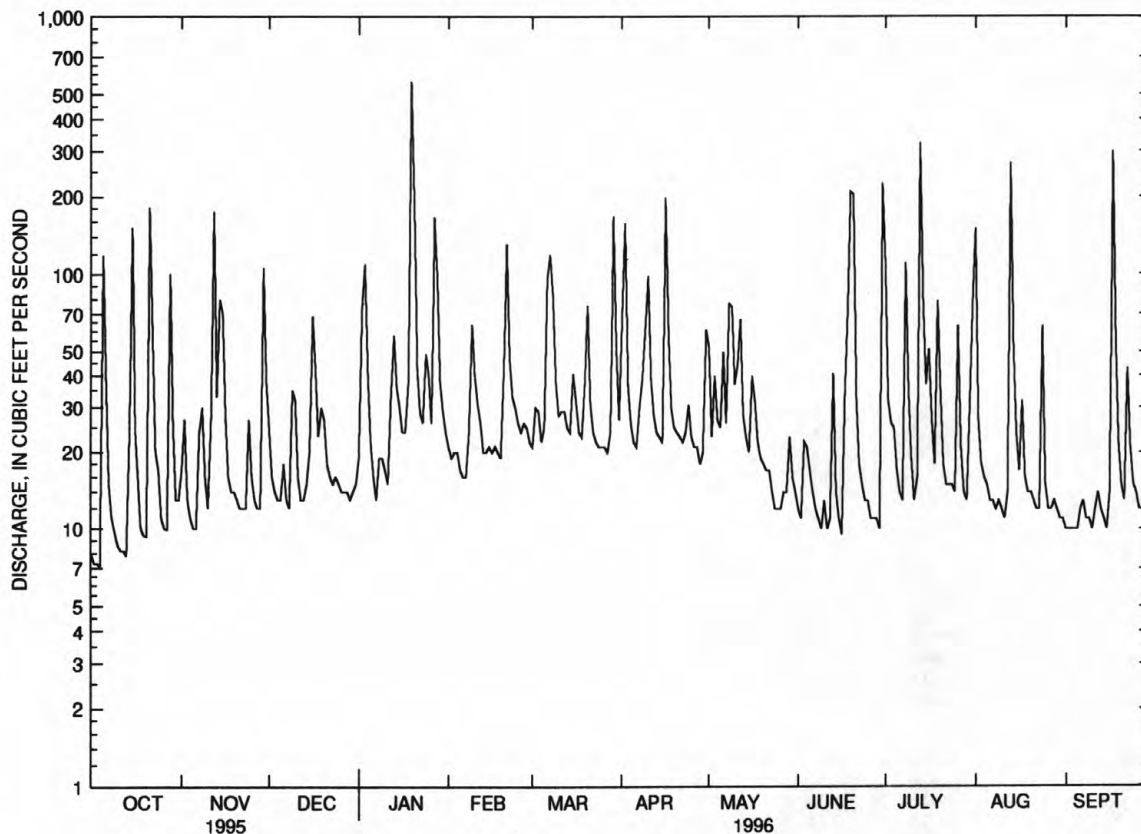
MEAN	26.6	31.9	37.5	39.3	37.1	42.5	41.5	36.7	29.3	32.3	30.0	26.6
MAX	46.8	79.6	74.6	97.8	76.1	78.9	99.4	66.7	54.9	66.8	97.6	65.8
(WY)	1976	1973	1973	1978	1979	1984	1983	1983	1972	1975	1971	1975
MIN	9.26	11.0	14.3	14.6	18.9	23.2	15.1	14.2	10.9	12.9	7.79	13.0
(WY)	1966	1992	1966	1992	1992	1981	1992	1965	1988	1993	1966	1965

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1964 - 1996

ANNUAL TOTAL	7841.3	13031.1	
ANNUAL MEAN	21.5	35.6	34.3
HIGHEST ANNUAL MEAN			50.6
LOWEST ANNUAL MEAN			19.2
HIGHEST DAILY MEAN	226	562	1510
LOWEST DAILY MEAN	5.4	7.1	1.2
ANNUAL SEVEN-DAY MINIMUM	5.7	9.8	5.6
INSTANTANEOUS PEAK FLOW		885	3300
INSTANTANEOUS PEAK STAGE		3.27	5.46
INSTANTANEOUS LOW FLOW		7.0	.80a
ANNUAL RUNOFF (CFSM)	1.26	2.09	2.02
ANNUAL RUNOFF (INCHES)	17.16	28.52	27.39
10 PERCENT EXCEEDS	38	74	59
50 PERCENT EXCEEDS	14	21	23
90 PERCENT EXCEEDS	7.1	11	12

a Regulation from unknown source.

e Estimated.



01467150 COOPER RIVER AT HADDONFIELD, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

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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.

REMARKS.--For February 21, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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, EC BROTH (MPN) (31615)	ENTERO- COCCI ME, MF WATER TOTAL (COL / 100 ML) (31649)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 1995													
13...	1047	32	180	7.2	6.5	768	10.6	86	5.4	1700	3200	55	
FEB 1996													
21...	1317	204	436	7.0	6.5	762	10.6	86	--	--	--	45	
APR													
03...	1009	36	190	7.1	8.5	760	10.5	90	81.4	130	300	46	
JUN													
05...	1209	19	212	7.5	21.0	765	8.0	89	3.0	790	220	57	
JUL													
25...	1135	14	214	7.3	23.5	764	7.2	85	<1.0	1300	<100	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)	ALKA- LINITY 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 1995													
13...	16	3.7	7.5	3.7	21	33	13	0.1	8.0	110	99	16	
FEB 1996													
21...	13	3.0	58	3.1	23	16	98	<0.1	4.5	230	211	65	
APR													
03...	13	3.2	14	2.6	22	21	23	0.1	7.1	120	99	16	
JUN													
05...	16	4.1	13	3.5	31	22	25	0.2	9.9	136	114	21	
JUL													
25...	16	4.4	13	3.6	32	21	24	0.2	12	140	115	24	
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- SOLVED (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 1995													
13...	0.005	0.31	<0.03	<0.03	0.50	0.29	0.81	0.60	0.15	0.03	5.7	1.5	
FEB 1996													
21...	--	0.42	--	--	0.70	0.34	1.1	0.76	0.36	0.02	4.5	1.5	
APR													
03...	0.007	0.42	0.08	0.08	0.60	0.43	1.0	0.85	0.18	0.01	5.2	2.1	
JUN													
05...	0.017	0.24	0.15	0.14	0.90	0.39	1.1	0.63	0.28	<0.01	3.6	2.1	
JUL													
25...	0.022	0.35	0.26	0.23	0.80	0.37	1.2	0.72	0.34	<0.01	4.4	0.3	

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

DATE	CADMIUM REC OV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, TOTAL REC OV- FM BOT- TERIAL (UG/L AS CR) (01034)	CHRO- MIUM, REC OV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, REC OV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, REC OV. TOTAL REC OV- ERABLE (UG/L AS CU) (01042)	COPPER, REC OV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, REC OV. TOTAL REC OV- ERABLE (UG/L AS FE) (01045)	IRON, REC OV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, REC OV. TOTAL REC OV- ERABLE (UG/L AS PB) (01051)	LEAD, REC OV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, TOTAL REC OV- ERABLE (UG/L AS MN) (01055)
NOV 1995											
13...	--	2	--	--	2	--	2400	--	12	--	90
13...	<1	--	5	<5	--	2	--	430	--	10	--
JUN 1996											
05...	--	1	--	--	2	--	4300	--	8	--	90

DATE	MANGANESE, RECOVERABLE FM BOTTOM MATERIAL (UG/L) (UG/G) (01053)	MERCURY TOTAL RECOVERABLE (UG/L) AS HG (71900)	MERCURY RECOVERABLE FM BOTTOM MATERIAL (UG/G) AS HG (71921)	NICKEL, RECOVERABLE FM BOTTOM MATERIAL (UG/L) AS NI (01067)	NICKEL, RECOVERABLE FM BOTTOM MATERIAL (UG/G) AS NI (01068)	SELENIUM, TOTAL RECOVERABLE (UG/L) AS SE (01147)	SELENIUM, TOTAL RECOVERABLE (UG/G) (01148)	ZINC, RECOVERABLE (UG/L) AS ZN (01092)	ZINC, RECOVERABLE (UG/G) AS ZN (01093)	CARBON, INORGANIC TOTAL FM BOTTOM MATERIAL (G/KG) AS C (00686)
NOV 1995										
13...	--	<0.1	--	6	--	<1	--	40	--	--
13...	18	--	0.01	--	<10	--	<1	--	20	<0.1
JUN 1996										
05...	--	<0.1	--	5	--	<1	--	10	--	--

[illegible][illegible]

DELAWARE RIVER BASIN

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01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ

LOCATION.--Lat 39°48'05", long 75°04'27", Gloucester County, Hydrologic Unit 02040202, at bridge on Blackwood-Clementon Road at Blackwood Terrace, 1,000 ft upstream from Bull Run, and 2.0 mi northeast of Fairview.

DRAINAGE AREA.--19.1 mi².

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

REMARKS.--For February 21, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	
NOV 1995										
21...	1035	E25	174	7.2	7.5	756	11.7	98	E1.4	49
FEB 1996										
21...	1035	E75	263	7.3	6.0	763	11.7	94	--	--
APR										
02...	1007	E100	124	6.6	9.0	758	11.0	96	2.9	240
JUN										
05...	0940	E25	161	7.3	19.5	764	7.7	84	2.2	330
JUL										
25...	0937	E20	153	7.4	22.5	763	7.2	83	<1.0	1700
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)	ALKA-LINITY 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 1995										
21...	60	47	14	3.0	11	2.8	25	18	17	<0.1
FEB 1996										
21...	--	34	10	2.2	30	2.6	21	12	49	<0.1
APR										
02...	660	26	7.4	1.8	10	1.8	16	10	16	<0.1
JUN										
05...	370	39	11	2.7	12	2.6	24	12	18	<0.1
JUL										
25...	100	39	11	2.8	10	2.5	27	11	17	<0.1
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 1995										
21...	7.9	98	93	3	0.015	0.89	0.24	0.27	0.50	
FEB 1996										
21...	4.9	154	127	41	--	0.79	--	--	0.70	
APR										
02...	3.4	90	63	--	0.013	0.66	0.14	0.15	0.70	
JUN										
05...	5.5	106	83	--	0.058	0.93	0.22	0.18	0.60	
JUL										
25...	6.5	100	81	10	0.024	0.88	0.19	0.10	0.50	

DELAWARE RIVER BASIN

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)
NOV 1995 21...	0.39	1.4	1.3	0.05	<0.01	3.2	0.6	--
FEB 1996 21...	0.44	1.5	1.2	0.16	0.03	3.7	1.7	--
APR 02...	0.52	1.4	1.2	0.09	0.02	5.7	1.5	22
JUN 05...	0.45	1.5	1.4	0.11	0.01	3.5	1.1	14
JUL 25...	0.27	1.4	1.2	0.09	0.01	3.8	1.0	--
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 TOTAL RECOV- ERABLE (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 1995 21...	1035	15	<1	<10	70	<1	<1	<1
JUN 1996 05...	0940	16	1	<10	70	<1	<1	1
DATE	TIME	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1995 21...	1300		1	50	<0.1	1	<1	<10
JUN 1996 05...	1800		3	50	<0.1	1	<1	<10

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 mi².

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 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 except those for estimated daily discharges, which are fair. Flow regulated by Still Creek Reservoir (station 01469200) since February 1933, Blue Marsh Lake (station 01470870) since April 1979, Green Lane Reservoir (station 01472200) since December 1956 and to some extent by Lake Ontelaunee. Records of discharge do not include diversion above station by city of Philadelphia for municipal water supply. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4, 1869 reached a stage of 17.0 ft, discharge, 135,000 ft³/s, from rating extended above 46,000 ft³/s. Flood of Mar. 1, 1902 reached a stage of 14.8 ft, discharge, 98,000 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 21	2200	20,900	8.95	Jan. 27	2325	38,900	10.73
Jan. 19	2400	*79,000	*13.36	Apr. 2	0800	32,600	10.17
Jan. 25	0330	20,900	8.95	Apr. 16	1525	33,300	10.23

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	559	2180	2020	1290	8770	4500	5090	8060	1570	3380	4980	685
2	578	2890	1890	1640	6590	4020	22800	6260	1480	2770	2420	669
3	618	3420	1770	3190	5250	3790	8690	5130	1420	2420	1900	699
4	565	2640	1760	2780	4760	3410	6380	4550	1390	2970	1880	656
5	2090	2150	1720	1920	4100	3090	5390	3920	1790	2170	1970	723
6	6390	1950	1690	e1300	3630	4120	4910	3990	1910	1810	1690	693
7	2650	1850	1750	e1030	3320	9020	4760	3690	1640	1610	1520	945
8	1410	2360	1650	e600	3360	9160	6580	3370	1340	1710	1380	1790
9	1060	2130	e1580	e900	3920	5290	5340	3550	1290	1580	1350	2660
10	913	1730	e1480	1600	4930	4270	6110	3610	1380	1810	1510	868
11	785	1670	e1400	1860	4500	4070	5070	3310	2080	1620	1370	889
12	735	12500	1290	1780	4730	4060	4140	8610	2460	1560	1280	746
13	634	8710	1330	1520	3890	4020	3830	5680	5140	7580	4380	793
14	1200	7840	1420	1560	3180	3850	3630	4720	3030	8070	2680	1030
15	4030	12500	1450	1580	3000	3670	3460	4210	2070	5450	1750	878
16	2210	11400	1880	1570	2940	3650	18900	4050	2070	5210	1410	866
17	1460	8670	2300	1420	2700	3720	15500	3910	1950	3960	1310	6470
18	1100	6050	2080	1550	2470	3490	10600	3390	2380	2860	1230	4640
19	954	4900	e1900	26400	2340	3590	8220	2970	3740	4090	1140	2530
20	840	4300	e1800	51800	2390	12100	6620	2740	4640	5070	1030	1550
21	6770	3540	e1620	21900	10500	9220	5590	2540	5100	3230	1010	1230
22	11700	3060	e1550	13200	10800	7260	4870	2390	3450	2520	940	2730
23	5620	2650	e1500	10600	9030	5710	4350	2310	2570	2050	898	3060
24	3450	2610	1590	11100	8670	4880	4160	2100	2280	1620	2730	1740
25	2450	2510	1540	18200	8860	4340	3760	1970	2020	1690	1510	1480
26	2030	2250	1500	12100	7640	3960	3300	1820	1890	1940	1110	1140
27	1720	2100	1400	18900	6720	3570	3180	1830	1570	2970	935	970
28	6770	2190	1430	31600	5720	3310	2950	1950	1480	2050	979	999
29	5070	2270	1350	19800	5290	8350	2890	2130	1410	1610	803	4710
30	2950	2130	1240	13700	---	7720	4770	2330	2510	1860	719	2720
31	2370	---	1250	11100	---	5180	---	1800	---	4760	720	---
TOTAL	81681	127150	50130	289490	154000	160390	195840	112890	69050	94000	50534	51559
MEAN	2635	4238	1617	9338	5310	5174	6528	3642	2302	3032	1630	1719
MAX	11700	12500	2300	51800	10800	12100	22800	8610	5140	8070	4980	6470
MIN	559	1670	1240	600	2340	3090	2890	1800	1290	1560	719	656

SCHUYLKILL RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1996, BY WATER YEAR (WY)

MEAN	1333	2329	3109	3345	3617	4856	4288	3122	2104	1651	1392	1395
MAX	4771	6272	9569	11400	8136	13320	11620	9943	11640	6434	7980	4863
(WY)	1956	1973	1984	1979	1939	1936	1983	1989	1972	1984	1933	1960
MIN	89.4	223	444	340	647	1552	1237	693	261	116	140	117
(WY)	1942	1932	1981	1981	1934	1981	1985	1965	1965	1966	1966	1932

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1932 - 1996	
ANNUAL TOTAL	832294		1436714		2707	
ANNUAL MEAN	2280		3925		4791	
HIGHEST ANNUAL MEAN					1014	
LOWEST ANNUAL MEAN					93400	
HIGHEST DAILY MEAN	30300	Mar 9	51800	Jan 20		Jun 23 1972
LOWEST DAILY MEAN	487	Sep 16	559	Oct 1	.60	Sep 2 1966
ANNUAL SEVEN-DAY MINIMUM	576	Sep 2	692	Aug 31	24	Sep 28 1941
INSTANTANEOUS PEAK FLOW			79000	Jan 19	103000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			13.36	Jan 19	14.65	Jun 23 1972
INSTANTANEOUS LOW FLOW			382	Oct 4	.00	Sep 2 1966
10 PERCENT EXCEEDS	4040		8260		5850	
50 PERCENT EXCEEDS	1630		2510		1660	
90 PERCENT EXCEEDS	689		1030		424	

e Estimated.

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.

WATER-DISCHARGE RECORDS

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

REMARKS.--Records poor. Several measurements of water temperature, other than those published, were made during the year.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 19	1915	*1,030	*13.54	Apr. 16	1830	405	11.11
Jan. 28	0145	384	10.99	July 13	2130	e550	---
Apr. 2	0600	360	10.84	Aug. 13	1445	e450	---

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12	22	38	27	50	40	83	e66	23	61	40	14
2	e11	25	33	69	e53	39	249	e46	22	29	35	14
3	e11	23	30	166	e61	40	85	e56	27	24	26	13
4	e10	22	29	65	e54	40	e64	e53	31	21	23	13
5	e48	20	27	e40	e47	39	e51	e48	27	19	21	13
6	e41	20	27	e35	e46	66	e49	e69	23	17	18	14
7	e21	23	27	e30	e44	134	e53	e88	21	16	17	15
8	e17	34	26	e35	42	160	e64	e80	20	19	16	15
9	e16	26	30	e35	89	69	e95	71	19	19	15	17
10	e14	22	44	e35	93	51	170	61	20	16	16	14
11	e13	24	31	e30	69	48	98	53	21	15	15	16
12	12	108	23	e45	60	56	64	74	21	15	15	19
13	12	44	23	78	43	65	54	45	31	e300	e370	17
14	14	77	24	51	40	40	48	38	23	e180	108	17
15	79	103	26	35	42	51	44	35	19	46	40	15
16	28	41	72	33	41	61	231	42	17	72	31	16
17	18	32	71	32	41	43	157	45	19	43	56	188
18	17	30	38	37	39	40	85	39	27	32	33	64
19	15	28	41	507	37	48	63	36	33	146	25	30
20	15	27	48	467	60	116	55	32	49	90	21	21
21	84	26	37	99	212	61	52	29	73	31	20	19
22	64	25	33	75	118	47	49	30	27	23	20	30
23	25	24	32	71	67	42	44	27	21	24	18	25
24	20	32	31	88	55	40	51	25	18	23	17	21
25	18	33	30	92	49	37	46	23	18	20	17	19
26	17	31	29	65	45	33	43	23	16	66	19	17
27	17	29	27	140	44	30	43	25	16	34	16	16
28	152	27	26	225	43	31	39	28	15	21	17	18
29	41	125	25	78	42	96	37	33	15	19	16	81
30	26	64	25	63	---	98	e57	30	47	35	15	30
31	23	---	25	57	---	57	---	25	---	48	14	---
TOTAL	911	1167	1028	2905	1726	1818	2323	1375	759	1524	1130	821
MEAN	29.4	38.9	33.2	93.7	59.5	58.6	77.4	44.4	25.3	49.2	36.5	27.4
MAX	152	125	72	507	212	160	249	88	73	300	370	188
MIN	10	20	23	27	37	30	37	23	15	15	14	13
CFSM	1.09	1.45	1.23	3.48	2.21	2.18	2.88	1.65	.94	1.83	1.36	1.02
IN.	1.26	1.61	1.42	4.02	2.39	2.51	3.21	1.90	1.05	2.11	1.56	1.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1996, BY WATER YEAR (WY)

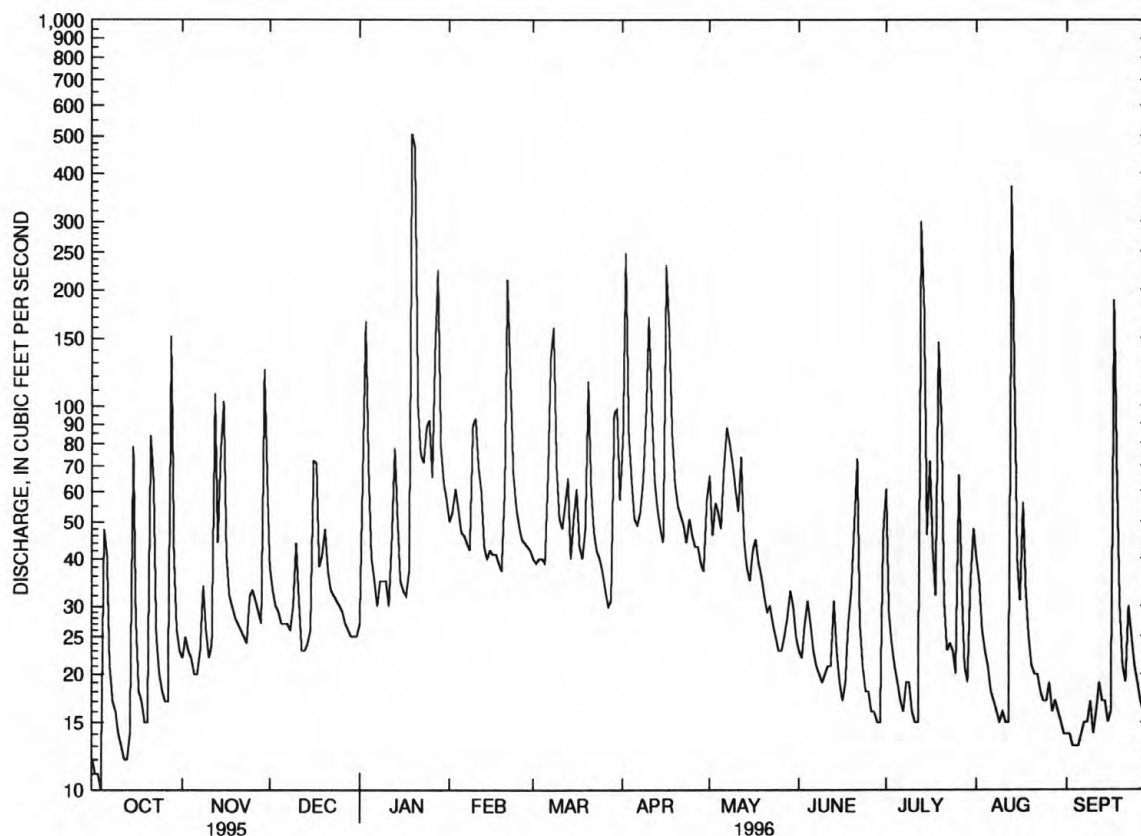
MEAN	27.9	34.7	44.1	51.6	49.9	55.2	53.7	42.1	34.3	32.4	30.1	25.6
MAX	65.2	93.9	107	123	115	132	134	72.6	77.7	112	121	71.9
(WY)	1990	1973	1973	1978	1979	1994	1983	1989	1975	1975	1967	1971
MIN	13.0	18.0	18.8	20.7	23.6	22.7	21.3	15.9	10.7	6.01	5.89	11.7
(WY)	1993	1975	1981	1981	1992	1981	1985	1977	1966	1966	1966	1968

DELAWARE RIVER BASIN

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1966 - 1996	
ANNUAL TOTAL	9870.6		17487		40.3	
ANNUAL MEAN	27.0		47.8		64.7	
HIGHEST ANNUAL MEAN					22.5	
LOWEST ANNUAL MEAN					1260	
HIGHEST DAILY MEAN	257	Mar 9	507	Jan 19	2.9	Aug 28 1971
LOWEST DAILY MEAN	7.5	Sep 7	10	Oct 4	3.3	Jul 14 1966
ANNUAL SEVEN-DAY MINIMUM	7.7	Sep 2	14	Aug 31	3530	Aug 25 1966
INSTANTANEOUS PEAK FLOW			1030	Jan 19	17.44	Aug 10 1967
INSTANTANEOUS PEAK STAGE			13.54	Jan 19	2.9	Jul 14 1966
INSTANTANEOUS LOW FLOW			---		1.50	
ANNUAL RUNOFF (CFSM)	1.01		1.78		20.36	
ANNUAL RUNOFF (INCHES)	13.65		24.18		66	
10 PERCENT EXCEEDS	42		85		29	
50 PERCENT EXCEEDS	23		33		14	
90 PERCENT EXCEEDS	10		16			

e Estimated.



01477120 RACCOON CREEK NEAR SWEDESBORO, NJ, DAILY MEAN DISCHARGE

DELAWARE RIVER BASIN

497

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1966 to September 1973.

SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

REMARKS.--For February 21, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301).
Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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,MPF WATER TOTAL (COL / 100 ML) (31649)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV 1995													
02...	1105	25	236	7.2	14.5	763	8.6	84	<1.0	110	310	74	
FEB 1996													
21...	1155	215	160	6.8	6.0	762	11.2	90	--	--	--	41	
APR													
08...	1050	E64	181	7.1	6.5	760	11.2	91	E1.7	33	10	54	
JUN													
12...	1140	21	202	7.6	21.0	760	7.4	83	E1.3	490	220	64	
JUL													
23...	1050	24	194	7.4	19.5	757	7.6	83	<1.0	230	<100	57	
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)	ALKA-LINITY LAB (MG/L AS CAC03) (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 1995													
02...	23	4.0	9.7	4.5	37	33	18	0.2	12	146	131	4	
FEB 1996													
21...	12	2.7	8.7	3.2	15	19	17	0.1	6.6	92	84	64	
APR													
08...	16	3.4	8.3	2.9	20	26	16	0.1	7.9	110	99	5	
JUN													
12...	19	3.9	9.1	3.7	34	23	17	0.2	10	106	112	12	
JUL													
23...	17	3.6	9.6	3.8	32	21	17	0.2	10	104	108	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 (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-SOLVED (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (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 1995													
02...	0.018	0.95	0.06	<0.03	0.30	0.22	1.2	1.2	0.13	<0.01	3.6	0.5	
FEB 1996													
21...	--	1.30	--	--	0.90	0.38	2.2	1.7	0.35	0.04	4.8	2.3	
APR													
08...	0.007	1.50	0.10	0.12	0.40	0.32	1.9	1.8	0.08	0.01	3.9	--	
JUN													
12...	0.079	1.30	0.16	0.19	0.50	0.33	1.8	1.6	0.16	0.03	3.1	0.7	
JUL													
23...	0.016	1.40	0.09	0.11	0.40	0.28	1.8	1.7	0.16	0.04	4.4	0.7	

DELAWARE RIVER BASIN

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 02...	1105	16	1	<10	60	<1	<1	1
JUN 1996 12...	1140	<10	1	<10	50	<1	<1	<1

DATE	TIME	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1995 02...	1600	<1	<1	70	<0.1	3	<1	10
JUN 1996 12...	2500	<1	<1	50	<0.1	3	<1	<10

WATER-QUALITY QUALITY-CONTROL DATA

[The following analyses are quality-assurance samples processed during the 1996 water year and are defined in the explanation of the records section entitled, "Water Quality-Control Data."]

DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
JUN 1996 12...	1139	ISOKINETIC SAMPLER & CHURN BLANK	--	--	--	--	<1
12...	1140	FIELD BLANK	<1	<1	<0.1	<1	<1

DELAWARE RIVER BASIN

499

01477510 OLDMANS CREEK AT PORCHES MILL, NJ

LOCATION.--Lat 39°41'57", long 75°20'01", Salem County, Hydrologic Unit 02040206, at bridge on Kings Highway in Porches Mill, 150 ft downstream of tributary from outflow of lake at Porches Mill, 1.0 mi north of Seven Stars, and 2.1 mi southeast of Auburn.

DRAINAGE AREA.--21.0 mi².

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

REMARKS.--For February 21, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

		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 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 1995													
20...	1025	24	246	7.1	6.0	765	10.6	85	<1.0	330	40	84	
FEB 1996													
21...	0940	125	202	6.9	4.5	762	10.5	81	--	--	--	57	
MAR													
28...	1220	26	214	7.1	7.0	773	11.9	97	E1.6	79	130	72	
MAY													
30...	1210	28	219	7.3	15.0	761	9.0	89	E1.6	490	<10	82	
JUL													
24...	1220	18	200	7.5	21.5	761	8.6	98	<1.0	490	20	71	
		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)	ALKA- LINEITY LAB 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- PENDEED (MG/L) (00530)
NOV 1995													
20...	25	5.2	7.2	4.5	27	40	20	0.2	12	144	138	1	
FEB 1996													
21...	16	4.1	9.1	4.1	16	25	21	0.1	8.3	108	107	20	
MAR													
28...	21	4.7	6.8	3.3	23	30	19	0.2	8.5	134	117	4	
MAY													
30...	24	5.3	6.9	3.5	31	26	19	0.2	11	160	123	7	
JUL													
24...	21	4.5	6.1	4.0	33	22	17	0.2	12	150	113	1	
		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- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (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 SUB- PENDEED TOTAL (MG/L AS C) (00689)
NOV 1995													
20...	0.012	1.70	0.10	0.08	0.40	0.24	2.1	1.9	0.06	<0.01	4.1	0.4	
FEB 1996													
21...	--	2.20	--	--	0.70	0.46	2.9	2.7	0.16	0.04	4.8	0.9	
MAR													
28...	0.012	2.30	<0.03	<0.03	0.30	0.23	2.6	2.5	0.07	0.03	3.0	0.6	
MAY													
30...	0.033	1.80	0.17	0.19	0.50	0.51	2.3	2.3	0.08	0.04	3.8	0.8	
JUL													
24...	0.026	1.40	0.09	0.07	0.50	0.32	1.9	1.7	0.08	<0.01	5.8	0.5	

DELAWARE RIVER BASIN

01477510 OLDMANS CREEK AT PORCHES MILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 20...	1025	--	<1	<10	30	<1	<1	1
MAY 1996 30...	1210	20	1	<10	20	<1	<1	<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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1995 20...	1100	<1	110	<0.1	8	<1	20
MAY 1996 30...	1800	<1	130	<0.1	6	<1	<10

DELAWARE RIVER BASIN

501

01482500 SALEM RIVER AT WOODSTOWN, NJ

LOCATION.--Lat 39°38'36", long 75°19'52", Salem County, Hydrologic Unit 02040206, on right end of Memorial Lake Dam at Woodstown, 0.2 mi upstream from small brook, and 0.3 mi downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi².

PERIOD OF RECORD.--Water years 1973 to current year.

REMARKS.--For February 20, dissolved ammonia as N (00608) was not used in the calculation to determine the sum of dissolved solid constituents (70301). Dissolved ammonia is generally a small percentage of the sum of dissolved solid constituents.

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 1995 TO SEPTEMBER 1996

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 1995 13...	1025	21	258	7.3	7.0	767	11.1	91	2.8	>24000	18900	79	
FEB 1996 20...	1040	21	264	7.2	2.5	765	13.1	96	--	--	--	85	
MAR 28...	0920	16	256	7.1	9.5	773	11.0	95	3.1	70	50	82	
MAY 30...	0910	21	255	7.4	15.0	761	9.0	89	3.9	1600	40	86	
JUL 24...	0935	12	232	7.6	23.0	750	7.4	88	3.0	230	60	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)	ALKA-LINITY 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 1995 13...	17	8.8	7.7	10	26	36	23	0.1	8.2	150	138	32	
FEB 1996 20...	19	9.2	9.7	4.4	21	36	24	<0.1	8.5	150	142	7	
MAR 28...	19	8.5	9.1	4.7	21	38	22	0.1	6.5	148	137	33	
MAY 30...	19	9.4	8.3	4.9	35	33	22	0.1	6.4	178	133	22	
JUL 24...	17	8.1	7.7	8.0	38	28	19	0.2	1.9	154	118	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-SOLVED (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 1995 13...	0.051	2.50	0.19	0.22	1.6	0.98	4.1	3.5	0.40	0.15	8.7	3.7	
FEB 1996 20...	--	4.20	--	--	0.9	0.70	5.1	4.9	0.09	0.04	3.9	0.6	
MAR 28...	0.050	3.60	0.20	0.21	1.1	0.55	4.7	4.1	0.18	0.02	4.1	2.4	
MAY 30...	0.081	2.00	0.42	0.41	1.3	1.1	3.3	3.1	0.16	0.03	5.3	2.3	
JUL 24...	0.050	1.20	0.08	0.05	1.7	0.70	2.9	1.9	0.23	0.03	8.3	3.7	

DELAWARE RIVER BASIN

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 TOTAL RECOV- ERABLE (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 1995 13...	1025	48	1	<10	40	<1	<1	5
MAY 1996 30...	0910	32	1	<10	20	<1	<1	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 RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV 1995 13...	1900	3	80	<0.1	3	<1	10
MAY 1996 30...	1200	2	110	<0.1	2	<1	<10

RESERVOIRS IN DELAWARE RIVER BASIN

- 01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, Hydrologic Unit 02040102, near release chamber at Downsview Dam on East Branch Delaware River, and 1.6 mi east of Downsview. DRAINAGE AREA, 372 mi². 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 earthen 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, 152,791 mil gal, Apr. 17, elevation, 1,281.61 ft; minimum observed, 65,759 mil gal, Oct. 20, elevation, 1,223.37 ft.
- 01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, 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 mi². 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 earthen 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, 104,267 mil gal, May 13, elevation, 1,153.51 ft; minimum observed, 25,674 mil gal, Oct. 14, elevation, 1,087.91 ft.
- 01428900 PROMPTON RESERVOIR.--Lat 41°35'18", long 75°19'39", Wayne County, Hydrologic Unit 02040103, at dam on West Branch Lackawaxen River, 0.3 mi north of Prompton, 0.4 mi upstream from highway bridge, and 0.5 mi upstream from Van Auken Creek. DRAINAGE AREA, 59.6 mi². 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 of 1,205.00 ft. Storage began July 1960. Capacity at elevation 1,205.00 ft is 51,700 acre-ft. Ordinary minimum (conservation) pool 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.
COOPERATION.--Records provided by U.S. Army Corps of Engineers
EXTREMES FOR PERIOD OF RECORD. Maximum contents, 8,170 acre-ft, June 29, 1973, elevation, 1,138.40 ft; minimum (after first filling), 2,500 acre-ft, June 5, 1991, elevation, 1,121.46 ft.
EXTREMES FOR CURRENT YEAR.--Maximum contents, 6,840 acre-ft, Jan. 20, elevation, 1,134.61 ft; minimum contents, 3,030 acre-ft, Oct. 1, 2, elevation, 1,123.33 ft.
- 01429400 GENERAL EDGAR JADWIN RESERVOIR.--Lat 41°36'44", long 75°15'55", Wayne County, Hydrologic Unit 02040103, at dam on Dyberry Creek, 0.4 mi upstream from unnamed tributary, 2.4 mi north of Honesdale, and 2.9 mi upstream from mouth. DRAINAGE AREA, 64.5 mi². PERIOD OF RECORD, October 1959 to current year. GAGE, data collection platform (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 in October 1959. Capacity at elevation of 1,053.00 ft is 24,500 acre-ft. Reservoir is used for flood control. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel.
COOPERATION.--Records provided by U.S. Army Corps of Engineers.
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 6,520 acre-ft, June 19, 1973, elevation, 1,017.40 ft; minimum contents, no storage many times.
EXTREMES FOR CURRENT YEAR.--Maximum contents, 4,920 acre-ft, Jan. 20, elevation, 1,012.08 ft; minimum contents, no storage many times.
- 01431700 LAKE WALLENPAUPACK.--Lat 41°27'35", long 75°11'10", Wayne County, Hydrologic Unit 02040103, at dam on Wallenpaupack Creek at Wilsonville, 1.2 mi south of Hawley, and 1.5 mi upstream from mouth. DRAINAGE AREA, 228 mi². PERIOD OF RECORD, January 1926 to current year. GAGE, vertical staff. Datum of gage is sea level (levels by Pennsylvania Power and Light Co.).
REMARKS.--Lake formed by concrete gravity-type and earthen 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, 100,000 acre-ft, Jan. 27, elevation, 1,188.6 ft; minimum contents, 41,990 acre-ft, Jan. 17, elevation 1,178.4 ft.
- 01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'21", long 74°47'00", Sullivan County, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi northwest of Fowlersville. DRAINAGE AREA, 116 mi², 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 earthen dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft³ between elevations 1,010.0 ft, minimum operating pool, and 1,071.2 ft, top of flashboards. Capacity below elevation 1,010.0 ft, minimum operating pool, about 212.7 mil ft³. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft. Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records provided by Orange and Rockland Utilities, Inc.
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 1,461.6 mil ft³, Mar. 14, 1977, elevation, 1,071.8 ft; minimum observed (after first filling), -141.4 mil ft³, Dec. 2, 1938, elevation, 987.5 ft.
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 1,375.2 mil ft³, May 15, elevation, 1,069.7 ft; minimum observed, 882.8 mil ft³, Jan. 6, elevation, 1,056.2 ft.

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi southeast of village of Black Lake. DRAINAGE AREA, 22.9 mi². 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 ft³ 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 ft³. 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 ft³, July 20, 1945, elevation, 1,222.0 ft; minimum observed (after first filling), -26.8 mil ft³, Nov. 15, 1928, elevation, 1,144.5 ft.

EXTREMES OF CURRENT YEAR.--Maximum contents observed, 1,130.6 mil ft³, May 13, elevation, 1,220.9 ft; minimum observed, 391.3 mil ft³, Jan. 19, elevation, 1,194.6 ft.

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi northwest of Fowlersville. DRAINAGE AREA, 6.46 mi², 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 ft³ between elevations 1,043.3 ft, minimum operating pool, and 1,072.0 ft, top of permanent flashboards. Capacity below elevation 1,043.3 ft, minimum operating pool, about 6.54 mil ft³. Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft. Records provided by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 145.44 mil ft³, July 30, 31, 1945, elevation, 1,073.1 ft; minimum observed (after first filling), about -6.54 mil ft³, Mar. 16, 1963, elevation, 1,038.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 132.74 mil ft³, May 13, elevation, 1,071.6 ft; minimum observed, 47.92 mil ft³, Jan. 19, elevation, 1,058.8 ft.

01435900 NEVERSINK RESERVOIR.--Lat 41°49'27", long 74°38'20", Sullivan County, Hydrologic Unit 02040104, at a gatehouse at Neversink Dam on Neversink River, and 2 mi southwest of Neversink. DRAINAGE AREA, 92.5 mi². 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, 37,773 mil gal, May 1, elevation, 1,441.26 ft; minimum observed, 9,941 mil gal, Oct. 13, elevation, 1,364.11 ft.

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, Hydrologic Unit 02040106, at dam on Lehigh River, 2,200 ft downstream from Bear Creek, and 5.0 mi northeast of White Haven. DRAINAGE AREA, 289 mi². PERIOD OF RECORD, February 1961 to current year. GAGE, water-stage recorder (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.

COOPERATION.--Records provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 62,100 acre-ft, Sept. 28, 1985, elevation, 1,417.08 ft; minimum contents (after establishment of conservation pool), 980 acre-ft, July 6, 1982, elevation, 1,287.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 41,220 acre-ft, Jan. 21, elevation, 1,397.55 ft; minimum contents, 1,310 acre-ft, Feb. 6, elevation, 1,293.39 ft.

01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, Hydrologic Unit 02040106, at dam on Wild Creek, 0.7 mi upstream from hatchery, 2.6 mi upstream from Wild Creek Dam, 4.4 mi upstream from mouth, and 10.0 mi northeast of Palmerton. DRAINAGE AREA, 16.5 mi². PERIOD OF RECORD, October 1958 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by city of Bethlehem).

REMARKS.--Reservoir formed by an earthfill dam with ungated concrete spillway at elevation 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.

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, elevation, 890.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 4,060 acre-ft, Nov. 6, elevation, 947.97 ft; minimum contents, 0 acre-ft, many days, elevation, 890.60 ft.

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

- 01449700 WILD CREEK RESERVOIR.--Lat 40°53'50", long 75°33'50", Carbon County, Hydrologic Unit 02040106, at dam on Wild Creek, 1.6 mi upstream from mouth, 2.4 mi south of hatchery, and 7.5 mi northeast of Palmerton. DRAINAGE AREA, 22.2 mi². PERIOD OF RECORD, January 1941 to current year. 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, 12,330 acre-ft, Jan. 20, elevation, 821.10 ft; minimum contents 7,470 acre-ft, Oct. 27, elevation 801.96 ft.
- 01449790 BELTZVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, 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 mi². PERIOD OF RECORD, February 1971 to current year. GAGE, water-stage recorder (U.S. Army Corps of Engineers datum).
 REVISED RECORDS.--WDR NJ-96-1: 1995.
 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.
 COOPERATION.--Records provided by U.S. Army Corps of Engineers.
 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, 49,410 acre-ft, Jan. 29, elevation, 635.97 ft; minimum contents, 31,940 acre-ft, Oct. 4, elevation, 617.12 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 mi². 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 ft³/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, 16,640,000,000 gal, July 15, elevation 922.95 ft; minimum, 15,585,000,000 gal, Oct. 20, elevation 917.90 ft.
- 01455400 LAKE HOPATCONG.--Lat 40°55'00", long 74°39'50", Morris County, Hydrologic Unit 02040105, in gatehouse of Lake Hopatcong Dam on Musconetcong River at Landing. DRAINAGE AREA, 25.3 mi². PERIOD OF RECORD, February 1887 to current year. Monthend contents only prior to October 1950, published in WSP 1302. REVISED RECORDS, WDR NJ-82-2: Drainage area; WDR NJ-83-2: Corrections 1981 (m/m). GAGE, 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. CORRECTIONS.--Once-daily staff readings furnished by New Jersey Department of Environmental Protection.
 COOPERATION.--Records provided by New Jersey Department of Environmental Protection.
 EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 8,777,000,000 gal, August 19, 1955, gage height, 10.55 ft; minimum, 1,525,000,000 gal, Dec. 29, 1960, gage height, 0.65 ft.
 EXTREMES FOR CURRENT YEAR.--Maximum contents, 7,981,000,000 gal, July 16, gage height, 9.62 ft; minimum, 5,630,000,000 gal, Jan. 3, gage height, 6.74 ft.
- 01459350 NOCKAMIXON RESERVOIR.--Lat 40°28'13", long 75°11'10", Bucks County, PA, Hydrologic Unit 02040105, at dam on Tohickon Creek, 6.2 mi upstream from gaging station on Tohickon Creek, 2.9 mi upstream from Mink Run, and 1.3 mi east of Ottsville. DRAINAGE AREA-- 73.3 mi². PERIOD OF RECORD.--December 1973 to current year. GAGE.--Water stage recorder. Datum of gage is 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 42,490 acre-ft, Apr. 26, elevation, 396.60 ft; minimum contents, 39,220 acre-ft, Oct. 2, elevation, 394.30 ft.
- 01469200 STILL CREEK RESERVOIR.--Lat 40°51'25", long 75°59'30", Schuylkill County, 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 mi². 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, 8,370 acre-ft, Jan. 31, elevation, 1,182.3 ft; minimum contents, 8,210 acre-ft, Oct. 31, elevation, 1,181.7 ft.

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01470870 BLUE MARSH LAKE.--Lat 40°22'45", long 76°01'59", Berks County, Hydrologic Unit 02040203, at dam on Tulpehocken Creek, 0.8 mi upstream from gaging station on Tulpehocken Creek (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 mi². 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, 29,540 acre-ft, Jan. 21, elevation, 295.28 ft; minimum contents, 16,880 acre-ft, Oct. 5, elevation, 284.21.

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, Hydrologic Unit 02040203, at dam on Perkiomen Creek, 0.4 mi west of Green Lane, and 2.1 mi upstream from Unami Creek. DRAINAGE AREA, 70.9 mi². PERIOD OF RECORD, December 1956 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by Philadelphia Suburban Water Co.).

REMARKS.--Reservoir formed by concrete, gravity-type dam, with ungated spillway at elevation of 286.00 ft. Storage began December 21, 1956. Capacity at elevation 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, 14,630 acre-ft, Apr. 16, elevation, 287.36 ft; minimum contents, 9,430 acre-ft, Oct. 1, elevation, 280.45 ft.

01480684 MARSH CREEK RESERVOIR.--Lat 40°03'24", long 75°43'06", Chester County, Hydrologic Unit 02040205, on right bank at dam on Marsh Creek, 0.3 mi upstream from mouth, and 3.2 mi north of Downingtown. DRAINAGE AREA.--20.1 mi². PERIOD OF RECORD.--November 1973 to current year. GAGE.--Water-stage recorder. Datum of gage is 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, 14,950 acre-ft, Sept. 20, elevation, 360.90 ft; minimum contents, 12,660 acre-ft, Dec. 16, elevation, 356.51 ft.

MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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.....	1,230.81	74,470	--	1,090.47	27,691	--	1,123.38	3,050	--
Oct. 31.....	1,231.23	74,981	+25.5	1,104.62	40,758	+652	1,125.43	3,620	+9.3
Nov. 30.....	1,245.29	93,403	+950	1,124.86	63,717	+1,184	1,125.84	3,740	+2.0
Dec. 31.....	1,244.94	92,913	-24.5	1,127.83	67,492	+188	1,124.91	3,480	-4.2
CAL YR 1995			-70.8			-73.0			-0.1
Jan. 31.....	1,273.09	137,367	+2,219	1,151.78	101,483	+1,697	1,126.24	3,850	+6.0
Feb. 28.....	1,275.86	142,274	+262	1,151.09	100,372	-59.3	1,126.49	3,920	+1.2
Mar. 31.....	1,277.81	145,790	+175	1,150.64	99,648	-36.1	1,125.64	3,680	-3.9
Apr. 30.....	1,281.44	152,473	+345	1,152.00	101,837	+113	1,128.47	4,470	+13.3
May 31.....	1,279.52	148,917	-177	1,149.91	98,481	-168	1,124.85	3,460	-16.4
June 30.....	1,278.45	146,955	-101	1,149.10	97,249	-63.5	1,124.56	3,380	-1.3
July 31.....	1,280.08	149,947	+149	1,150.05	98,699	+72.4	1,124.89	3,470	+1.5
Aug. 31.....	1,275.11	140,936	-450	1,148.04	95,637	-153	1,123.77	3,160	-5.0
Sept. 30.....	1,268.39	129,257	-602	1,144.35	90,073	-287	1,123.49	3,080	-1.3
WTR YR 1996			+232			+264			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.....	976.16	0	--	1,179.7	50,490	--	1,061.3	1,056.0	--
Oct. 31.....	978.56	11	+0.2	1,184.6	77,650	+442	1,065.0	1,191.3	+50.5
Nov. 30.....	981.86	114	+1.7	1,185.2	81,290	+61.2	1,066.2	1,237.0	+17.6
Dec. 31.....	977.26	0	-1.9	1,181.2	58,320	-374	1,057.1	912.2	-121
CAL YR 1995			0			+0.1			-7.5
Jan. 31.....	983.51	180	+2.9	1,185.4	82,290	+390	1,069.2	1,355.0	+165
Feb. 28.....	983.46	178	0	1,181.2	58,320	-417	1,064.4	1,168.9	-74.3
Mar. 31.....	982.53	141	-0.6	1,180.5	54,970	-54.5	1,061.9	1,077.3	-34.2
Apr. 30.....	992.76	876	+12.4	1,185.2	81,290	+442	1,067.5	1,287.5	+81.1
May 31.....	977.86	0	-14.2	1,185.7	83,810	+41.0	1,066.9	1,264.0	-8.8
June 30.....	981.85	114	+1.9	1,184.5	77,000	-114	1,065.3	1,202.7	-23.6
July 31.....	977.26	0	-1.9	1,184.1	74,450	-41.5	1,066.5	1,248.6	+17.1
Aug. 31.....	976.41	0	0	1,181.7	60,830	-222	1,062.0	1,080.9	-62.6
Sept. 30.....	977.36	0	0	1,178.6	43,200	-296	1,065.3	1,202.7	+47.0
WTR YR 1996			0			-10.0			+4.6

MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

MONTH END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996									
Date	Elevation (feet)†	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)†	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)*	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)
01433100 Toronto Reservoir				01433200 Cliff Lake			01435900 Neversink Reservoir		
Sept. 30.....	1,196.0	422.2	--	1,061.5	62.21	--	1,368.73	11,053	--
Oct. 31.....	1,196.9	442.6	+7.6	1,064.9	83.02	+7.8	1,390.40	17,138	+304
Nov. 30.....	1,203.3	600.0	+60.7	1,066.9	96.47	+5.2	1,410.91	24,376	+373
Dec. 31.....	1,201.7	558.9	-15.4	1,060.4	56.12	-15.1	1,405.72	22,406	-98.3
CAL YR 1995			+5.5				-8		
Jan. 31.....	1,205.0	644.5	+32.0	1,070.7	125.33	+25.8	1,431.02	32,866	+522
Feb. 28.....	1,210.4	792.2	+58.9	1,067.7	102.20	-9.2	1,434.59	34,531	+88.8
Mar. 31.....	1,214.3	907.4	+43.0	1,062.1	65.66	-13.6	1,432.75	33,666	-43.2
Apr. 30.....	1,219.1	1,066.7	+61.5	1,067.5	100.76	+13.5	1,441.26	37,773	+212
May 31.....	1,220.1	1,101.8	+13.1	1,067.4	100.04	-0.3	1,437.67	36,004	-88.3
June 30.....	1,219.8	1,091.2	-4.1	1,065.8	88.94	-4.3	1,437.62	35,980	-1.24
July 31.....	1,216.3	971.4	-44.7	1,069.0	111.86	+8.5	1,438.86	36,584	+30.1
Aug. 31.....	1,210.3	789.4	-67.9	1,066.8	95.78	-6.0	1,423.88	29,690	-344
Sept. 30.....	1,208.0	725.2	-24.8	1,066.5	93.71	-0.8	1,414.69	25,866	-197
WTR YR 1996			+9.6				+1.0		
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 (acre- feet)	Change in contents (equivalent in ft ³ /s)
01447780 Francis E. Walter Lake				01449400 Penn Forest Reservoir			01449700 Wild Creek Reservoir		
Sept. 30.....	1,300.81	2,080	--	934.58	2,140	--	807.72	8,800	--
Oct. 31.....	1,326.50	5,350	+53.2	944.85	3,540	+22.8	803.76	7,890	-14.8
Nov. 30.....	1,301.06	1,890	-58.1	943.20	3,290	-4.2	819.00	11,800	+65.7
Dec. 31.....	1,301.26	1,910	+0.3	942.30	3,160	-2.1	819.64	11,930	+2.1
CAL YR 1995			-0.2				-1.1	0	
Jan. 31.....	1,308.37	2,610	+11.4	935.10	2,190	-15.8	821.00	12,300	+6.0
Feb. 28.....	1,306.82	2,440	-3.0	929.85	1,640	-9.6	820.50	12,150	-2.6
Mar. 31.....	1,306.49	2,410	-0.5	913.51	559	-17.6	820.36	12,110	-0.7
Apr. 30.....	1,319.58	4,130	+28.9	897.50	0	-9.4	820.46	12,140	+0.5
May 31.....	1,306.64	2,420	-27.8	892.74	0	0	820.16	12,050	-1.5
June 30.....	1,303.25	2,080	-5.7	--	0	0	819.93	11,990	-1.0
July 31.....	1,303.78	2,130	+0.8	--	0	0	820.18	12,050	+1.0
Aug. 31.....	1,299.51	1,760	-6.0	--	0	0	818.31	11,610	-7.2
Sept. 30.....	1,307.25	2,490	+12.3	--	0	0	814.96	10,690	-15.5
WTR YR 1996			+6				-3		
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 gallons)	Change in contents (equivalent in ft ³ /s)
01449790 Beltzville Lake (WY1995)				01449790 Beltzville Lake (WY1996)			01455221 Merrill Creek Reservoir		
Sept. 30.....	627.97a	41,220a	--	617.17	31,980	--	919.19	15,846	--
Oct. 31.....	627.56a	40,830a	- 6.3a	623.44	37,070	+82.8	918.20	15,645	-10.0
Nov. 30.....	628.40a	41,630a	+13.4a	628.02	41,270	+70.6	918.28	15,666	+1.1
Dec. 31.....	627.40a	40,680a	-15.5a	627.90	41,150	-2.0	918.15	15,645	-1.0
CAL YR 1995			- 0.7a				+1		
Jan. 31.....	627.22a	40,510a	- 2.8a	634.69	47,960	+111	919.19	15,846	+10.0
Feb. 28.....	627.30a	40,580a	+ 1.3a	628.03	41,280	-116	919.73	15,947	+5.4
Mar. 31.....	627.94a	41,190a	+ 9.9a	628.33	41,560	+4.6	922.30	16,492	+27.2
Apr. 30.....	628.11a	41,350a	+ 2.7a	628.54	41,760	+3.4	922.84	16,597	+5.4
May 31.....	627.98a	41,230a	- 2.0a	627.98	41,230	-8.6	922.80	16,597	0
June 30.....	627.84a	41,100a	- 2.2a	628.38	41,610	+6.4	922.87	16,618	+1.1
July 31.....	627.94a	41,190a	+ 1.5a	628.08	41,330	-4.6	922.74	16,577	-2.0
Aug. 31.....	623.84a	37,410a	-61.5a	627.91	41,160	-2.8	922.50	16,555	-1.1
Sept. 30.....	617.17a	31,980a	-91.3a	627.94	41,190	+0.5	922.16	16,471	-4.3
WTR YR 1996			-12.8a				+1.4		

a Corrected figures for 1995.

DELAWARE RIVER BASIN
RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

Date	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)	Elevation (feet)†	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)
01455400 Lake Hopatcong				01459350 Nockamixon Reservoir			01469200 Still Creek Reservoir		
Sept. 30.....	7.74	6,425	--	394.30	39,220	--	1,180.7	7,930	--
Oct. 31.....	9.28	7,694	+63.3	395.10	40,340	+18.2	1,181.7	8,210	+4.6
Nov. 30.....	8.32	6,897	-41.1	395.00	40,200	- 2.4	1,182.1	8,320	+1.8
Dec. 31.....	6.78	5,661	-61.7	394.80	39,920	- 4.6	1,182.0	8,290	-0.5
CAL YR 1995			-2			- 0.7			0
Jan. 31.....	9.32	7,728	+103.2	395.30	40,620	+11.4	1,182.3	8,370	+1.3
Feb. 28.....	9.06	7,509	-11.7	395.45	40,820	+ 3.5	1,182.1	8,320	-0.9
Mar. 31.....	9.12	7,560	+2.5	395.60	41,030	+ 3.4	1,182.1	8,320	0
Apr. 30.....	9.20	7,627	+3.5	396.60	42,490	+24.5	1,182.2	8,340	+0.3
May 31.....	9.10	7,543	-4.2	395.40	40,750	-28.3	1,182.1	8,320	-0.3
June 30.....	9.06	7,509	-1.8	394.80	39,920	-13.9	1,182.1	8,320	0
July 31.....	9.26	7,677	+8.4	394.80	39,920	0	1,182.1	8,320	0
Aug. 31.....	8.88	7,359	-15.9	395.20	40,480	+ 9.1	1,182.0	8,290	-0.5
Sept. 30.....	9.16	7,593	+12.1	395.60	41,030	+ 9.2	1,182.0	8,290	0
WTR YR 1996			+5.0			+24.9			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 (acre- feet)	Change in contents (equivalent in ft ³ /s)
01470870 Blue Marsh Lake				01472200 Green Lane Reservoir			01480684 Marsh Creek Reservoir		
Sept. 30.....	284.46	17,110	--	280.45	9,430	--	358.55	13,680	--
Oct. 31.....	289.86	22,740	+91.6	286.05	13,480	+65.9	360.65	14,820	+18.5
Nov. 30.....	285.13	17,750	-83.9	286.00	13,430	-0.8	359.84	14,370	-7.6
Dec. 31.....	285.04	17,660	-1.5	285.94	13,380	-0.8	356.98	12,900	-23.9
CAL YR 1995			0			0			0
Jan. 31.....	285.98	18,590	+15.1	286.20	13,610	+3.7	360.21	14,570	+27.2
Feb. 28.....	284.91	17,540	-18.3	286.11	13,530	-1.4	356.91	12,860	-29.7
Mar. 31.....	285.70	18,310	+12.5	286.15	13,560	+0.5	359.37	14,110	+20.3
Apr. 30.....	290.26	23,200	+82.2	286.21	13,610	+0.8	359.57	14,220	+1.8
May 31.....	289.93	22,820	-6.2	285.99	13,420	-3.1	360.00	14,460	+3.9
June 30.....	290.63	23,630	+13.6	285.93	13,370	-0.8	359.94	14,430	-0.5
July 31.....	289.97	22,860	-12.5	286.03	13,460	+1.5	360.69	14,840	+6.7
Aug. 31.....	290.14	23,060	+3.3	285.78	13,230	-3.7	360.18	14,560	-4.6
Sept. 30.....	290.06	22,970	-1.5	286.10	13,520	+4.9	360.44	14,700	+2.4
WTR YR 1996			+9			+6			+2

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 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).

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WITHDRAWALS BY CITY OF NEW YORK

MONTH	<u>01415200</u> Pepacton Reservoir	<u>01423900</u> Cannonsville Reservoir	<u>01435800</u> Neversink Reservoir
October	708	0.0	122
November	338	83.3	106
December	461	351	209
CAL YR 1995	533	306	196
January	277	276	134
February	641	153	234
March	694	395	311
April	277	352	334
May	316	277	387
June	631	336	210
July	464	167	252
August	627	62.8	439
September	699	202	324
WTR YR 1996	511	221	255

MISCELLANEOUS WITHDRAWALS FROM BASIN, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

MONTH	<u>01437360</u> Bear Swamp Reservoir	<u>01447750</u> Bear Creek	<u>01448830</u> Hazle Creek	<u>01460440</u> Delaware & Raritan Canals
October .....	.37	0	7.96	117
November .....	.34	0	8.66	110
December .....	.36	0	4.40	143
CAL YR 1995 .....	.39	0	6.03	139
January .....	.41	0	6.78	119
February .....	.43	0	6.29	131
March .....	.38	0	6.53	113
April .....	.41	0	5.17	112
May .....	.42	0	11.80	140
June .....	.40	0	5.75	120
July .....	.40	0	5.78	123
August .....	.40	0	5.70	114
September .....	.43	0	6.04	116
WTR YR 1996 .....	.40	0	6.15	113

DELAWARE RIVER BASIN

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 ft³/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 Lanes 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 1995 TO SEPTEMBER 1996

MONTH	01446572 Merrill Creek Reservoir	01459005 Point Pleasant	01463480 Borough of Morrisville	01463490 City of Trenton
October	-1.2	66.8	4.26	48.2
November	0	52.4	4.24	46.6
December	-1.2	9.8	4.71	45.4
CAL YR 1995	-1.57	36.1	4.34	49.9
January	0	16.7	4.90	45.4
February	0	18.1	5.16	46.2
March	0	25.0	4.74	46.6
April	0	45.2	4.36	45.6
May	0	79.6	4.23	46.3
June	-1.2	80.4	3.78	50.7
July	0	78.5	4.14	53.1
August	0	81.8	4.95	58.1
September	-10.4	75.6	4.16	52.0
WTR YR 1996	-.90	52.5	4.47	48.7

WITHDRAWALS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996--Continued

City of Philadelphia			
MONTH	01467030 Delaware River Torresdale	01474500 Schuylkill River	
		Belmont	Queen Lane
October	301	91.0	142
November	299	86.2	140
December	298	83.3	152
CAL YR 1995	318	98.8	152
January	290	83.1	153
February	300	94.5	155
March	283	95.6	146
April	281	85.3	147
May	283	92.4	134
June	296	98.7	147
July	327	104	161
August	321	101	160
September	290	92.1	135
WTR YR 1996	297	92.3	148

DELAWARE RIVER BASIN

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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 diverted 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 1995 TO SEPTEMBER 1996--Continued

MONTH	OCTORARO CREEK		
	01367630 Morris Lake	01578420 Coatesville Water Authority	01578450 Chester Water Authority
October	1.38	1.28	50.0
November	1.40	1.44	50.5
December	1.53	1.31	51.4
CAL YR 1995	1.42	1.69	53.7
January	1.51	.98	53.5
February	1.60	1.52	54.8
March	1.46	1.61	46.6
April	1.38	1.98	48.2
May	1.43	1.55	49.6
June	1.54	1.45	52.3
July	1.52	1.34	50.4
August	1.53	1.74	50.0
September	1.47	1.43	50.0
WTR YR 1996	1.48	1.47	50.6

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

Station name and number	Location and drainage area	Period of record	Water year 1996 maximum			Period of record maximum		
			Date	Gage Height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (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 .	1965-96	1-19-96	2.98b	400	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 .	1965-96	1-19-96	1.90b	140	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 north-east 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†, 1977-96	1-28-96	13.85b	792	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 .	1981-96	1-28-96	6.09	1,550	4-06-84	7.20	2,170
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, 1976-96	11-12-95	2.20	350	5-29-68	11.64c	1,300c

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1996 maximum			Period of record maximum		
			Date	Gage Height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (ft ³ /s)
PASSAIC RIVER BASIN--Continued								
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 .	1989-96	1-29-96	11.75	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 .	1979-96	7-13-96	4.35b	680	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, 1991-96†	1-29-96	11.97	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, 1979-96	6-03-96	3.64b	834	7-23-45	---	3,800e
Molly Ann Brook at North Haldeon, 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, 1979-96	7-08-96	8.02	720	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 35.31 ft above sea level. Drainage area is 1.37 mi ² .	1967-96	7-08-96	2.82	a	11-08-77	6.47b	470
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 .	1966-96	1-19-96	4.43b	1,650	11-08-77	5.25bd	4,150
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 .	1969-96	11-12-95	5.81	500	11-08-77	8.28	1,380

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1996 maximum			Period of record maximum		
			Date	Gage Height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (ft ³ /s)
PASSAIC RIVER BASIN--Continued								
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 .	1975-96	1-19-96	3.28b	245	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 .	1988-96	10-28-95	5.35b	580	6-05-92	6.58b	830
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 .	1995-96	1-19-96	2.39	88	7-18-95	2.66	98r
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†, 1963-96	7-31-96	3.98	1,080	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, or 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†, 1989-96	7-31-96	3.80	801	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†, 1988-96	1-19-96	5.29	722	7-26-88	6.13	914
North Branch Raritan River at South Branch, NJ (01400010)	Lat 40°33'24", long 74°41'19", Somerset County, Hydrologic Branch, 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 46.0 ft. Drainage area is 190 mi ² .	1993-96	1-19-96	13.91	a	1-19-96	13.91	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 .	1991-96	1-19-96	8.08b	a	1-28-94	9.08b	a

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1996 maximum			Period of record maximum		
			Date	Gage Height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (ft ³ /s)
RARITAN RIVER BASIN--Continued								
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 south-east 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, 1979-96	1-19-96	6.92	1,220	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 sea level. Drainage area is 65.8 mi ² .	1965-75†, 1976-87, 1987-89†, 1990-96	6-23-96	3.97	907	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 .	1971-75, 1979-96	1-19-96	7.00b	1,050	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 .	1986-96	1-19-96	10.53	720	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 .	1960-96	1-19-96	6.90	700	8-27-71	8.64	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 .	1968-96	6-13-96	4.25	177	7-14-87	5.27d	470
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 .	1980-96	6-13-96	4.85	140	6-10-89	6.68	275

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1996 maximum			Period of record maximum		
			Date	Gage Height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (ft ³ /s)
RARITAN RIVER BASIN--Continued								
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†, 1990-96	1-20-96	5.42	8,170	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 .	1967-96	1-19-96	5.98b	1,800	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 north-west 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.	1967-96	1-19-96	12.81b	6,900	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 .	1966-96	7-31-96	9.37	4,200	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 .	1993-96	1-19-96	10.62b	a	1-19-96	10.62b	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 spillway, 300 ft north of Scotch Plains, 1.0 mi west of Mountain-side, 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, 1981-96	1-19-96	4.61	185	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†, 1985-96	1-19-96	3.61b	872	7-23-38	5.82db	2,890

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1996 maximum			Period of record maximum		
			Date	Gage Height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (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, 1991-96	1-19-96	5.29	1,170	11-28-93	6.10c	1,620
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, 1992-96	1-19-96	8.93b	1,480	8-02-73	10.65b	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†	1-19-96	8.74b	2,710	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 .	1980-96	1-20-96	7.91b	1,120	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 .	1969-96	1-20-96	5.40	200	7-21-75	7.31	425
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, 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†, 1968-96	1-20-96	2.91	103	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 .	1995-96	7-18-95 1-19-96	5.15 8.10	88r d	1-19-96	8.10	285

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1996 maximum			Period of record maximum		
			Date	Gage Height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (ft ³ /s)
DELAWARE RIVER BASIN--Continued								
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†, 1972-96	1-20-96	28.72	187,000	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, 1995-96	1-20-96	13.31b	1,100	7-09-45 8-20-55	18.4 28.37k	2,900 a
Moore 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, 1995-96	3-09-95 7-31-96	1.11 3.04	67r 320	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, 0.2 mi north of Colonial Lake. Drainage area is 0.27 mi ² .	1995-96	6-12-96	6.70	a	6-12-96	6.70	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, 0.9 mi upstream from mouth. Drainage area is 0.99 mi ² .	1979, 1995-96	1-20-96	6.55	88	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 .	1995-96	1-20-96	2.56	62	1-20-96	2.56	62
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, 1995-96	6-23-96	3.66	172	6-23-96	3.66	172
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 .	1995-96	1-19-96	4.27	39	1-19-96	4.27	39

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1996 maximum			Period of record maximum		
			Date	Gage Height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (ft ³ /s)
DELAWARE RIVER BASIN--Continued								
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 north-east of Mount Holly. Datum of gage is 33.71 ft above sea level. Drainage area is 5.38 mi ² .	1978-96	1-20-96	6.67b	260	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 .	1964-96	8-13-96	4.71	225	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 .	1964-96	8-13-96	3.18	88	9-01-78	4.62	295

* Also a low-flow partial-record station.

* Operated as a continuous-record gaging station.

i Discharge not determined.

j Downstream side of bridge.

: Recorded at previous site.

l Not the maximum gage height for period of record.

: Determined at Bradford Avenue, 0.2 mi downstream of gage, adjusted for change in drainage area.

: Determined at Squaw Lake Dam, 0.2 mi upstream of gage.

: 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 mi²), adjusted for change in drainage area.

k Due to backwater from Delaware River.

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 1996

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
HUDSON RIVER BASIN						
01368950	Black Creek near Vernon, NJ	Lat 41°13'21", long 74°28'33", Sussex County, Hydrologic Unit 02020007, at highway bridge on Maple Grange Road, 0.6 mi upstream of mouth, 0.7 mi northwest of Maple Grange, and 1.7 mi northeast of Vernon.	17.3	1977-86, 1988, 1990-91, 1994-96	9-26-96	29
HACKENSACK RIVER BASIN						
01378590	Metzler Brook at Englewood, NJ	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.	1.54	1965-94, 1996	2-09-96	5.3
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	1989-96	8-27-96	.32
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, 1983-96	8-09-96	30
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	1989-96	8-27-96	28
01381800	Whippany River near Pine Brook, NJ	Lat 40°50'42", long 74°20'51", Morris County, Hydrologic Unit 02030103, on left upstream abutment of bridge on Edwards Road, 0.1 mi northeast of overpass of Interstate 280, 0.3 mi upstream of Rockaway River, and 1.2 mi southwest of Pine Brook.	68.5	1992-94, 1996	8-09-96	40
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, 1986-92, 1994-96	8-28-96	119
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	1992-96	6-18-96	.54
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	1992-96	6-18-96	3.5

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
PASSAIC RIVER BASIN—Continued						
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, 1992-96	6-18-96	4.6
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	1992-96	6-18-96	5.4
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, 1986-96	5-23-96	25
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, 1988-96	6-18-96	3.9
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	1989-96	8-27-96	.87
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	1989-96	8-27-96	1.3
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	1989-96	8-27-96	1.5
RARITAN RIVER BASIN						
01396220	Stony Brook at Naughtright, NJ	Lat 40°48'11", long 74°45'07", Morris County, Hydrologic Unit 02040105, at bridge on Naughtright Road, 0.6 mi northwest of Naughtright, 0.7 mi upstream from mouth, and 1.9 mi northeast of Long Valley.	3.34	1963-67, 1973, 1991-96	8-20-96, 9-04-96	2.0, 1.0
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	1991-96	7-25-96	2.8
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, 1988-96	5-15-96, 6-17-96, 8-20-96, 9-04-96	16, 7.8, 4.3, 3.3
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, 1988-96	5-15-96, 6-17-96, 8-20-96, 9-04-96	31, 12, 6.0, 5.0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
RARITAN RIVER BASIN--Continued						
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	1991-96	8-20-96 9-04-96	1.1 .77
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	1988-96	8-20-96 9-04-96	15 8.0
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	1989-96	7-08-96 9-05-96	4.6 3.3
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	1989-96	7-08-96 9-05-96	2.2 1.6
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	1989-96	7-08-96 9-05-96	4.2 .85
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	1989-96	7-08-96 9-05-96	5.2 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	1989-96	7-08-96 9-05-96	.45 0
WRECK POND BROOK BASIN						
01407800	Wreck Pond Brook near Spring Lake, NJ	Lat 40°09'11", long 74°03'43", Monmouth County, Hydrologic Unit 02030104, at Osborne Pond Dam, 1.1 mi above Hannabrand Brook, and 1.7 mi west of Spring Lake.	7.00	1956-57a, 1959-63, 1966, 1995-96	7-08-96	3.5
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	1989-96	7-08-96 9-05-96	3.5 2.2

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
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, 1991-96	10-31-95	1.6
					11-29-95	4.3
					2-15-96	3.1
					3-25-96	3.9
					4-26-96	3.3
					5-22-96	3.7
					6-11-96	2.6
					7-29-96	4.4
					8-12-96	2.2
					9-04-96	2.1
					9-16-96	2.0
					9-27-96	2.2
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, 1995-96	11-08-95	18
					2-07-96	17
					4-23-96	25
					6-13-96	13
					8-08-96	19
					9-06-96	8.3
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	1995-96	11-08-95	58
					2-07-96	138
					4-23-96	178
					6-13-96	70
					8-08-96	93
					9-06-96	62
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, 1991-96	10-31-95	2.7
					11-29-95	3.8
					2-15-96	3.5
					3-25-96	3.5
					4-26-96	2.1
					5-22-96	3.8
					6-11-96	2.6
					7-29-96	3.2
					8-12-96	3.3
					9-04-96	3.5
					9-16-96	2.4
					9-27-96	3.0
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, 1991-96	10-31-95	4.3
					11-29-95	16
					2-15-96	12
					3-25-96	12
					4-26-96	9.8
					5-22-96	12
					6-11-96	4.6
					7-29-96	12
					8-12-96	10
					9-04-96	7.6
					9-16-96	8.1
					9-27-96	9.2
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	1991-96	10-31-95	.26
					11-29-95	.46
					2-15-96	2.3
					3-25-96	1.1
					4-26-96	1.2
					5-22-96	1.3
					6-11-96	.76
					7-29-96	.32
					8-12-96	.23
					9-04-96	.01
					9-16-96	0
					9-27-96	.04

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	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	1991-96	10-31-95	1.7
					11-29-95	2.8
					2-15-96	4.0
					3-25-96	3.3
					4-26-96	3.0
					5-22-96	3.7
					6-11-96	2.2
					7-29-96	3.2
					8-12-96	2.8
					9-04-96	2.2
					9-16-96	2.2
					9-27-96	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.	---	1991-96	10-31-95	.52
					11-29-95	2.5
					2-15-96	3.5
					3-25-96	4.1
					4-26-96	3.1
					5-22-96	3.3
					6-11-96	1.8
					7-29-96	3.1
					8-12-96	1.6
					9-04-96	1.6
					9-16-96	1.0
					9-27-96	2.0
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	1991-96	10-31-95	16
					11-29-95	24
					2-15-96	25
					3-25-96	24
					4-26-96	28
					5-22-96	26
					6-11-96	17
					7-29-96	24
					8-12-96	17
					9-04-96	19
					9-16-96	14
					9-27-96	19
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	1991-96	10-31-95	.69
					11-29-95	4.6
					2-15-96	8.6
					3-25-96	8.0
					4-26-96	8.5
					5-22-96	6.8
					6-11-96	3.7
					7-29-96	6.9
					8-12-96	3.2
					9-04-96	1.2
					9-16-96	.60
					9-27-96	3.5
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	1991-96	10-31-95	9.5
					11-29-95	10
					2-15-96	9.6
					3-25-96	11
					4-26-96	9.5
					5-22-96	11
					6-11-96	9.7
					7-29-96	10
					8-12-96	9.2
					9-04-96	8.8
					9-16-96	9.1
					9-27-96	9.1

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
MULLICA RIVER BASIN--Continued						
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	1991-96	10-31-95	1.9
					11-29-95	3.4
					2-15-96	4.1
					3-25-96	4.2
					4-26-96	5.0
					5-22-96	5.3
					6-11-96	3.6
					7-29-96	5.8
					8-12-96	4.1
					9-04-96	3.4
					9-16-96	3.4
					9-27-96	3.5
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	1991-96	10-31-95	17
					11-29-95	22
					2-15-96	22
					3-25-96	22
					4-26-96	22
					5-22-96	26
					6-11-96	22
					7-29-96	26
					8-12-96	25
					9-04-96	19
					9-16-96	19
					9-27-96	17
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	1991-96	10-31-95	.06
					11-29-95	.12
					2-15-96	2.0
					3-25-96	1.5
					4-26-96	1.8
					5-22-96	1.3
					6-11-96	.91
					7-29-96	.60
					8-12-96	1.4
					9-04-96	.88
					9-16-96	.75
					9-27-96	1.1
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	1995-96	11-08-95	9.2
					2-07-96	13
					4-23-96	12
					6-13-96	3.8
					8-08-96	11.8
					9-06-96	6.2
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, 1995-96	11-08-95	50
					2-07-96	94
					4-23-96	76
					6-13-96	52
					8-08-96	61
					9-06-96	34
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	1995-96	11-08-95	17
					2-07-96	18
					4-23-96	25
					6-13-96	17
					8-08-96	16
					9-06-96	10
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	1995-96	11-08-95	14
					2-07-96	18
					4-23-96	15
					6-13-96	17
					8-08-96	13
					9-09-96	9.7

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
MULICA RIVER BASIN--Continued						
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, 1995-96	11-08-95	13.8
					2-07-96	.82
					4-23-96	36
					6-13-96	12
					8-08-96	18
				9-06-96	8.1	
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, 1995-96	11-08-95	58
					2-07-96	93
					4-23-96	115
					6-13-96	75
					8-08-96	81
				9-06-96	52	
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	1995-96	11-08-95	23
					2-07-96	63
					4-23-96	75
					6-13-96	38
					8-08-96	48
				9-06-96	20	
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, 1995-96	11-08-95	16
					2-07-96	53
					4-23-96	29
					6-13-96	20
					8-08-96	22
				9-06-96	11	
GREAT EGG HARBOR RIVER BASIN						
01410803	Fourmile Branch at Winslow Crossing, NJ	Lat 39°42'07", long 74°58'11", Camden County, Hydrologic Unit 02040301, at bridge on Andrews Road in Winslow Crossing, 1.4 mi northeast of Williamstown, and 2.1 mi upstream from Great Egg Harbor River.	6.22	1972-80, 1990-96	10-27-95 7-12-96	3.6 2.5
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, 1989-96	10-27-95 7-12-96	5.4 6.4
01410865	Squankum Branch at Malaga Road, near Williamstown, NJ	Lat 39°40'04", long 74°57'39", Gloucester County, Hydrologic Unit 02040302, at bridge on Malaga Road, 1.0 mi upstream from Hedges Branch, and 2.2 mi east of Williamstown.	3.02	1974, 1990-96	10-27-95 7-12-96	.19 .33
01411035	Hospitality Branch at Blue Bell Road, near Cecil, NJ	Lat 39°38'36", long 74°58'40", Gloucester County, Hydrologic Unit 02040302, at bridge on Blue Bell Road, 1.2 mi upstream of Timber Road, 1.2 mi upstream of Timber Lakes, and 2.0 mi west of Cecil.	4.51	1990-96	10-27-95 7-12-96	1.1 3.3
01411047	Whitehall Branch below Victory Lakes, near Cecil, NJ	Lat 39°37'59", long 74°56'51", Gloucester County, Hydrologic Unit 02040302, at bridge on unnamed dirt road off of Yardley Road in Friendly Village trailer park, 800 ft downstream from Victory Lake and 1.0 mi south of Cecil.	4.60	1990-96	10-27-95 7-12-96	1.2 4.9
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, 1995-96	7-10-96	74
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	1994-96	7-11-96 9-26-96	15 16

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
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	1994-96	7-11-96	2.8
					9-26-96	2.4
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	1994-96	7-11-96	2.5
					9-26-96	4.0
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, 1995-96	7-11-96	7.9
					9-26-96	6.7
01412100	Manumuskin River near Manumuskin, NJ	Lat 39°20'57", long 74°57'31", Cumberland County, Hydrologic Unit 02040206, at bridge on light-duty road, 1.1 mi north of Manumuskin 2.9 mi northeast of Port Elizabeth, and 5.0 mi upstream from mouth.	32.1	1964-71, 1994-96	7-11-96	14
					9-26-96	34
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	1992-96	12-05-95	3.4
					5-15-96	7.6
					6-07-96	2.6
					9-27-96	.95
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	1992-96	5-15-96	1.8
					6-07-96	1.1
					9-27-96	.14
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	1989-96	9-03-96	2.0
					9-25-96	8.0
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, 1987-96	9-03-96	4.3
					9-25-96	8.2
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, 1994-96	9-03-96	1.9
					9-25-96	4.0
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	1991-96	7-25-96	5.3
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	1991-96	9-03-96	.48
					9-25-96	.72
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	1991-96	9-03-96	2.7
					9-25-96	.24

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
DELAWARE RIVER BASIN—Continued						
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, 1991-96	7-25-96	17
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	1991-96	7-25-96	2.8
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	1991-96	7-25-96	2.1
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, 1988-96	6-28-96 9-26-96	2.3 3.0
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, 1988-96	6-28-96 9-26-96	7.0 8.7
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, 1988-96	6-28-96 9-26-96	4.2 3.8
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, 1988-96	6-28-96 9-26-96	7.0 7.6
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, 1994-96	6-27-96 9-24-96	22 26
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, 1994-96	6-27-96 9-26-96	13 16
01477130	Basgalore Brook at Russell 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	1957d, 1966d, 1994-96	6-27-96 9-26-96	2.8 3.9
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, 1994-96	6-27-96 9-26-96	.95 .40
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, 1994-96	6-27-96 9-26-96	4.6 5.0

Discharge measurements made at low-flow partial-record stations during water year 1996--Continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
DELAWARE RIVER BASIN—Continued						
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, 1994-96	6-27-96 9-26-96	2.3 3.1

* 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.

e Estimated.

Discharge Measurements at Miscellaneous Sites

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*).

Discharge measurements made at miscellaneous sites during water year 1996

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	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, 1987-95	9-26-96	59
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, 1991-95	9-26-96	140
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, 1961-93c, 1994-95	6-12-96	0
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	1995	5-30-96 7-13-96 7-13-96	.27 4.9 5.6
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	--	5-24-96 7-13-96 7-13-96	.43 39 32
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	--	5-22-96 7-13-96 7-13-96	.24 12 11
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	--	5-22-96 7-13-96 7-13-96	.05 5.6 3.9
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	1989-95	8-28-96	90
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, 1992-95	9-25-96	610

Discharge measurements made at miscellaneous sites during water year 1996

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
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, 1994-95	9-26-96	29
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, 1985-95	9-26-96	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, 1985-95	9-26-96	7.0
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, 1985-95	9-26-96	86
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, 1985-95	9-26-96	42
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	1977-95	9-26-96	17
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, 1985-95	9-26-96	61
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, 1987-95	8-19-96	6.3
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	9-21-96	43.2
01401600 Bedden 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, 1976-95	8-27-96	5.6
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, 1993-95	8-30-96	27

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1996

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
RARITAN RIVER BASIN--Continued						
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, 1993-95	11-01-95	6.0
					2-26-96	11
					8-29-96	4.7
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	1993-95	10-05-95	42
					3-20-96	53
					7-13-96	97
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	1994-95	10-05-95	1.1
					11-02-95	1.4
					3-20-96	18
01408630 Davenport Branch	Wrangle Brook	Lat 39°57'38", long 74°14'42", Ocean County, Hydrologic Unit 02040301, at bridge on Mule Road in Berkeley Township, 1.4 mi upstream of mouth, and 2.5 mi west of Toms River.	12.1	1993-95	10-05-95	11.8
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	1994-95	10-05-95	18
					3-20-96	2.3
					7-13-96	14
					7-13-96	15
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 out- let of Atsion Lake, and 0.2 mi upstream from Wesickaman Creek..	26.7	1976-95	9-25-96	41
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, 1985-95	9-25-96	14
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, 1985-95	9-25-96	211
COHANSEY RIVER BASIN						
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	1975-95	9-24-96	25

Discharge measurements made at miscellaneous sites during water year 1996

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
DELAWARE RIVER BASIN						
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, 1988-95	9-26-96	57
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, 1984-95	2-22-96 6-14-96 9-30-96	809 183 183
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, 1993-95	9-27-96	61
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, 1987-95	9-19-96 9-28-96	287 161
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	8-20-96	.49
01463050 Gold Run	Delaware River	Lat 40°16'05", long 74°48'54", Mercer County, Hydrologic Unit 02040105, 0.3 mi north- east of West Trenton, 0.5 mi south of Mer- cer County Airport, 0.8 mi west of Ewing, and 1.8 mi north of mouth of Gold Run.	.21	1995	8-20-96	0
01463080 Gold Run	Delaware River	Lat 40°15'55", long 74°48'20", Mercer County, Hydrologic Unit 02040105, 0.5 mi north- west 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	1995	8-20-96	.09
01463100 Gold Run	Delaware River	Lat 40°15'20", long 74°48'30", Mercer County, Hydrologic Unit 02040105, 0.9 mi south- east 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	1995	8-20-96	.53
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 south- east of West Trenton, 1.1 mi northeast of Wilburtha, and 1.4 mi south of Mercer County Airport.	.11	1995	8-20-96	.12
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	1995	8-20-96	.92
01463180 Gold Run tributary No. 1	Gold Run	Lat 40°14'55", long 74°48'55", Mercer County, Hydrologic Unit 02040105, 0.6 mi north- east of mouth of Gold Run, 0.7 mi east of Wilburtha, and 1.2 mi southeast of West Trenton.	.39	1995	8-20-96	.18

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1996

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
DELAWARE RIVER BASIN--Continued						
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	1995	8-20-96	1.4
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 southeast of Lumberton, and 3.1 mi upstream from Southwest Branch.	64.5	1925, 1959-62, 1975-95	9-24-96	92
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, 1990-95	9-24-96	10
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 downstream of Blackwood Avenue, and 0.5 mi southeast of Blackwood Terrace.	19.1	1979-81, 1985-95	9-24-96	26
01475031 Chestnut Branch	Mantua Creek	Lat 39°42'32", long 75°06'58", Gloucester County, Hydrologic Unit 02040202, 0.3 mi north of Glassboro, 1.4 mi upstream from the mouth of Plank Run, and 1.5 mi south of Pitman.	.36	1995	10-04-95 11-01-95 3-28-96 5-01-96 5-29-96 6-27-96	.24 .28 .60 .42 .86 .27
01475032 Chestnut Branch	Mantua Creek	Lat 39°42'38", long 75°07'22", Gloucester County, Hydrologic Unit 02040202, 0.7 mi northwest of Glassboro, 1.0 mi upstream from the mouth of Plank Run, and 1.4 mi south of Pitman.	.47	1995	10-04-95 11-01-95 3-28-96 5-01-96 5-29-96 6-27-96	.21 .23 .49 1.0 2.5 .37
0147503330 Plank Run	Chestnut Branch	Lat 39°43'02", long 75°08'14", Gloucester County, Hydrologic Unit 02040202, 0.1 mi upstream of Chestnut Branch, 1.0 mi south of Pitman, and 1.5 mi northwest of Glassboro.	.96	1995	10-04-95 11-01-95 3-28-96 5-01-96 5-29-96 6-27-96	1.0 .79 1.4 2.8 2.1 1.4
01475034 Lost Lake Run	Plank Run	Lat 39°43'26", long 75°07'38", Gloucester County, Hydrologic Unit 02040202, 0.4 mi south of Pitman, 0.7 mi upstream from Chestnut Branch, and 1.5 mi north of Glassboro.	.33	1995	10-04-95 11-01-95 3-28-96 5-01-96 5-29-96 6-27-96	0 0 0 .01 .29 0
0147503450 Cabin Run	Chestnut Branch	Lat 39°43'39", long 75°08'39", Gloucester County, Hydrologic Unit 02040202, 0.1 mi upstream of mouth and Alcyon Lake, 1.0 mi west of Pitman, and 1.3 mi east of Richwood.	.51	1995	10-04-95 11-01-95 3-28-96 5-01-96 5-29-96 6-27-96	.24 .38 .74 1.2 1.1 .86
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, 1987-95	9-24-96	18

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1996

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
DELAWARE RIVER BASIN--Continued						
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 rail- road bridge.	14.6	1973-95	9-24-96	8.2

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.

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 1996 maximum		Period of record maximum	
			Date	Elevation (ft)	Date	Elevation (ft)
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†, 1980-96	3-20-96	8.67	12-11-92	10.4
Luppataatong 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, 1980-96	3-20-96	8.11	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.	1965-96	3-04-94, 1-08-96	4.73r 3.96	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.	1979-96	1-08-96	5.44	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.	1958-96†	1-07-96	5.34	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, 1965-96	1-08-96	5.79	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†, 1985-96	1-08-96	6.27	3-29-84	7.77
Beach Thorofare at Atlantic City, NJ (01410570)	Lat 39°21'56", long 74°26'44", Atlantic County, Hydrologic Unit 02040302, on west abutment south side of AMTRAK railroad swivel bridge in Atlantic City, 0.5 mi northeast of Bader Field airport, and 2.7 mi northeast of Ventnor City.	1944, 1950, 1960, 1962, 1978†, 1969-96	1-08-96	4.71	3-06-62	8.3
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.	1979-96†	1-08-96	5.86	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.	1965-96	1-07-96	6.59	12-11-92	7.89

ELEVATIONS AT TIDAL CREST-STAGE STATIONS

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Maximum elevation at tidal crest-stage partial-record stations--Continued

Station name and number	Location	Period of record	Water year 1996 maximum		Period of record maximum	
			Date	Elevation (ft)	Date	Elevation (ft)
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.	1965-96	1-07-96	6.37	3-29-84	7.33
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, 1979-96	1-08-96	5.84	11-25-50	8.8

† Operated as a continuous-record gaging station.

e Estimated.

r Revised.

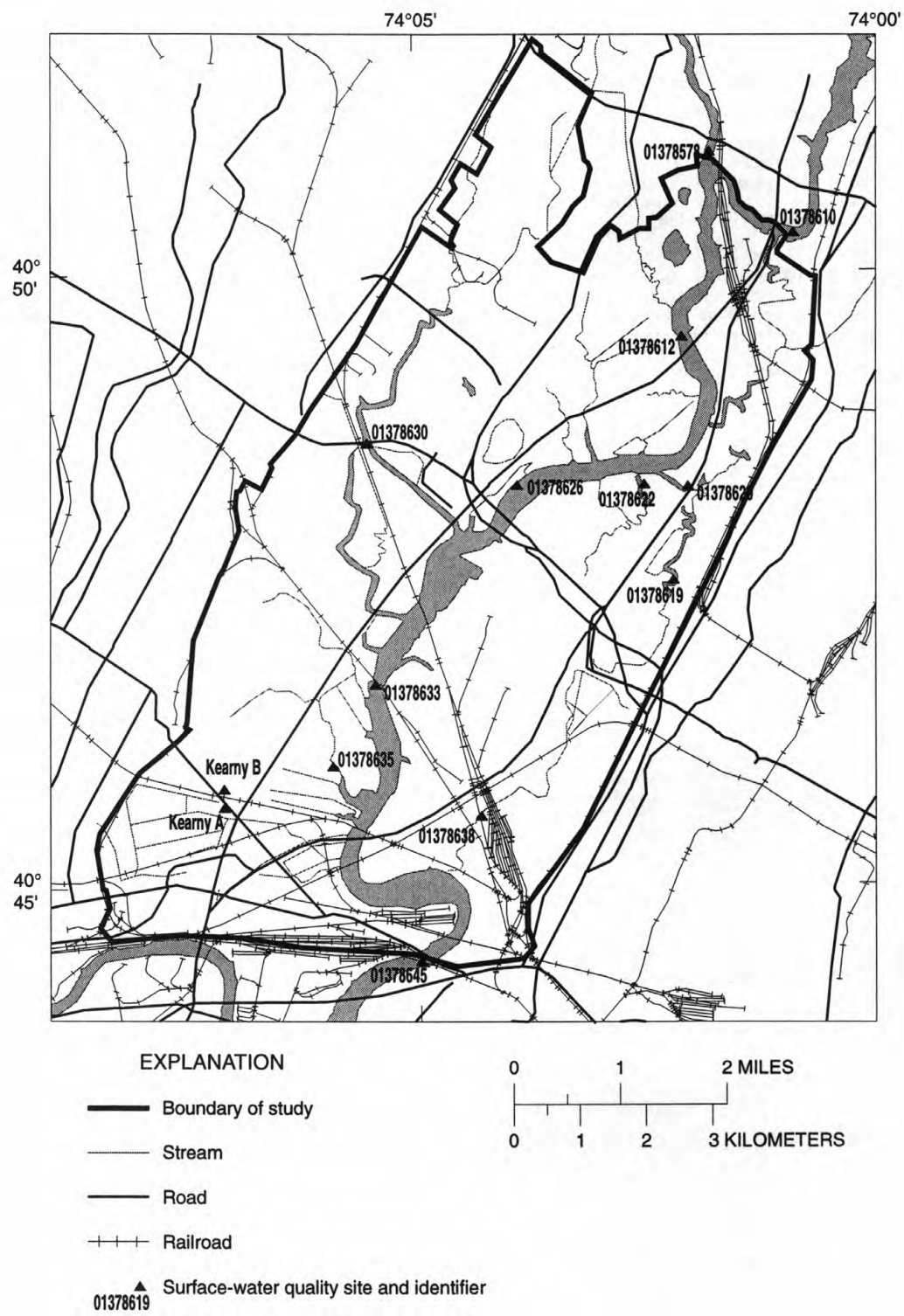


Figure 18. Hackensack Meadowlands District study area.

WATER QUALITY AT MISCELLANEOUS SITES

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Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

Water-quality partial-record stations and miscellaneous sites are locations where chemical-quality data are collected once only, intermittently, or systematically but on limited frequency for use in hydrologic analyses.

[Samples collected by Hackensack Meadowlands Development Commission personnel and analyzed at the U.S. Geological Survey National Water Quality Laboratory.]

DATE	TIME	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
01378578 HACKENSACK R 400 FT DS BERGEN TPK AT LITTLE FERRY NJ (LAT 40 50 58N LONG 074 01 49W)							
MAY 1993							
27...	1105	6.20	0.700	7.5	8.6	1.30	0.810
JUN							
02...	1030	--	--	--	--	--	--
JUL							
28...	1030	5.70	0.250	6.0	8.9	0.460	1.80
OCT							
21...	1035	4.80	0.440	5.8	7.4	1.40	0.840
MAR 1994							
08...	1130	4.10	0.060	5.8	5.8	1.10	0.290
01378610 OVERPECK CREEK AT BERGEN TPK AT RIDGEFIELD NJ (LAT 40 50 19N LONG 074 01 01W)							
MAY 1993							
26...	1150	1.40	0.270	2.3	2.8	0.780	0.170
JUN							
02...	1025	--	--	--	--	--	--
JUL							
26...	1140	0.590	0.080	1.6	3.6	0.210	0.850
OCT							
19...	1050	2.30	0.230	3.4	5.4	0.880	0.540
MAR 1994							
09...	1150	3.10	0.050	4.0	4.2	1.20	0.150
01378612 HACKENSACK R 800 FT US NJ TPK NR MOONACHIE NJ (LAT 40 49 29N LONG 074 02 08W)							
MAY 1993							
27...	1050	6.20	0.700	7.5	7.0	1.30	0.750
JUN							
01...	1435	--	--	--	--	--	--
JUL							
28...	1015	5.70	0.260	7.6	8.0	0.520	1.80
OCT							
21...	1020	4.90	0.420	5.8	7.4	1.30	0.790
MAR 1994							
08...	1115	6.50	0.100	8.6	9.3	0.960	0.450
01378619 CROMAKILL CREEK 1.0 MI US NJ TPK NR SECAUCUS NJ (LAT 40 47 30N LONG 074 02 15W)							
MAY 1993							
25...	1450	5.40	0.240	7.6	9.0	0.610	1.20
JUN							
02...	1105	--	--	--	--	--	--
JUL							
26...	1105	12.0	<0.010	18	18	<0.050	3.20
OCT							
19...	1011	6.20	0.200	7.4	8.2	0.670	0.670
MAR 1994							
09...	1115	6.00	0.060	7.6	7.9	0.520	0.240

WATER QUALITY AT MISCELLANEOUS SITES--Continued

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)
01378578 HACKENSACK R 400 FT DS BERGEN TPK AT LITTLE FERRY NJ (LAT 40 50 58N LONG 074 01 49W)							
MAY 1993							
27...	0.500	8.7	5.9	<0.010	6	--	--
JUN							
02...	--	--	--	--	--	95.0	10.0
JUL							
28...	1.20	11	1.2	<0.010	2	30.0	3.40
OCT							
21...	0.480	8.7	2.3	<0.010	10	19.0	1.70
MAR 1994							
08...	0.120	7.0	1.2	<0.010	1	1.20	0.200
01378610 OVERPECK CREEK AT BERGEN TPK AT RIDGEFIELD NJ (LAT 40 50 19N LONG 074 01 01W)							
MAY 1993							
26...	0.050	7.6	2.8	<0.010	2	--	--
JUN							
02...	--	--	--	--	--	81.0	9.20
JUL							
26...	0.540	9.5	4.7	<0.010	3	140	23.0
OCT							
19...	0.230	6.8	2.9	<0.010	1	19.0	3.40
MAR 1994							
09...	0.100	6.0	--	<0.010	2	1.50	0.200
01378612 HACKENSACK R 800 FT US NJ TPK NR MOONACHIE NJ (LAT 40 49 29N LONG 074 02 08W)							
MAY 1993							
27...	0.530	9.4	5.3	<0.010	6	--	--
JUN							
01...	--	--	--	--	--	67.0	7.70
JUL							
28...	1.60	10	1.1	<0.010	2	15.0	1.20
OCT							
21...	0.530	7.1	1.5	<0.010	8	9.60	0.900
MAR 1994							
08...	0.250	10	2.0	<0.010	2	0.900	<0.100
01378619 CROMAKILL CREEK 1.0 MI US NJ TPK NR SECAUCUS NJ (LAT 40 47 30N LONG 074 02 15W)							
MAY 1993							
25...	0.730	13	2.1	<0.010	1	--	--
JUN							
02...	--	--	--	--	--	64.0	7.40
JUL							
26...	2.40	13	>7.7	<0.010	3	73.0	2.70
OCT							
19...	0.400	9.0	1.9	<0.010	3	26.0	3.30
MAR 1994							
09...	0.010	9.6	1.3	<0.010	3	55.0	14.0

WATER QUALITY AT MISCELLANEOUS SITES--Continued

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Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	TIME	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
01378620 CROMAKILL CREEK AT NJ TPK NR SECAUCUS NJ (LAT 40 48 16N LONG 074 02 05W)							
MAY 1993							
27...	1037	4.50	0.570	5.8	7.0	1.40	0.800
JUN							
02...	1050	--	--	--	--	--	--
JUL							
28...	0950	4.70	0.130	6.6	7.6	0.300	1.80
OCT							
21...	1005	4.20	0.320	5.1	6.0	1.30	0.870
MAR 1994							
08...	1102	5.50	0.070	7.5	7.4	1.00	0.590
01378622 MILL CREEK 800 FT US HACKENSACK R NR SECAUCUS NJ (LAT 40 48 17N LONG 074 02 33W)							
MAY 1993							
27...	1005	1.20	0.320	2.3	3.1	3.50	1.30
JUN							
01...	1420	--	--	--	--	--	--
JUL							
28...	0930	2.60	0.210	3.8	4.8	2.90	1.90
OCT							
21...	0945	1.60	0.270	2.5	2.9	3.30	1.10
MAR 1994							
08...	1035	1.30	0.070	2.4	2.5	5.40	1.20
01378626 HACKENSACK RIVER AT NJ RT 3 NR LYNDHURST NJ (LAT 40 48 17N LONG 074 03 55W)							
MAY 1993							
26...	1210	1.90	0.330	2.8	2.8	1.30	0.290
JUN							
01...	1410	--	--	--	--	--	--
JUL							
27...	1100	4.20	0.260	5.1	7.2	0.650	1.70
OCT							
20...	1050	2.80	0.540	3.4	3.9	1.80	0.500
MAR 1994							
07...	1225	6.00	0.090	8.1	8.2	1.00	0.380
01378630 BERRYS CREEK AT RT 3 NR RUTHERFORD NJ (LAT 40 48 38N LONG 074 05 31W)							
MAY 1993							
26...	1150	2.70	0.370	3.8	4.1	1.30	0.440
JUN							
01...	1112	--	--	--	--	--	--
JUL							
27...	1050	0.770	0.170	1.4	3.5	0.830	1.20
OCT							
20...	1035	3.00	0.510	2.9	3.8	1.70	0.500
MAR 1994							
07...	1205	1.90	0.040	3.0	3.0	0.770	0.150

WATER QUALITY AT MISCELLANEOUS SITES--Continued

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)
01378620 CROMAKILL CREEK AT NJ TPK NR SECAUCUS NJ (LAT 40 48 16N LONG 074 02 05W)							
MAY 1993							
27...	0.500	8.4	4.2	<0.010	4	--	--
JUN							
02...	--	--	--	--	--	77.0	7.40
JUL							
28...	1.40	11	1.7	<0.010	3	25.0	1.00
OCT							
21...	0.640	7.8	1.3	<0.010	7	9.20	0.700
MAR 1994							
08...	0.460	10	1.7	<0.010	4	0.900	0.200
01378622 MILL CREEK 800 FT US HACKENSACK R NR SECAUCUS NJ (LAT 40 48 17N LONG 074 02 33W)							
MAY 1993							
27...	0.920	8.3	6.2	<0.010	1	--	--
JUN							
01...	--	--	--	--	--	68.0	6.90
JUL							
28...	1.50	12	0.90	<0.010	1	16.0	0.700
OCT							
21...	0.820	7.0	1.0	<0.010	4	6.60	0.500
MAR 1994							
08...	1.00	8.6	1.3	<0.010	2	0.600	0.200
01378626 HACKENSACK RIVER AT NJ RT 3 NR LYNDHURST NJ (LAT 40 48 17N LONG 074 03 55W)							
MAY 1993							
26...	0.250	6.2	2.3	<0.010	--	--	--
JUN							
01...	--	--	--	--	--	64.0	6.90
JUL							
27...	1.20	12	1.7	<0.010	2	29.0	3.00
OCT							
20...	0.500	6.2	1.7	<0.010	<1	13.0	0.600
MAR 1994							
07...	0.230	9.1	1.4	<0.010	8	0.900	0.200
01378630 BERRYS CREEK AT RT 3 NR RUTHERFORD NJ (LAT 40 48 38N LONG 074 05 31W)							
MAY 1993							
26...	0.310	8.7	3.0	<0.010	1	--	--
JUN							
01...	--	--	--	--	--	27.0	2.20
JUL							
27...	0.520	11	4.2	<0.010	<1	97.0	3.80
OCT							
20...	0.350	5.5	1.7	<0.010	--	21.0	1.00
MAR 1994							
07...	0.070	11	1.0	<0.010	1	0.400	<0.100

WATER QUALITY AT MISCELLANEOUS SITES--Continued

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Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	TIME	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
01378633 HACKENSACK R .1 MI US KINGSLAND CK NR LYNDHURST NJ (LAT 40 46 40N LONG 074 05 27W)							
MAY 1993							
26...	1130	1.40	0.290	2.4	2.7	1.30	0.310
JUN							
01...	1345	--	--	--	--	--	--
JUL							
27...	1020	2.40	0.310	3.0	4.3	0.780	1.10
OCT							
20...	1015	1.60	0.530	2.0	2.8	1.80	0.450
MAR 1994							
07...	1139	4.70	0.060	6.7	6.4	1.10	0.280
01378635 SAWMILL CREEK .5 MI US HACKENSACK R NR KEARNEY NJ (LAT 40 46 00N LONG 074 05 55W)							
MAY 1993							
26...	1105	1.00	0.250	0.80	1.5	1.30	0.180
JUN							
01...	1335	--	--	--	--	--	--
JUL							
27...	1005	1.20	0.280	1.5	3.4	0.740	1.10
OCT							
20...	0935	1.40	0.520	2.1	2.5	1.90	0.430
MAR 1994							
07...	1125	5.20	0.050	7.1	7.2	1.10	0.200
01378638 PENHORN CK 450 FT US 2ND RR BRIDGE NR SECAUCUS NJ (LAT 40 45 35N LONG 074 04 20W)							
MAY 1993							
25...	1300	4.50	0.020	5.9	7.1	0.130	0.350
JUN							
02...	1430	--	--	--	--	--	--
JUL							
26...	1030	0.190	0.050	1.4	8.9	0.110	1.40
OCT							
19...	0932	2.60	0.030	3.4	4.1	0.160	0.410
MAR 1994							
09...	1111	2.40	0.040	3.9	3.9	0.510	0.220
01378645 HACKENSACK RIVER 200 FT DS NEWARK TPK NR KEARNY NJ (LAT 40 44 25N LONG 074 04 58W)							
MAY 1993							
26...	1025	0.720	0.170	1.0	1.3	1.10	0.160
JUN							
01...	1315	--	--	--	--	--	--
JUL							
27...	0941	1.00	0.280	1.4	2.3	0.870	0.710
OCT							
20...	0930	1.00	0.390	1.5	1.5	1.60	0.280
MAR 1994							
07...	1035	2.80	0.050	3.8	4.6	1.10	0.180

WATER QUALITY AT MISCELLANEOUS SITES--Continued

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)
01378633 HACKENSACK R .1 MI US KINGSLAND CK NR LYNDHURST NJ (LAT 40 46 40N LONG 074 05 27W)							
MAY 1993							
26...	0.180	6.8	1.5	<0.010	<1	--	--
JUN							
01...	--	--	--	--	--	62.0	6.40
JUL							
27...	0.860	7.1	1.9	<0.010	1	34.0	3.40
OCT							
20...	0.260	4.4	1.5	<0.010	<1	10.0	0.700
MAR 1994							
07...	0.180	8.4	1.0	<0.010	4	1.20	0.200
01378635 SAWMILL CREEK .5 MI US HACKENSACK R NR KEARNEY NJ (LAT 40 46 00N LONG 074 05 55W)							
MAY 1993							
26...	0.100	5.5	1.1	<0.010	--	--	--
JUN							
01...	--	--	--	--	--	38.0	3.10
JUL							
27...	0.530	7.1	2.8	<0.010	<1	32.0	4.50
OCT							
20...	0.290	3.1	1.4	<0.010	5	10.0	0.500
MAR 1994							
07...	0.130	7.7	1.1	<0.010	1	1.90	0.300
01378638 PENHORN CK 450 FT US 2ND RR BRIDGE NR SECAUCUS NJ (LAT 40 45 35N LONG 074 04 20W)							
MAY 1993							
25...	0.030	13	2.4	<0.010	<1	--	--
JUN							
02...	--	--	--	--	--	19.0	5.20
JUL							
26...	0.100	14	>7.7	<0.010	<1	510	63.0
OCT							
19...	0.060	11	1.6	<0.010	2	1.40	0.200
MAR 1994							
09...	0.030	8.5	2.3	<0.010	1	11.0	2.50
01378645 HACKENSACK RIVER 200 FT DS NEWARK TPK NR KEARNY NJ (LAT 40 44 25N LONG 074 04 58W)							
MAY 1993							
26...	0.100	4.3	1.1	<0.010	<1	--	--
JUN							
01...	--	--	--	--	--	23.0	2.30
JUL							
27...	0.430	5.6	0.90	<0.010	--	10.0	0.700
OCT							
20...	0.250	2.8	1.3	<0.010	3	4.70	<0.100
MAR 1994							
07...	0.110	5.6	0.80	<0.010	3	1.40	0.200

WATER QUALITY AT MISCELLANEOUS SITES--Continued

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Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	
DATE	TIME							
404540074070500 KEARNY MARSH SW RT 7/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 40N LONG 074 07 05W)								
MAY 1993								
25...	1000	0.070	<0.010	1.1	1.6	0.099	0.120	
JUN								
02...	1500	--	--	--	--	--	--	
JUL								
26...	0935	0.060	0.010	2.0	5.5	<0.050	0.550	
OCT								
19...	0912	0.100	<0.010	1.0	3.0	0.061	0.260	
MAR 1994								
09...	0958	0.890	0.020	1.6	6.4	0.190	0.590	
404549074070500 KEARNY MARSH NW RT 3/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 49N LONG 074 07 05W)								
MAY 1993								
25...	0953	22.0	0.050	28	36	0.450	0.240	
JUN								
02...	1505	--	--	--	--	--	--	
JUL								
26...	0920	28.0	0.110	35	39	0.410	1.90	
OCT								
19...	0850	120	0.050	140	150	0.340	2.40	
MAR 1994								
09...	1025	49.0	0.040	51	61	0.800	0.360	
DATE		PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)
404540074070500 KEARNY MARSH SW RT 7/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 40N LONG 074 07 05W)								
MAY 1993								
25...	<0.010	--	1.2	<0.010	<1	--	--	
JUN								
02...	--	--	--	--	--	30.0	6.10	
JUL								
26...	0.070	25	3.7	<0.010	2	210	7.90	
OCT								
19...	0.030	18	>7.7	<0.010	<1	31.0	6.50	
MAR 1994								
09...	0.020	7.6	>7.7	<0.010	2	170	8.40	
404549074070500 KEARNY MARSH NW RT 3/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 49N LONG 074 07 05W)								
MAY 1993								
25...	0.040	27	1.5	<0.010	4	--	--	
JUN								
02...	--	--	--	--	--	21.0	3.80	
JUL								
26...	0.610	34	4.0	<0.010	<1	270	4.30	
OCT								
19...	0.430	19	>7.7	--	21	--	--	
MAR 1994								
09...	0.210	45	2.3	<0.010	4	6.80	1.70	

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	TIME	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	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)	ACRO- LEIN TOTAL (UG/L) (34210)
01378578	HACKENSACK R 400 FT DS BERGEN TPK AT LITTLE FERRY NJ (LAT 40 50 58N LONG 074 01 49W)										
MAR 1994 08...	1130	<0.200	0.300	<0.200	<0.200	<0.200	<0.200	1.10	<0.200	<0.200	<20.0
01378610	OVERPECK CREEK AT BERGEN TPK AT RIDGEFIELD NJ (LAT 40 50 19N LONG 074 01 01W)										
MAR 1994 09...	1150	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.500	<0.200	<0.200	<20.0
01378612	HACKENSACK R 800 FT US NJ TPK NR MOONACHIE NJ (LAT 40 49 29N LONG 074 02 08W)										
MAR 1994 08...	1115	<0.200	0.700	<0.200	<0.200	<0.200	0.200	2.30	1.40	0.200	<20.0
01378619	CROMAKILL CREEK 1.0 MI US NJ TPK NR SECAUCUS NJ (LAT 40 47 30N LONG 074 02 15W)										
MAR 1994 09...	1115	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.400	<0.200	0.800	<20.0
01378620	CROMAKILL CREEK AT NJ TPK NR SECAUCUS NJ (LAT 40 48 16N LONG 074 02 05W)										
MAR 1994 08...	1102	<0.200	0.600	<0.200	<0.200	<0.200	<0.200	2.00	0.600	<0.200	<20.0
01378622	MILL CREEK 800 FT US HACKENSACK R NR SECAUCUS NJ (LAT 40 48 17N LONG 074 02 33W)										
MAR 1994 08...	1035	<0.200	1.00	<0.200	<0.200	<0.200	0.500	2.00	0.200	<0.200	<20.0
01378626	HACKENSACK RIVER AT NJ RT 3 NR LYNDHURST NJ (LAT 40 48 17N LONG 074 03 55W)										
MAR 1994 07...	1225	<0.200	0.600	<0.200	<0.200	<0.200	0.200	2.00	1.20	0.300	<20.0
01378630	BERRYS CREEK AT RT 3 NR RUTHERFORD NJ (LAT 40 48 38N LONG 074 05 31W)										
MAR 1994 07...	1205	<0.200	0.300	<0.200	<0.200	<0.200	<0.200	0.800	0.300	<0.200	<20.0
01378633	HACKENSACK R .1 MI US KINGSLAND CK NR LYNDHURST NJ (LAT 40 46 40N LONG 074 05 27W)										
MAR 1994 07...	1139	<0.200	0.300	<0.200	<0.200	<0.200	<0.200	1.10	1.10	0.300	<20.0
01378635	SAWMILL CREEK .5 MI US HACKENSACK R NR KEARNEY NJ (LAT 40 46 00N LONG 074 05 55W)										
MAR 1994 07...	1125	<0.200	<0.200	<0.200	0.300	<0.200	<0.200	0.600	1.90	<0.200	<20.0
01378638	PENHORN CK 450 FT US 2ND RR BRIDGE NR SECAUCUS NJ (LAT 40 45 35N LONG 074 04 20W)										
MAR 1994 09...	1111	<0.200	0.500	<0.200	<0.200	<0.200	<0.200	2.30	0.600	2.20	<20.0
01378645	HACKENSACK RIVER 200 FT DS NEWARK TPK NR KEARNY NJ (LAT 40 44 25N LONG 074 04 58W)										
MAR 1994 07...	1035	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.500	0.200	<0.200	<20.0

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	ACRYLO- NITRILE TOTAL (UG/L) (34215)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)	ETHYL- BENZENE TOTAL (UG/L) (34371)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	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)
01378578	HACKENSACK R 400 FT DS BERGEN TPK AT LITTLE FERRY NJ (LAT 40 50 58N LONG 074 01 49W)										
MAR 1994 08...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	1.70	1.50	<0.200	<0.200	<0.200
01378610	OVERPECK CREEK AT BERGEN TPK AT RIDGEFIELD NJ (LAT 40 50 19N LONG 074 01 01W)										
MAR 1994 09...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	1.40	1.60	<0.200	0.300	<0.200
01378612	HACKENSACK R 800 FT US NJ TPK NR MOONACHIE NJ (LAT 40 49 29N LONG 074 02 08W)										
MAR 1994 08...	<20.0	<0.200	<0.200	0.200	<0.200	<0.200	2.50	2.40	<0.200	<0.200	<0.200
01378619	CROMAKILL CREEK 1.0 MI US NJ TPK NR SECAUCUS NJ (LAT 40 47 30N LONG 074 02 15W)										
MAR 1994 09...	<20.0	0.400	<0.200	<0.200	<0.200	<0.200	1.30	0.800	<0.200	<0.200	<0.200
01378620	CROMAKILL CREEK AT NJ TPK NR SECAUCUS NJ (LAT 40 48 16N LONG 074 02 05W)										
MAR 1994 08...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	1.60	5.40	<0.200	<0.200	<0.200
01378622	MILL CREEK 800 FT US HACKENSACK R NR SECAUCUS NJ (LAT 40 48 17N LONG 074 02 33W)										
MAR 1994 08...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	0.300	0.400	<0.200	<0.200	<0.200
01378626	HACKENSACK RIVER AT NJ RT 3 NR LYNDHURST NJ (LAT 40 48 17N LONG 074 03 55W)										
MAR 1994 07...	<20.0	<0.200	<0.200	0.200	<0.200	<0.200	2.50	2.10	<0.200	<0.200	<0.200
01378630	BERRYS CREEK AT RT 3 NR RUTHERFORD NJ (LAT 40 48 38N LONG 074 05 31W)										
MAR 1994 07...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	0.900	1.40	<0.200	0.500	<0.200
01378633	HACKENSACK R .1 MI US KINGSLAND CK NR LYNDHURST NJ (LAT 40 46 40N LONG 074 05 27W)										
MAR 1994 07...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	1.70	1.20	<0.200	<0.200	<0.200
01378635	SAWMILL CREEK .5 MI US HACKENSACK R NR KEARNEY NJ (LAT 40 46 00N LONG 074 05 55W)										
MAR 1994 07...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	0.800	0.700	<0.200	<0.200	<0.200
01378638	PENHORN CK 450 FT US 2ND RR BRIDGE NR SECAUCUS NJ (LAT 40 45 35N LONG 074 04 20W)										
MAR 1994 09...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.600	<0.200	<0.200	<0.200
01378645	HACKENSACK RIVER 200 FT DS NEWARK TPK NR KEARNY NJ (LAT 40 44 25N LONG 074 04 58W)										
MAR 1994 07...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	0.700	0.600	<0.200	<0.200	<0.200

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA- CHLORO- WATER WAT UNF REC (UG/L) (34516)	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 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L) (34576)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)
01378578	HACKENSACK R 400 FT DS BERGEN TPK AT LITTLE FERRY NJ (LAT 40 50 58N LONG 074 01 49W)										
MAR 1994 08...	0.600	<0.200	<0.200	<0.200	<0.200	<0.200	0.200	<0.200	<0.200	<1.00	<0.200
01378610	OVERPECK CREEK AT BERGEN TPK AT RIDGEFIELD NJ (LAT 40 50 19N LONG 074 01 01W)										
MAR 1994 09...	0.700	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<1.00	<0.200
01378612	HACKENSACK R 800 FT US NJ TPK NR MOONACHIE NJ (LAT 40 49 29N LONG 074 02 08W)										
MAR 1994 08...	0.700	<0.200	<0.200	0.200	<0.200	<0.200	0.300	<0.200	0.300	<1.00	<0.200
01378619	CROMAKILL CREEK 1.0 MI US NJ TPK NR SECAUCUS NJ (LAT 40 47 30N LONG 074 02 15W)										
MAR 1994 09...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.600	<1.00	<0.200
01378620	CROMAKILL CREEK AT NJ TPK NR SECAUCUS NJ (LAT 40 48 16N LONG 074 02 05W)										
MAR 1994 08...	0.300	<0.200	<0.200	<0.200	<0.200	<0.200	0.200	<0.200	0.400	<1.00	<0.200
01378622	MILL CREEK 800 FT US HACKENSACK R NR SECAUCUS NJ (LAT 40 48 17N LONG 074 02 33W)										
MAR 1994 08...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<1.00	<0.200
01378626	HACKENSACK RIVER AT NJ RT 3 NR LYNDHURST NJ (LAT 40 48 17N LONG 074 03 55W)										
MAR 1994 07...	0.600	<0.200	<0.200	0.300	<0.200	<0.200	0.500	<0.200	0.300	<1.00	<0.200
01378630	BERRYS CREEK AT RT 3 NR RUTHERFORD NJ (LAT 40 48 38N LONG 074 05 31W)										
MAR 1994 07...	0.600	<0.200	<0.200	1.30	<0.200	<0.200	<0.200	<0.200	<0.200	<1.00	<0.200
01378633	HACKENSACK R .1 MI US KINGSLAND CK NR LYNDHURST NJ (LAT 40 46 40N LONG 074 05 27W)										
MAR 1994 07...	0.400	<0.200	<0.200	0.400	<0.200	<0.200	0.600	<0.200	0.300	<1.00	<0.200
01378635	SAWMILL CREEK .5 MI US HACKENSACK R NR KEARNEY NJ (LAT 40 46 00N LONG 074 05 55W)										
MAR 1994 07...	0.200	<0.200	<0.200	0.500	<0.200	<0.200	0.600	<0.200	0.400	<1.00	<0.200
01378638	PENHORN CK 450 FT US 2ND RR BRIDGE NR SECAUCUS NJ (LAT 40 45 35N LONG 074 04 20W)										
MAR 1994 09...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<1.00	<0.200
01378645	HACKENSACK RIVER 200 FT DS NEWARK TPK NR KEARNY NJ (LAT 40 44 25N LONG 074 04 58W)										
MAR 1994 07...	0.200	<0.200	<0.200	0.700	<0.200	<0.200	0.900	0.300	0.500	<1.00	<0.200

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	NAPHTH- ALENE TOTAL (UG/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	STYRENE TOTAL (UG/L) (77128)	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	2,2-DI- CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)
01378578	HACKENSACK R 400 FT DS BERGEN TPK AT LITTLE FERRY NJ (LAT 40 50 58N LONG 074 01 49W)										
MAR 1994 08...	0.400	<0.200	<0.200	<0.200	0.400	<0.200	0.700	<0.200	<0.200	<0.200	<0.200
01378610	OVERPECK CREEK AT BERGEN TPK AT RIDGEFIELD NJ (LAT 40 50 19N LONG 074 01 01W)										
MAR 1994 09...	<0.200	<0.200	<0.200	<0.200	0.400	<0.200	1.90	<0.200	<0.200	<0.200	<0.200
01378612	HACKENSACK R 800 FT US NJ TPK NR MOONACHIE NJ (LAT 40 49 29N LONG 074 02 08W)										
MAR 1994 08...	0.400	<0.200	<0.200	<0.200	0.500	<0.200	1.00	<0.200	<0.200	<0.200	<0.200
01378619	CROMAKILL CREEK 1.0 MI US NJ TPK NR SECAUCUS NJ (LAT 40 47 30N LONG 074 02 15W)										
MAR 1994 09...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
01378620	CROMAKILL CREEK AT NJ TPK NR SECAUCUS NJ (LAT 40 48 16N LONG 074 02 05W)										
MAR 1994 08...	0.400	<0.200	<0.200	<0.200	0.500	<0.200	0.600	<0.200	<0.200	<0.200	<0.200
01378622	MILL CREEK 800 FT US HACKENSACK R NR SECAUCUS NJ (LAT 40 48 17N LONG 074 02 33W)										
MAR 1994 08...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
01378626	HACKENSACK RIVER AT NJ RT 3 NR LYNDHURST NJ (LAT 40 48 17N LONG 074 03 55W)										
MAR 1994 07...	0.400	<0.200	<0.200	<0.200	0.500	<0.200	0.800	<0.200	<0.200	<0.200	<0.200
01378630	BERRYS CREEK AT RT 3 NR RUTHERFORD NJ (LAT 40 48 38N LONG 074 05 31W)										
MAR 1994 07...	<0.200	<0.200	<0.200	0.500	1.60	<0.200	4.30	<0.200	<0.200	<0.200	<0.200
01378633	HACKENSACK R .1 MI US KINGSLAND CK NR LYNDHURST NJ (LAT 40 46 40N LONG 074 05 27W)										
MAR 1994 07...	0.300	<0.200	<0.200	<0.200	0.400	<0.200	0.500	<0.200	<0.200	<0.200	<0.200
01378635	SAWMILL CREEK .5 MI US HACKENSACK R NR KEARNEY NJ (LAT 40 46 00N LONG 074 05 55W)										
MAR 1994 07...	0.200	<0.200	<0.200	<0.200	0.300	<0.200	0.300	<0.200	<0.200	<0.200	<0.200
01378638	PENHORN CK 450 FT US 2ND RR BRIDGE NR SECAUCUS NJ (LAT 40 45 35N LONG 074 04 20W)										
MAR 1994 09...	0.500	<0.200	<0.200	<0.200	1.60	<0.200	0.300	<0.200	<0.200	<0.200	<0.200
01378645	HACKENSACK RIVER 200 FT DS NEWARK TPK NR KEARNY NJ (LAT 40 44 25N LONG 074 04 58W)										
MAR 1994 07...	<0.200	<0.200	<0.200	<0.200	0.300	<0.200	0.300	<0.200	<0.200	<0.200	<0.200

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	BENZENE 124-TRI METHYL UNFLT RECOVER (UG/L) (77222)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)
01378578	HACKENSACK R 400 FT DS BERGEN TPK AT LITTLE FERRY NJ (LAT 40 50 58N LONG 074 01 49W)									
MAR 1994 08...	0.600	<0.200	<0.200	0.200	2.30	0.300	<0.200	<0.200	<0.200	<0.200
01378610	OVERPECK CREEK AT BERGEN TPK AT RIDGEFIELD NJ (LAT 40 50 19N LONG 074 01 01W)									
MAR 1994 09...	0.500	<0.200	<0.200	0.200	0.800	<0.200	<0.200	<0.200	<0.200	<0.200
01378612	HACKENSACK R 800 FT US NJ TPK NR MOONACHIE NJ (LAT 40 49 29N LONG 074 02 08W)									
MAR 1994 08...	7.70	<0.200	<0.200	4.20	5.10	0.600	<0.200	<0.200	<0.200	<0.200
01378619	CROMAKILL CREEK 1.0 MI US NJ TPK NR SECAUCUS NJ (LAT 40 47 30N LONG 074 02 15W)									
MAR 1994 09...	0.200	<0.200	<0.200	<0.200	11.0	1.10	<0.200	<0.200	<0.200	<0.200
01378620	CROMAKILL CREEK AT NJ TPK NR SECAUCUS NJ (LAT 40 48 16N LONG 074 02 05W)									
MAR 1994 08...	2.10	<0.200	0.200	0.700	39.0	4.00	<0.200	<0.200	<0.200	<0.200
01378622	MILL CREEK 800 FT US HACKENSACK R NR SECAUCUS NJ (LAT 40 48 17N LONG 074 02 33W)									
MAR 1994 08...	0.200	<0.200	<0.200	<0.200	1.20	<0.200	<0.200	<0.200	<0.200	<0.200
01378626	HACKENSACK RIVER AT NJ RT 3 NR LYNDHURST NJ (LAT 40 48 17N LONG 074 03 55W)									
MAR 1994 07...	0.500	<0.200	<0.200	0.200	5.70	0.600	<0.200	<0.200	<0.200	<0.200
01378630	BERRYS CREEK AT RT 3 NR RUTHERFORD NJ (LAT 40 48 38N LONG 074 05 31W)									
MAR 1994 07...	0.300	<0.200	<0.200	<0.200	0.600	<0.200	<0.200	<0.200	<0.200	<0.200
01378633	HACKENSACK R .1 MI US KINGSLAND CK NR LYNDHURST NJ (LAT 40 46 40N LONG 074 05 27W)									
MAR 1994 07...	0.400	<0.200	<0.200	<0.200	3.50	0.300	<0.200	<0.200	<0.200	<0.200
01378635	SAWMILL CREEK .5 MI US HACKENSACK R NR KEARNEY NJ (LAT 40 46 00N LONG 074 05 55W)									
MAR 1994 07...	<0.200	<0.200	<0.200	<0.200	1.10	<0.200	<0.200	<0.200	<0.200	<0.200
01378638	PENHORN CK 450 FT US 2ND RR BRIDGE NR SECAUCUS NJ (LAT 40 45 35N LONG 074 04 20W)									
MAR 1994 09...	0.800	<0.200	<0.200	0.300	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
01378645	HACKENSACK RIVER 200 FT DS NEWARK TPK NR KEARNY NJ (LAT 40 44 25N LONG 074 04 58W)									
MAR 1994 07...	<0.200	<0.200	<0.200	<0.200	1.10	<0.200	<0.200	<0.200	<0.200	<0.200

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	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)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)
01378578	HACKENSACK R 400 FT DS BERGEN TPK AT LITTLE FERRY NJ (LAT 40 50 58N LONG 074 01 49W)									
MAR 1994 08...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	7.90	0.800	<0.200	<1.00
01378610	OVERPECK CREEK AT BERGEN TPK AT RIDGEFIELD NJ (LAT 40 50 19N LONG 074 01 01W)									
MAR 1994 09...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	9.60	0.600	<0.200	<1.00
01378612	HACKENSACK R 800 FT US NJ TPK NR MOONACHIE NJ (LAT 40 49 29N LONG 074 02 08W)									
MAR 1994 08...	0.300	<0.200	<0.200	<0.200	<0.200	<0.500	11.0	2.50	<0.200	<1.00
01378619	CROMAKILL CREEK 1.0 MI US NJ TPK NR SECAUCUS NJ (LAT 40 47 30N LONG 074 02 15W)									
MAR 1994 09...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	4.00	0.400	<0.200	<1.00
01378620	CROMAKILL CREEK AT NJ TPK NR SECAUCUS NJ (LAT 40 48 16N LONG 074 02 05W)									
MAR 1994 08...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	13.0	1.10	<0.200	<1.00
01378622	MILL CREEK 800 FT US HACKENSACK R NR SECAUCUS NJ (LAT 40 48 17N LONG 074 02 33W)									
MAR 1994 08...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	30.0	0.200	<0.200	<1.00
01378626	HACKENSACK RIVER AT NJ RT 3 NR LYNDHURST NJ (LAT 40 48 17N LONG 074 03 55W)									
MAR 1994 07...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	9.30	1.10	<0.200	<1.00
01378630	BERRYS CREEK AT RT 3 NR RUTHERFORD NJ (LAT 40 48 38N LONG 074 05 31W)									
MAR 1994 07...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	5.30	1.20	<0.200	<1.00
01378633	HACKENSACK R .1 MI US KINGS LAND CK NR LYNDHURST NJ (LAT 40 46 40N LONG 074 05 27W)									
MAR 1994 07...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	7.60	0.900	<0.200	<1.00
01378635	SAWMILL CREEK .5 MI US HACKENSACK R NR KEARNEY NJ (LAT 40 46 00N LONG 074 05 55W)									
MAR 1994 07...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	3.40	0.500	<0.200	<1.00
01378638	PENHORN CK 450 FT US 2ND RR BRIDGE NR SECAUCUS NJ (LAT 40 45 35N LONG 074 04 20W)									
MAR 1994 09...	0.200	<0.200	<0.200	<0.200	<0.200	<0.500	8.80	0.800	<0.200	<1.00
01378645	HACKENSACK RIVER 200 FT DS NEWARK TPK NR KEARNY NJ (LAT 40 44 25N LONG 074 04 58W)									
MAR 1994 07...	<0.200	<0.200	<0.200	0.300	<0.200	<0.500	3.70	<0.200	<0.200	<1.00

WATER QUALITY AT MISCELLANEOUS SITES--Continued

Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	TIME	DI-BROMO-METHANE WHOLE RECOVER (UG/L) (30217)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLORIDE 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)	ACRO-LEIN TOTAL (UG/L) (34210)	
404540074070500 KEARNY MARSH SW RT 7/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 40N LONG 074 07 05W)												
MAR 1994 09...	0958	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<20.0	
404549074070500 KEARNY MARSH NW RT 3/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 49N LONG 074 07 05W)												
MAR 1994 09...	1025	<0.200	1.20	<0.200	<0.200	<0.200	<0.200	5.60	1.00	1.70	<20.0	
DATE		ACRYLO-NITRILE TOTAL (UG/L) (34215)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLORIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLORIDE 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)
404540074070500 KEARNY MARSH SW RT 7/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 40N LONG 074 07 05W)												
MAR 1994 09...	<20.0	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.300	<0.200	<0.200	<0.200	
404549074070500 KEARNY MARSH NW RT 3/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 49N LONG 074 07 05W)												
MAR 1994 09...	<20.0	2.70	0.600	0.300	<0.200	<0.200	0.200	5.90	2.40	1.70	1.40	
DATE		1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2-TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	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 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L) (34576)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)
404540074070500 KEARNY MARSH SW RT 7/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 40N LONG 074 07 05W)												
MAR 1994 09...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<1.00	<0.200
404549074070500 KEARNY MARSH NW RT 3/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 49N LONG 074 07 05W)												
MAR 1994 09...	2.00	<0.200	<0.200	0.300	<0.200	<0.200	<0.200	<0.200	0.600	<1.00	<0.200	

WATER QUALITY AT MISCELLANEOUS SITES--Continued

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Hackensack Meadowlands Development Commission/USGS Cooperative Sampling, Water Years 1993-94

DATE	NAPHTH- ALENE TOTAL (UG/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	STYRENE TOTAL (UG/L) (77128)	1,1-DI CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)
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404540074070500 KEARNY MARSH SW RT 7/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 40N LONG 074 07 05W)

MAR 1994

09... <0.200 <0.200 <0.200 <0.200 0.700 <0.200 0.300 <0.200 <0.200 <0.200 <0.200

404549074070500 KEARNY MARSH NW RT 3/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 49N LONG 074 07 05W)

MAR 1994

09... 0.400 <0.200 <0.200 0.800 18.0 <0.200 15.0 <0.200 <0.200 <0.200 <0.200

DATE	BENZENE 124-TRI METHYL UNFLTR RECOVER (UG/L) (77222)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)
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404540074070500 KEARNY MARSH SW RT 7/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 40N LONG 074 07 05W)

MAR 1994

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404549074070500 KEARNY MARSH NW RT 3/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 49N LONG 074 07 05W)

MAR 1994

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DATE	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	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)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)
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404540074070500 KEARNY MARSH SW RT 7/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 40N LONG 074 07 05W)

MAR 1994

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404549074070500 KEARNY MARSH NW RT 3/NJ TPK X-ROAD NR KEARNY NJ (LAT 40 45 49N LONG 074 07 05W)

MAR 1994

09... <0.200 <0.200 <0.200 <0.200 <0.200 <0.500 2.60 2.80 <0.200 <1.00

1. The first part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation

$$f(x) = \int_0^x \frac{1}{1+t^2} dt.$$

It is shown that the function $f(x)$ is increasing and concave down.

2. The second part of the paper is devoted to the study of the function $g(x)$ defined by the equation

$$g(x) = \int_0^x \frac{1}{1+t^4} dt.$$

It is shown that the function $g(x)$ is increasing and concave down.

3. The third part of the paper is devoted to the study of the function $h(x)$ defined by the equation

$$h(x) = \int_0^x \frac{1}{1+t^6} dt.$$

It is shown that the function $h(x)$ is increasing and concave down.

4. The fourth part of the paper is devoted to the study of the function $k(x)$ defined by the equation

$$k(x) = \int_0^x \frac{1}{1+t^8} dt.$$

It is shown that the function $k(x)$ is increasing and concave down.

5. The fifth part of the paper is devoted to the study of the function $l(x)$ defined by the equation

$$l(x) = \int_0^x \frac{1}{1+t^{10}} dt.$$

It is shown that the function $l(x)$ is increasing and concave down.

6. The sixth part of the paper is devoted to the study of the function $m(x)$ defined by the equation

$$m(x) = \int_0^x \frac{1}{1+t^{12}} dt.$$

It is shown that the function $m(x)$ is increasing and concave down.

7. The seventh part of the paper is devoted to the study of the function $n(x)$ defined by the equation

$$n(x) = \int_0^x \frac{1}{1+t^{14}} dt.$$

It is shown that the function $n(x)$ is increasing and concave down.

8. The eighth part of the paper is devoted to the study of the function $o(x)$ defined by the equation

$$o(x) = \int_0^x \frac{1}{1+t^{16}} dt.$$

It is shown that the function $o(x)$ is increasing and concave down.

9. The ninth part of the paper is devoted to the study of the function $p(x)$ defined by the equation

$$p(x) = \int_0^x \frac{1}{1+t^{18}} dt.$$

It is shown that the function $p(x)$ is increasing and concave down.

10. The tenth part of the paper is devoted to the study of the function $q(x)$ defined by the equation

$$q(x) = \int_0^x \frac{1}{1+t^{20}} dt.$$

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
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
<i>Area</i>		
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
<i>Volume</i>		
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
<i>Flow</i>		
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
<i>Mass</i>		
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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