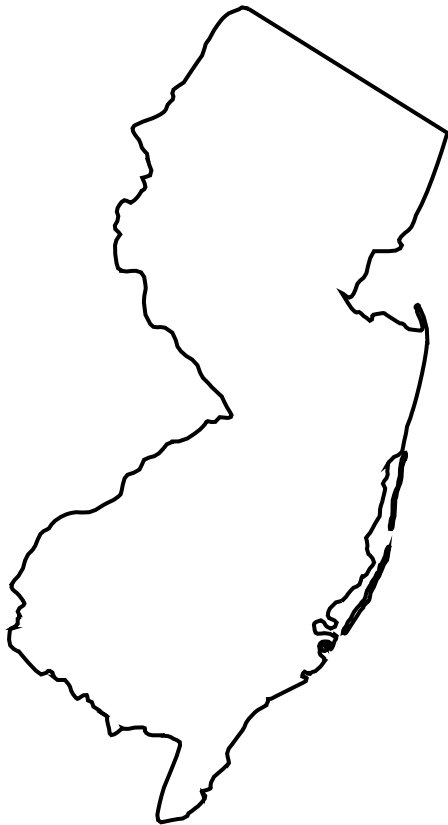




Water Resources Data New Jersey Water Year 2002

Volume 3. Water-Quality Data

Water-Data Report NJ-02-3



U.S. Department of the Interior
U.S. Geological Survey



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

CALENDAR FOR WATER YEAR 2002

2001

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

2002

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2						1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28			24	25	26	27	28	29	30
																				31

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6				1	2	3	4							1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
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
																				30

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
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 2002". 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 again being published in three volumes:

Volume 1.--Surface-water streamflow data.

Volume 2.--Ground-water level data.

Volume 3 --Water-quality data.

This volume contains a summary of the hydrologic conditions for the 2002 water year (October 1, 2001 - September 30, 2002), a listing of current water-resources projects in the New Jersey District, a bibliography of recent reports, articles and fact sheets, and records of ground-water levels in 184 wells.

During 2002, the U.S. Geological Survey, in cooperation with the New Jersey Department of Environmental Protection (NJDEP), expanded its Drought Monitoring Network. In order to make ground-water level data available in the shortest time possible, satellite telemetry was added to 8 more wells. This brings the total number of real-time ground-water level sites to 15.

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 68 stream-gaging stations, 15 ground-water wells and 3 continuous water-quality sites around the State are presented. Also, peak-flow files and historical data for many gaging stations, ground-water wells, water-quality sites, monthly hydrologic conditions, and links to other sites of interest can be accessed. This information is available at:

<http://nj.usgs.gov/>

Copies of this report in paper or microfiche are for sale through the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Data also can be provided by file transfer (ftp), or on floppy disk. When ordering, refer to U.S. Geological Survey Water-Data Report NJ-02-1 (for Volume 1), NJ-02-2 (for Volume 2), or NJ-02-3 (for Volume 3). For further information on this report, or to change or remove your address from our mailing list, please contact Walter D. Jones at the above address, telephone (609) 771-3900, or send e-mail to wjones@usgs.gov.

Sincerely,

William R. Bauersfeld, Chief
Hydrologic Data Assessment Program

UNITED STATES DEPARTMENT OF THE INTERIOR

GALE A. NORTON, *Secretary*

GEOLOGICAL SURVEY

Charles G. Groat, *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 08628-1099

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 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 3 volumes:

Volume 1. Surface-Water Data
Volume 2. Ground-Water Data
Volume 3. Water-Quality Data

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

Jacob Gibs

Robert D. Schopp

Word processing of the report was done by H.L. Hoppe and H.A. Heckathorn. W.H. Ellis, G.L. Simpson, and D.K. Sun drafted the illustrations.

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

M.D. Bilger	J.F. Dudek	G.K. Holzer	A.R. Protz	J.C. Shvanda	B.T. White
R.A. Brightbill	S.M. Edwards	W.D. Jones	E.A. Pustay	A.B. Spehar	
J.D. Byrnes	J.M. Fischer	E.L. Melvin	T.J. Reed	P.E. Stackelberg	
G.A. Brown	K.L. Hibbs	K.R. Murray	R.G. Reiser	G.C. Steckroat	
G.L. Centinaro	R.E. Hickman	T.D. Oden	K.M. Romanok	A.F. Watson	

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

A. Altieri	R. Fenton	C. Kunz	J. Specht
P. Burt	J. Janda	R. Maruska	

This report was prepared in cooperation with the State of New Jersey and with other agencies under the general supervision of William R. Bauersfeld, Chief of the Hydrologic Data Assessment Program; under the general supervision of David A. Stedfast, Associate District Chief; Rick Kropp, District Chief, New Jersey; and Catherine L. Hill, Regional Hydrologist, Northeastern Region.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE April 2003	3. REPORT TYPE AND DATES COVERED Annual--Oct.1, 2001 to Sept. 30, 2002	
4. TITLE AND SUBTITLE Water Resources Data-New Jersey, Water Year 2002, Volume 3 Water-Quality Data			5. FUNDING NUMBERS	
6. AUTHOR(S) M.J. DeLuca, H.L. Hoppe, H.A. Heckathorn, B.J. Gray, M.L. Riskin				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Mountain View Office Park 810 Bear Tavern Road, Suite 206 West Trenton, NJ 08628			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WRD-NJ-02-3	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Mountain View Office Park 810 Bear Tavern Road, Suite 206 West Trenton, NJ 08628			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WRD-NJ-02-3	
11. SUPPLEMENTARY NOTES Prepared in cooperation with the New Jersey Department of Environmental Protection and with other agencies.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report can be purchased from the National Technical Information Services, Springfield, Virginia 22161.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Water-resources data for the 2002 water year for New Jersey are presented in three volumes, and consists of records of stage, discharge, and quality of streams; stage and contents of lakes and reservoirs; and levels and quality of ground water. Volume 3 contains a summary of surface- and ground-water hydrologic conditions for the 2002 water year, a listing of current water-resources projects in New Jersey, a bibliography of water-related reports, articles, and fact sheets for New Jersey completed by the Geological Survey in recent years, water-quality records of chemical analyses from 118 continuing-record surface-water stations, 15 miscellaneous ground-water sites, and records of daily statistics of temperature and other physical measurements from 6 continuous-recording stations. Locations of water-quality stations are shown in figures 12-14. Locations of miscellaneous water-quality sites are shown in figures 40-41. 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.				
14. SUBJECT TERMS New Jersey, hydrologic conditions, hydrologic data, surface-water analysis, ground-water analysis, streambed-material analysis, suspended-sediment concentration, continuing-record station, continuous-recording station, miscellaneous sampling site.			15. NUMBER OF PAGES 476	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT	

CONTENTS

	Page
Preface	iii
List of surface-water stations, in downstream order, for which records are published	vii
List of discontinued continuous water-quality stations	xi
Introduction	1
Cooperation	1
Summary of hydrologic conditions	2
Surface-water quality	2
Yearly trends of precipitation, stream discharge, and physical water-quality characteristics monitored at several index stations	2
Ambient Stream Monitoring Network	2
Distribution of selected constituents in filtered and unfiltered surface water from stations in the ASMN ..	3
Distribution, detection frequency, and concentration of selected whole-water-recoverable trace elements, volatile organic compounds, and filtered pesticides in samples from 46 stations in the ASMN	3
Ambient Stream Monitoring Network Reconnaissance Study	14
Ground-water quality	14
Special networks and programs	17
Explanation of records	19
Station identification numbers	19
Downstream order system	19
Latitude-longitude system	19
Water quality records	19
Classification of records	20
Arrangement of records	20
On-site measurements and sample collection	20
Water temperature	20
Sediment	21
Laboratory measurements	21
Data presentation	24
Dissolved trace-element concentrations	26
Current water resources projects in New Jersey	27
Water-related reports for New Jersey completed by the Geological Survey in recent years	28
Water-related articles for New Jersey completed by the Geological Survey in recent years	30
Water-related factsheets for New Jersey completed by the Geological Survey in recent years	30
Access to USGS water data	31
Definition of terms	31
Selected references	44
Techniques of Water-Resources Investigations of the U.S. Geological Survey	45
Station records, surface-water quality	56
Water-quality at miscellaneous ground-water sites	435
Ambient Ground-Water-Quality network	435
Long Island-New Jersey National Water-Quality Assessment Program Ground-Water-Quality network	445
Index	455

ILLUSTRATIONS

Figure 1. Monthly mean precipitation for water year 2002 and mean-monthly precipitation for 1895-2001	4
2. Monthly mean discharge at index gaging stations	5
3. Monthly mean specific conductance at Delaware River at Trenton, New Jersey	6
4. Monthly mean water temperature at Delaware River at Trenton, New Jersey	6
5. Monthly medians of daily maximum and minimum dissolved-oxygen concentrations at Delaware River at Trenton, New Jersey	7
6. Distribution of physical characteristics of, and constituent concentrations in, samples from 112 stations in the Ambient Stream Monitoring Network	8
7. Concentration and detection frequency of whole-water-recoverable trace elements detected in samples from 46 stations in the Ambient Stream Monitoring Network	10
8. Concentration and detection frequency of volatile organic compounds detected in samples from 46 stations in the Ambient Stream Monitoring Network	12
9. Concentration and detection frequency of pesticides detected in filtered samples from 46 stations in the Ambient Stream Monitoring Network	13
10. Location of sites in the Ambient Ground-Water-Quality Network	15
11. System for numbering wells and miscellaneous sites (latitude and longitude)	19
12. Locations and types of surface-water-quality stations	50

ILLUSTRATIONS--Continued

13. Location of stations in the Long Island-New Jersey National Water-Quality Assessment Program, surface-water low-intensity-phase network	52
14. Location of stations in the Delaware River National Water-Quality Assessment Program, surface-water fixed station network	53
15. Counties in New Jersey.....	54
16. Cataloging units and codes in New Jersey.....	55
17. Physical characteristics and concentrations of constituents measured at 01388000 Ramapo River at Pompton Lakes	117
18. Cross sectional water-quality measurements with recorded monitor values, at Ramapo River at Pompton Lakes, April 18, 2002	119
19. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, May 6 - 17, 2002	123
20. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, May 28 - June 3, 2002.....	124
21. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, June 10 - 14, 2002	125
22. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, June 24 - July 1, 2002	126
23. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, July 16 - 23, 2002.....	127
24. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges	150
25. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River, at Two Bridges, June 24, 2002	158
26. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River, at Two Bridges, August 8, 2002.....	159
27. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, May 6 - 17, 2002	162
28. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, May 28 - June 3, 2002	163
29. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, June 10 - 14, 2002	164
30. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, June 24 - July 1, 2002.....	165
31. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, July 16 - 23, 2002.....	166
32. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, May 6 - 17, 2002	173
33. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, May 28 - June 3, 2002	174
34. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, June 10 - 14, 2002	175
35. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, June 24 - July 1, 2002	176
36. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, July 16 - 23, 2002	177
37. Physical characteristics and concentrations of constituents measured at 01463500 Delaware River at Trenton.....	375
38. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, May 22, 2002	377
39. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, September 18, 2002.....	378
40. Location of sites in the Ambient Ground-Water-Quality Network	435
41. Location of sites in the Long Island-New Jersey National Water-Quality Assessment Program, ground-water low-intensity-phase synoptic study.....	445

TABLES

Table 1. Concentration of volatile organic compounds detected only once in samples from 46 stations in the Ambient Stream Monitoring Network.....	12
2. Detection frequency of selected pesticides in filtered samples from 46 stations in the Ambient Stream Monitoring Network	13
3. Concentration of pesticides detected only once in filtered samples from 46 stations in the Ambient Stream Monitoring Network	13
4. Hydrogeologic unit and land use at three wells sampled as part of U.S. Geological Survey-N.J. Department of Environmental Protection (cooperative) Ambient Ground-Water-Quality Network.....	16

**WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH
RECORDS ARE PUBLISHED IN THIS VOLUME**

Note.--Data for miscellaneous sites for surface- and ground-water quality are published in separate sections of the data report.

[Letter after station name designates type of data: (c) general chemical, (m) microbiological, (s) suspended sediment, (t) continuous physical measurements, (w) whole-water-recoverable metals, (v) volatile organic compounds, (p) pesticide, (h) bed material, (WMA #) NJDEP watershed management area.]

	Station number	Page
(WMA 2 - WALLKILL RIVER & TRIBUTARIES)		
<u>HUDSON RIVER BASIN</u>		
Rondout Creek:		
Wallkill River at Sparta (cms)	01367625	56
Wallkill River at Scott Road, at Franklin (cmsvp).....	01367715	58
Wallkill River near Sussex (cms).....	01367770	61
Papakating Creek near Wykertown (cmsvp).....	01367780	63
Papakating Creek at Pelletstown (cmsw).....	01367800	66
Wallkill River near Unionville, NY (cmsw).....	01368000	68
Pochuck Creek:		
Wawayanda Creek:		
Double Kill at Wawayanda (cmsvp).....	01368820	70
(WMA 5 - HUDSON RIVER, HACKENSACK RIVER, SADDLE RIVER)		
<u>HACKENSACK RIVER BASIN</u>		
Hackensack River at Rivervale (cmswh)	01377000	73
Tenakill Brook at Old Closter Dock Road, at Closter (cmsvp).....	01378387	76
Coles Brook at Hackensack (cmsvp).....	01378560	79
(WMA 6 - UPPER PASSAIC RIVER, NEW RIVER, WHIPPANY RIVER, ROCKAWAY RIVER)		
<u>PASSAIC RIVER BASIN</u>		
Passaic River at Tempe Wick Road, near Mendham (cmsvp)	01378660	82
Great Brook:		
Primrose Brook at Morristown National Historical Park (cmsvp).....	01378780	85
Passaic River:		
Dead River near Millington (cmsw).....	01379200	88
Rockaway River:		
Beaver Brook at Morris Avenue, at Denville (cmsvp).....	01380098	90
Beaver Brook at Rockaway (cms).....	01380100	93
Whippany River near Pine Brook (cmswh).....	01381800	95
Passaic River at Two Bridges (cmsw)	01382000	98
(WMA 3 - UPPER TO MID-PASSAIC RIVER)		
Pequannock River (head of Pompton River):		
Macopin River at Echo Lake (cmsvp).....	01382410	100
Pequannock River at Macopin Intake Dam (cmsw).....	01382500	103
Wanaque River at Wanaque Avenue, at Pompton Lakes (cmsvp).....	01387014	105
Ramapo River near Mahwah (cmswh)	01387500	108
Ramapo River at Pompton Lakes (t)	01388000	111
Pompton River at Pompton Plains (cmswh)	01388500	120
Beaver Dam Brook at Ryerson Road, at Lincoln Park (cmswh).....	01388720	128
Passaic River below Pompton River, at Two Bridges (t)	01389005	131
(WMA 4 - MID-PASSAIC (SOUTH OF THE POMPTON), LOWER PASSAIC RIVER)		
Passaic River at Little Falls (cmsw)	01389500	160
Goffle Brook at Hawthorne (cmsvp).....	01389850	167
Saddle River at Lodi (cmswh).....	01391500	170
Saddle River at Garfield (cmsvp).....	01391550	178
(WMA 7 - NEWARK BAY, ARTHUR KILL, KILL van KULL, RAHWAY RIVER, ELIZABETH RIVER, MORSES CREEK, UPPER NEW YORK HARBOR)		
<u>RAHWAY RIVER BASIN</u>		
West Branch Rahway River at Northfield Avenue, at West Orange (cmsvp)	01393960	181
Rahway River near Springfield (cmsw).....	01394500	184
Rahway River at Rahway (cmswh).....	01395000	186
South Branch Rahway River at Colonia (cmsvp).....	01396030	189
(WMA 8 - NORTH AND SOUTH BRANCHES OF THE RARITAN RIVER, LAMINGTON RIVER)		
<u>RARITAN RIVER BASIN</u>		
South Branch Raritan River:		
Spruce Run at Newport (cmswvp).....	01396550	192
Mulhockaway Creek at Van Syckel (cmswh).....	01396660	196

**WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH
RECORDS ARE PUBLISHED IN THIS VOLUME--Continued**

Capoolong Creek at Lansdowne (cmsvp).....	01396900	199
Third Neshanic River at Copper Hill (cmsvp).....	01397950	202
Neshanic River at Reaville (cmsw).....	01398000	205
South Branch Raritan River at South Branch (cmsw).....	01398102	207
North Branch Raritan River:		
Lamington River at Burnt Mills (cmsw).....	01399780	209
North Branch Raritan River near Raritan (cmswh).....	01400000	211
(WMA 10 - MILLSTONE RIVER, STONY BROOK)		
Raritan River:		
Millstone River at Baird Road, near Perrineville (cmsvp).....	01400530	214
Millstone River near Grovers Mill (cmsw).....	01400640	217
Heathcote Brook at Kingston (cms).....	01401400	219
Beden Brook:		
Rock Brook at Zion (cmsvp).....	01401560	221
Millstone River at Blackwells Mills (cmsw).....	01402000	224
West Branch Middle Brook at Chimney Rock Road, at Martinsville (cmsvp).....	01403171	226
(WMA 9 - RARITAN RIVER MAINSTEM, MATCHAPONIX BROOK, SOUTH RIVER)		
Raritan River at Queens Bridge, at Bound Brook (csvp).....	01403300	229
Bound Brook at Route 28, at Middlesex (cms).....	01403385	233
Bound Brook at Middlesex (csvp).....	01403900	235
South River:		
Matchaponix Brook:		
Manalapan Brook at Federal Road, near Manalapan (cmswvp).....	01405340	239
(WMA -12 - RARITAN BAY & TRIBUTARIES)		
<u>WHALE POND BROOK BASIN</u>		
Whale Pond Brook at Larchwood Avenue, at Oakhurst (cmsvp).....	01407617	242
<u>SHARK RIVER BASIN</u>		
Jumping Brook near Neptune City (cmswh).....	01407760	245
<u>HANNABRAND BROOK BASIN</u>		
Hannabrand Brook at Old Mill Road, near Spring Lake Heights (cmsvp).....	01407806	248
<u>MANASQUAN RIVER BASIN</u>		
Manasquan River at Squankum (cmswh).....	01408000	251
Mingamahone Brook near Earle (cms).....	01408009	254
(WMA 13 - ATLANTIC OCEAN & TRIBUTARIES - MANASQUAN RIVER, METEDECONK RIVER, TOMS RIVER, BARNEGAT BAY, FORKED RIVER)		
<u>METEDECONK RIVER BASIN</u>		
North Branch Metedeconk River at Lakewood (cmsw).....	01408100	256
<u>TOMS RIVER BASIN</u>		
Toms River at Whitesville (cmsvp).....	01408300	258
Toms River near Toms River (cmswh).....	01408500	261
Jakes Branch at Dover Road, near Double Trouble (cmsvp).....	01408702	264
<u>CEDAR CREEK BASIN</u>		
Cedar Creek at Cedar Crest (cms).....	01408830	267
(WMA 14 - ATLANTIC OCEAN & TRIBUTARIES - TUCKERTON CREEK, LITTLE EGG HARBOR)		
<u>MULLICA RIVER BASIN</u>		
Mullica River at outlet of Atsion Lake, at Atsion (cms).....	01409387	269
Mullica River at Constable Bridge, near Batsto (csvp).....	0140940050	271
Blue Anchor Brook At Elm (cms).....	0140940950	274
Hammonton Creek at Wescoatville (csw).....	01409416	276
Skit Branch near Hampton Gate (cmsvp).....	01409435	278
Batsto River at Batsto (cmswh).....	01409500	281
Wading River:		
West Branch Wading River at Maxwell (cms).....	01409815	284
Bass River:		
East Branch Bass River near New Gretna (cmswh).....	01410150	286
(WMA 15 - ATLANTIC OCEAN & TRIBUTARIES - GREAT EGG HARBOR RIVER)		
<u>GREAT EGG HARBOR RIVER BASIN</u>		
Great Egg Harbor River:		
Hospitality Branch at Blue Bell Road, near Cecil (cms).....	01411035	289
Great Egg Harbor River at Weymouth (csw).....	01411110	291
Babcock Creek near Mays Landing (cs).....	01411196	293
<u>TUCKAHOE RIVER BASIN</u>		
Tuckahoe River near Estell Manor (csvp).....	01411290	295

**WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH
RECORDS ARE PUBLISHED IN THIS VOLUME--Continued**

Tuckahoe River at Head of River (cmsvp).....	01411300	298
(WMA 16 - DELAWARE BAY (PART OF ZONE 6) & TRIBUTARIES)		
<u>FISHING CREEK BASIN</u>		
Fishing Creek at Rio Grande (cs)	01411400	301
<u>DENNIS CREEK BASIN</u>		
Dennis Creek:		
Dennis Creek Tributary 2 at Dennisville (csvp).....	01411427	303
<u>WEST CREEK BASIN</u>		
West Creek near Leesburg (cmsvp)	01411444	306
(WMA 17 - DELAWARE BAY (PART OF ZONE 6) & TRIBUTARIES)		
<u>MAURICE RIVER BASIN</u>		
Maurice River:		
Still Run at Little Mill Road, near Clayton (cmsvp).....	01411452	309
Scotland Run:		
Indian Branch near Malaga (cms)	01411466	312
Maurice River at Norma (cmswh)	01411500	314
Buckshutem Creek:		
Gravelly Run at Laurel Lake (cmsvp)	01411955	317
<u>COHANSEY RIVER BASIN</u>		
Cohansey River at Seely (cmsw).....	01412800	320
Barrett Run at Bridgeton (cmsvp)	01413013	322
(WMA 1 - UPPER DELAWARE (ZONE 1C, ZONE 1D, AND THE UPPER PART OF ZONE 1E) & TRIBUTARIES)		
<u>DELAWARE RIVER BASIN</u>		
Delaware River at Montague (cms)	01438500	325
Flat Brook near Flatbrookville(cms)	01440000	327
Dunnfield Creek at Dunnfield (cmswvph)	01442760	329
Delaware River at Portland, PA (cms)	01443000	333
Paulins Kill at Warbasse Junction Road, near Lafayette (cmsvp)	01443250	335
Paulins Kill at Blairstown (cmswh).....	01443500	338
Pequest River:		
Bear Brook at Dark Moon Road, near Johnsonburg (cmswh).....	01445160	341
Honey Run near Hope (cmsvp).....	01445900	344
Pequest River at Belvidere (cmsw).....	01446400	347
Musconetcong River at Riegelsville (cms).....	01457400	349
(WMA 11 - UPPER DELAWARE & TRIBUTARIES - LOCKATONG, ALEXAUKEN CREEK, ASSUNPINK CREEK)		
Delaware River at Riegelsville (cms)	01457500	351
Nishisakawick Creek near Frenchtown (cms).....	01458570	353
Delaware River at Lumberville, PA (cms)	01461000	355
Wickecheoke Creek near Sergeantsville (cmswvp).....	01461282	357
Delaware River at Trenton (cmswvpt).....	01463500	360
Assunpink Creek:		
Miry Run at Route 533, at Mercerville (cmsw).....	01463850	379
Assunpink Creek at Peace Street, at Trenton (cmsvp).....	01464020	381
(WMA 20 - LOWER DELAWARE (UPPER PART OF ZONE 2) & TRIBUTARIES)		
Crosswicks Creek:		
North Run at Cookstown (cmsvp).....	01464380	384
Crosswicks Creek at Groveville Road, at Groveville (cmsvp).....	01464504	387
Doctors Creek at Allentown (cmsw)	01464515	390
Blacks Creek at Chesterfield (cmswh).....	01464527	392
<i>Little Neshaminy Creek at Valley Road, near Neshaminy, PA (csp) [site not within WMA 20].....</i>	<i>01464907</i>	<i>395</i>
(WMA 19 - LOWER DELAWARE (LOWER PART OF ZONE 2 AND UPPER PART OF ZONE 3) & TRIBUTARIES)		
Rancocas Creek:		
South Branch Rancocas Creek:		
Southwest Branch Rancocas Creek:		
Little Creek at Chairville (cms)	01465893	398
North Branch Rancocas Creek:		
North Branch Mt. Misery Brook:		
Mount Misery Brook at Upton (cmsvp)	01466100	400
Greenwood Branch:		
McDonalds Branch in Lebanon State Forest (cmsvp)	01466500	403
Greenwood Branch at New Lisbon (cms)	01466900	406
North Branch Rancocas Creek at Iron Works Park, at Mount Holly (cmswh)	01467005	408
Cooper River at Haddonfield (cmsw).....	01467150	411

**WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH
RECORDS ARE PUBLISHED IN THIS VOLUME--Continued**

North Branch Cooper River at Kresson (cmswvp).....	01467155	413
(WMA 18 - LOWER DELAWARE (LOWER PART OF ZONE 3, ZONE 4, ZONE 5, AND PART OF ZONE 6) & TRIBUTARIES)		
Big Timber Creek:		
North Branch Big Timber Creek at Glendora (cmsw).....	01467359	416
Schuylkill River:		
<i>French Creek near Phoenixville, PA (csp) [site not within WMA 18]</i>	01472157	418
<i>Schuylkill River at Philadelphia, PA (csp) [site not within WMA 18]</i>	01474500	421
Mantua Creek:		
Edwards Run at Jefferson (cmsvp)	01475090	424
Raccoon Creek near Swedesboro (cmswh)	01477120	427
Salem River at Woodstown (cms)	01482500	430
Major Run at Sharptown (cmsvp).....	01482530	432

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 at Millington, NJ	01379000		Temp.	1997-98
Passaic River near Chatham, NJ	01379500	100	Sed.	1964-68
			Temp.	1967-68
Rockaway River at Longwood Valley, NJ	01379680		Temp.	1997-98
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
Saddle River at Ridgewood, NJ	01390500		Temp.	1997-98
Rahway River at Washington Park, at Springfield, NJ	01394200		Temp.	1997-98
South Branch Raritan River near High Bridge, NJ	01396500	65.3	Temp.	1961-79
			S.C.	1969-79
Mulhockaway Creek at Van Syckel, NJ	01396660		Temp.	1997-98
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
Neshanic River at Reaville, NJ	01398000		Temp.	1997-98
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, 1997-98
			Sed.	1960-70
Beden Brook near Rocky Hill, NJ	01401600		Temp.	1997-98
Millstone River near Manville, NJ	01402900	287	Temp., S.C., pH, D.O.	1968-74
Raritan River at Queens Bridge	01403300		Temp.	1997-98
Bound Brook at Middlesex, NJ	01403900		Temp., S.C.	1996-98
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 at Sicklerville, NJ	01410784		Temp., S.C.	1996-98
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

* 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)
Delaware River at Port Jervis, NY	01434000		Temp.	1957-60, 1973-94 1999-2001
Delaware River near Delaware Water Gap, PA	01440200	3850	Sed.	1964-65, 1972
Delaware River at Dunnfield, NJ	01442750	4150	Temp. Sed.	1967-76 1966-76
Jordan Creek near Schnecksville, PA	01451800		Temp.	1999, 2001
Delaware and Raritan Canal Feeder at Raven Rock, NJ	01460300		Temp., S.C., Turb.	1998-99
Delaware and Raritan Canal Feeder at Lower Ferry Road at Trenton, NJ	01460400		Temp., S.C., Turb.	1998-99
Delaware and Raritan Canal Feeder at Port Mercer, NJ	01460440		Temp., S.C., Turb.	1998-99
Delaware and Raritan Canal Feeder at Griggstown, NJ	01460530		Temp., S.C., Turb.	1998-99
Delaware and Raritan Canal Feeder at Ten Mile Lock near Manville, NJ	01460565		Temp., S.C., Turb.	1998-99
Delaware and Raritan Canal Feeder at New Brunswick, NJ	01460600		Temp., S.C., Turb.	1998-99
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. Sed.	1967-70 1965-70
Little Neshaminy Creek at Valley Road, near Neshaminy, PA	01464907		Temp.	1999, 2001
McDonalds Branch in Lebanon State Forest, NJ	01466500	2.35	Temp. S.C. pH, D.O.	1960-92 1968-92 1984-92
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 1999-2001 1968-69
French Creek near Phoenixville, PA	01472157		Temp.	1999-2001
Schuylkill River at Philadelphia, PA	01474500		S.C. Temp.	1999 1999-2001
Raccoon Creek near Swedesboro, NJ	01477120	26.9	Temp. Sed.	1966-73 1999-2001 1966-69

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

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with Federal, State, and local agencies, collects a large amount of data pertaining to the water resources of New Jersey each water year. These data, accumulated over many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series, titled "Water Resources Data-New Jersey."

This report series includes records of stage, discharge, and water quality in streams; stage, contents, and water quality in lakes and reservoirs; and water levels and water quality in ground-water wells. This volume contains water-quality records, containing various chemical analyses from 118 continuing-record surface-water stations. Locations of these stations are shown in figures 12-14. Additional water-quality data were collected at various sites that are not part of the systematic data collection program. Miscellaneous data were collected at 15 ground-water sites. Locations of these sites are shown in figures 40 and 41. The data in this report represent that part of the National Water Information System (NWIS) data collected by the USGS and cooperating Federal, State, and local agencies in New Jersey.

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

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

Denver, CO 80225-0286, (303) 202-4610.

Publications similar to this report are produced annually by the USGS for all States. These reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NJ-02-3." For archiving and general distribution purposes, the reports for water years 1971 through 1974 also are identified as water-data reports. Water-data reports are available for purchase in paper copy or in microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

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

COOPERATION

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

New Jersey Department of Environmental Protection,
Bradley M. Campbell, Commissioner

North Jersey District Water Supply Commission,
Michael Barnes, General Manager

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

Delaware River Basin Commission, Carol R. Collier,
Executive Director

The New Jersey Department of Environmental
Protection aided in collecting records.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water Quality

Yearly Trend of Precipitation, Stream Discharge, and Physical Water-Quality Characteristics Monitored at Several Index Stations

New Jersey has been experiencing ongoing drought conditions for more than four years. The 2002 water year (October 2001 to September 2002) with a total of 33.99 inches of precipitation was the third driest water year since 1896. Precipitation was below average for 7 months during the 2002 water year (fig. 1) (Statewide Monthly Precipitation 1895-2002, Climate Data, N.J. State Climatologist, Rutgers University; accessed at <http://climate.rutgers.edu/stateclim/data/index.html>). During four of the seven months, deficits of precipitation greater than 2.3 inches occurred, and during two months, deficits greater than 1.2 inches occurred. March, April, May, June, and September had above average precipitation; June had the greatest surplus, 1.2 inches. September 2001 to February 2002 was the driest consecutive 6 months of any 6-month interval on record (Statewide Monthly Precipitation 1895-2002, Climate Data). Overall, precipitation was 10.73 inches (76 percent) below normal during the 2002 water year. Streamflow was below normal throughout much of the year. Monthly mean discharge values for November, February, and March set new minimum monthly mean values for the period of record at index stations High Bridge and Folsom (fig.2). Trenton was the only index station that recorded above normal streamflow at any time during the water year; it occurred during the months of May and June.

The substantial yearlong precipitation and streamflow deficits, and their resultant effects on solute concentrations, are evident in the plot of monthly mean values of specific conductance (SC) at the continuous water-quality monitoring station on the Delaware River at Trenton (fig. 3). Ten of the 12 monthly mean values of SC for the 2002 water year were above long-term (1968-2001) mean-monthly values. During May and June, the months of above normal statewide precipitation and streamflow at Trenton, monthly mean SC values were below the long-term mean-monthly values. During November and January, two of the months with the lowest mean discharge values for the water year, SC values exceeded the highest monthly mean values for the period of record.

Water year 2002 was the warmest water year on record with an average ambient temperature of 55.9°F (13.3°C), 3.8°F (2.1°C) above normal for the State. The long-term (1895-2001) mean-monthly ambient temperature values were exceeded every month, except May (Statewide Monthly Precipitation 1895-2002, Climate Data). Monthly mean water temperature values measured at the Delaware River at Trenton followed a similar trend. Long-term mean-monthly values were exceeded every month, except May and June (fig. 4). Additionally, the December monthly mean value exceeded the maximum for the period of record by 0.6°C. The monthly means for February, April, and

August also were high but did not exceed their respective monthly maximums.

Dissolved oxygen (DO) concentrations generally exhibit an inverse relation to water temperature. As water temperature decreases, oxygen concentration increases; as water temperature increases, oxygen concentration decreases. DO, therefore, varies seasonally; yearly maximums occur in winter, and yearly minimums occur in summer. As expected, the highest monthly median of daily maximum DO concentrations, 15.1 milligrams per liter (mg/L), occurred in January when the monthly mean water temperature was at its lowest, 2.6°C (fig. 5). The lowest monthly median of daily minimum DO concentrations, 8.8 mg/L, and the highest monthly mean water temperature, 27.0°C, occurred in July. No monthly medians of DO minimums and maximums during water year 2002 exceeded long-term extremes for the period of record.

Ambient Stream Monitoring Network

The United States Geological Survey (USGS) in cooperation with the New Jersey Department of Environmental Protection (NJDEP), operates the cooperative Ambient Stream Monitoring Network (ASMN), which is designed to determine statewide water-quality status and trends, measure water-quality near the downstream end of each NJDEP Watershed Management Area (WMA), define background water quality in each of the four physiographic provinces of New Jersey, and measure nonpoint source contributions from major land-use areas and atmospheric deposition. The ASMN consists of 112 stations located throughout the 20 WMAs. Five stations are located on the Delaware River main stem—the border between New Jersey and Pennsylvania—and are excluded from the following statistical plots of the ASMN data. The remaining 107 stations are segregated into 5 distinct types that together are used to define the surface-water quality in the State. Six background stations are located on reaches of streams that remain relatively unaffected by human activity in order to develop a baseline water-quality database. Twenty-three Watershed-Integrator (WI) stations are located at the farthest downstream point, not affected by tide, in one of the large drainage basins in each WMA except two, WMA 9 and 16. The WI stations provide information on the sum of point and nonpoint source contributions to surface water quality within each WMA. Land Use Indicator (LUI) stations are used to monitor the effects of the dominant land use in each WMA and provide data on nonpoint source loading of contaminants to streams. Of the 43 LUI stations, 15 are designated undeveloped, 9 agriculture, 13 urban, and 6 mixed. Forty statewide-status (SS) stations, two in each WMA, are chosen randomly to obtain a statistical basis that can be used to estimate values of water-quality indicators statewide. In water year 2002, five of the SS stations were co-located at existing WI or LUI stations; the data from the co-located stations are included in the statistical plots for the WI and LUI station categories. Water-column samples were collected at each station to assess water-quality constituents that can be used as environmental indicators statewide. In addition to the regularly scheduled samples, a Watershed Reconnaissance study is devised

annually according to specific project needs. The purpose of the Watershed Reconnaissance study in water year 2002 was to assess week-long diurnal physical measurements and constituent concentrations at three network stations located in the Passaic River basin. This is discussed further in Ambient Stream Monitoring Network Reconnaissance Study.

Distribution of Selected Constituents in Filtered and Unfiltered Surface Water from Stations in the ASMN

Physical characteristics and concentrations of total and filtered nutrients, filtered common ions, filtered organic carbon, and biochemical oxygen demand were determined in samples from 112 stations in the ASMN. Samples were collected at each station four times a year during the periods November to December, February to March, May to June, and August to September; however, two stations were not sampled during the August to September period as a result of drought conditions and construction. The analyzing laboratory used two different methods and reporting conventions for establishing the minimum concentration above which a quantitative measurement could be made. These reporting conventions were minimum reporting level (MRL) and laboratory reporting level (LRL). LRL was computed as twice the long-term method detection level (LT-MDL). Values reported by the analyzing laboratory as less than the MRL or LRL were included in each distribution but were reported as a value equal to one-half the MRL or the LT-MDL, respectively. Estimated values, which were determined to be greater than the LT-MDL but less than the LRL, were included. The estimated values are marked with an "E" in the water-quality tables. Refer to "Definition of Terms" in the "Introduction" for further explanation of these reporting conventions.

The record average ambient temperature for water year 2002 did not significantly affect median water temperatures when compared to those of previous water years. The median water temperatures for all the station types were within 3.25°C of each other (fig. 6). The remaining plots in figure 6 illustrate the relation between land use and water quality. Streams that drain urban areas seem to be negatively affected by wastewater discharges. In contrast, streams that drain background and undeveloped areas seemingly are not affected. The amount of dissolved and suspended organic matter in streams affect the concentrations of dissolved oxygen (DO), biochemical oxygen demand (BOD), and turbidity. Available DO is consumed during the biodegradation of organic matter; BOD is a measurement of this consumption. The lowest median DO concentration, 64.5 percent of saturation, the highest median BOD, 1.45 mg/L, and the highest median turbidity, 6.5 NTU, occurred at urban LUI stations. The highest median DO concentration, 95.5 percent of saturation, the lowest median BOD, 0.75 mg/L, and the lowest median turbidity, 1.1 NTU, occurred at background, undeveloped LUI, and background stations, respectively. Streams that are affected by wastewater discharges also are likely to have high levels of total dissolved solids (TDS); samples from urban LUI, WI, and agriculture LUI stations had the highest median

concentrations of TDS, 278 mg/L, 196 mg/L, and 157 mg/L, respectively. The minimum median TDS concentrations occurred at background stations with 30 mg/L, followed by undeveloped LUI stations with 51 mg/L. Stream concentrations of TDS also are affected by streamflow. Concentrations of TDS greater than 500 mg/L occurred only at statewide status stations during November 2001 and February 2002, the severest part of the drought. The high levels of TDS at those particular stations were likely the result of solute concentration from extremely low streamflow.

Nutrients in streams are generally from anthropogenic sources. Nutrients are likely the result of runoff that contains chemical fertilizer and animal waste, and of discharge of municipal sewage. Nutrient enrichment subsequently causes an increase in phytoplankton, free floating algae, in streams. The presence of chlorophyll a, contained in phytoplankton, is therefore an indicator of nutrient enrichment. As expected, median concentrations of ammonia, nitrite plus nitrate, phosphorus, and chlorophyll a are higher in samples from mixed LUI, urban LUI, agriculture LUI, and integrator station types (fig. 6). In contrast, median concentrations are lower in samples from background and undeveloped LUI station types. Dissolved organic carbon (DOC) is a heterogeneous mixture of many organic materials, mostly high molecular weight organic acids that result from the oxidation of organic matter. Organic matter can originate from anthropogenic or natural sources. Eutrophic urban streams have been found to have high levels of organic carbon caused by nutrient enrichment. The highest single value and median concentration of organic carbon occurred in samples from urban LUI stations. The highest single value was determined in a sample from a small urban stream that was stagnant until runoff from rainfall occurred the night prior to sampling. The water, both filtered and unfiltered, was reported as black in color. The lowest median concentration of DOC occurred in samples from background stations. Undeveloped LUI stations might be expected to have a low median concentration, but in fact, it is fairly high. Some undeveloped LUI stations were located on streams drain low relief cedar wetlands in the Coastal Plain physiographic province where the water has sufficient residence time to extract organic carbon compounds from decaying plant material.

Distribution, Detection Frequency, and Concentration of Selected Whole-Water Recoverable Trace Elements, Volatile Organic Compounds, and Filtered Pesticides in Samples from 46 Stations in the ASMN

Samples for analysis of trace elements, volatile organic compounds (VOCs), and pesticides were collected during the period when the constituents were most likely to have been detected, during August and September, February and March, and May and June, respectively. For ease of discussion, only those constituents detected in one or more samples are shown in the figures or tables on pages 10 through 13. A detected constituent is one whose value is reported to be greater than or equal to the laboratory MRL or LRL.

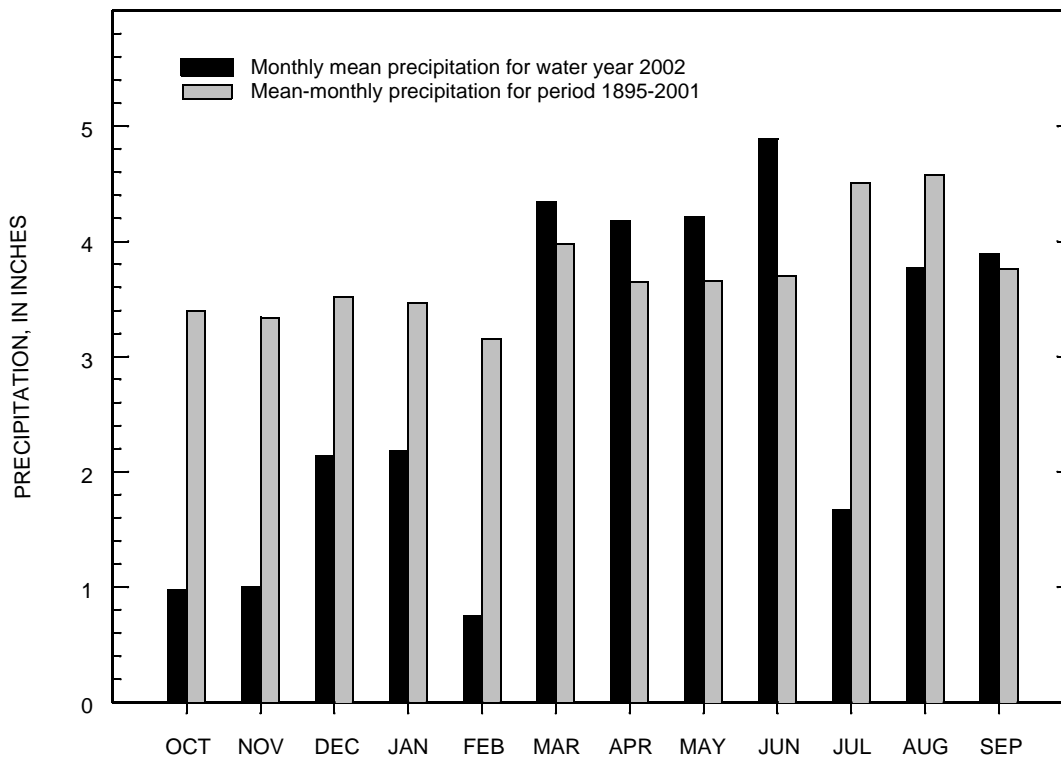
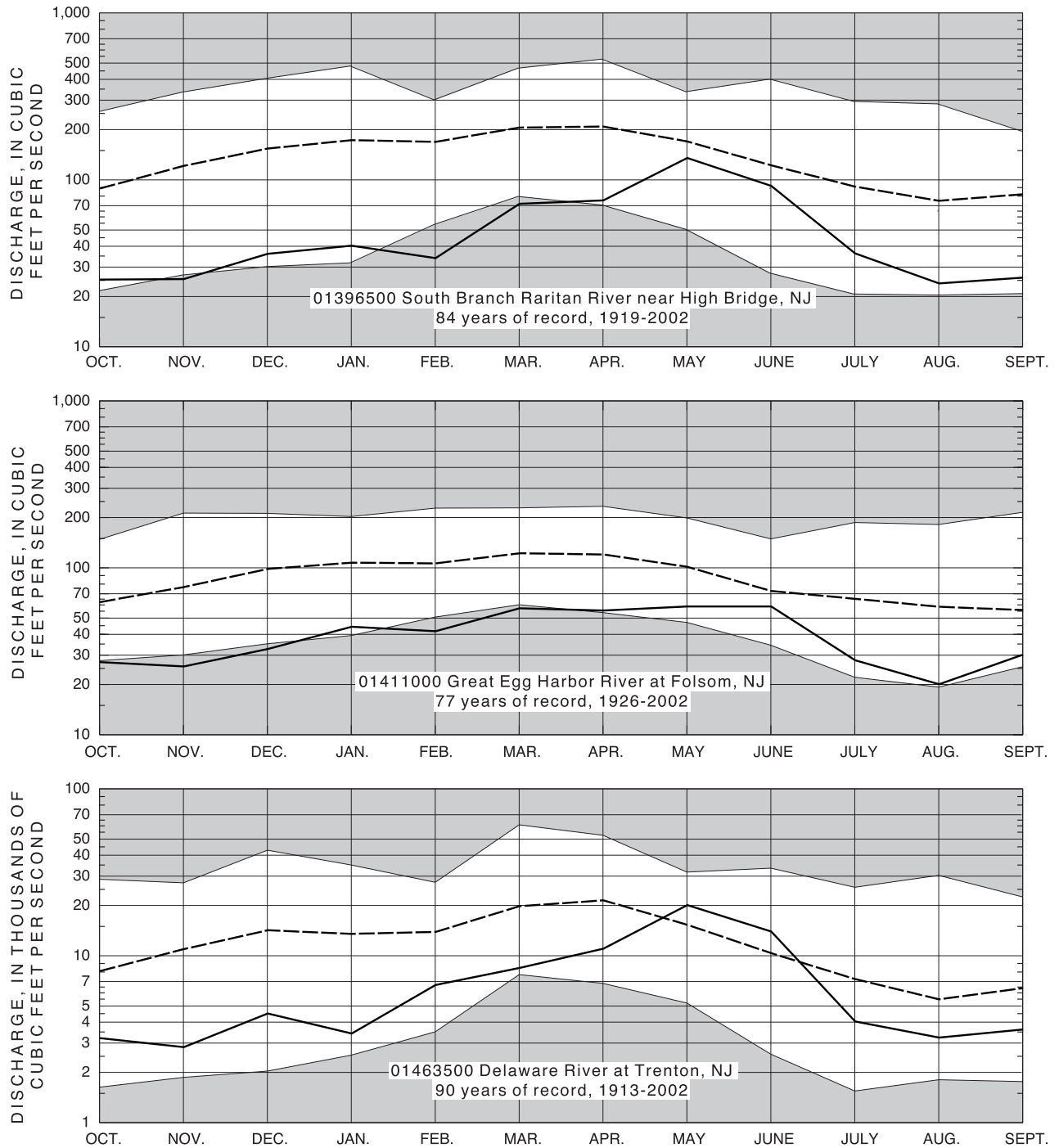


Figure 1. Monthly mean precipitation for water year 2002 and mean-monthly precipitation for 1895-2001. [Mean-monthly and monthly mean precipitation are spatially weighted averages of several dozen stations throughout the State]

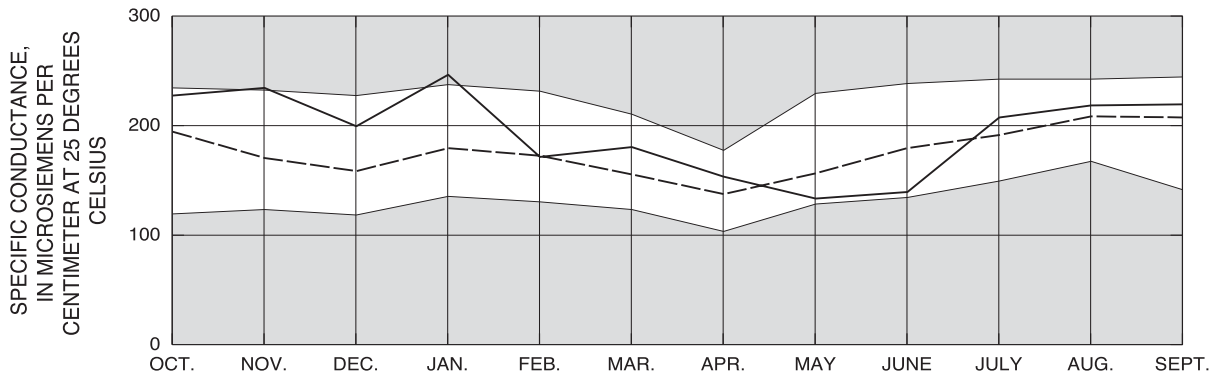


EXPLANATION

- UNSHADED AREA--Indicates range between highest and lowest mean discharge recorded for the month, prior to 2002 water year
- BROKEN LINE--Indicates normal discharge (median of the monthly means) for the standard reference period, 1971-2000
- SOLID LINE--Indicates observed monthly mean discharge for the 2002 water year

Figure 2. Monthly mean discharge at index gaging stations, water year 2002.

WATER RESOURCES DATA - NEW JERSEY, 2002



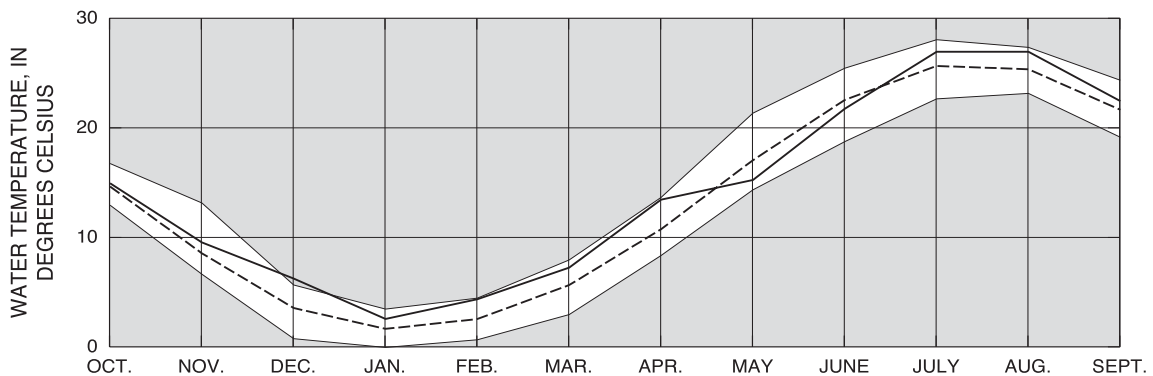
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly mean values and the lowest monthly mean values, water years 1968-2001.

SOLID LINE--Indicates the monthly mean values for water year 2002.

BROKEN LINE--Indicates the mean-monthly values for water years 1968-2001.

Figure 3. Monthly mean specific conductance at Delaware River at Trenton, New Jersey, water year 2002.



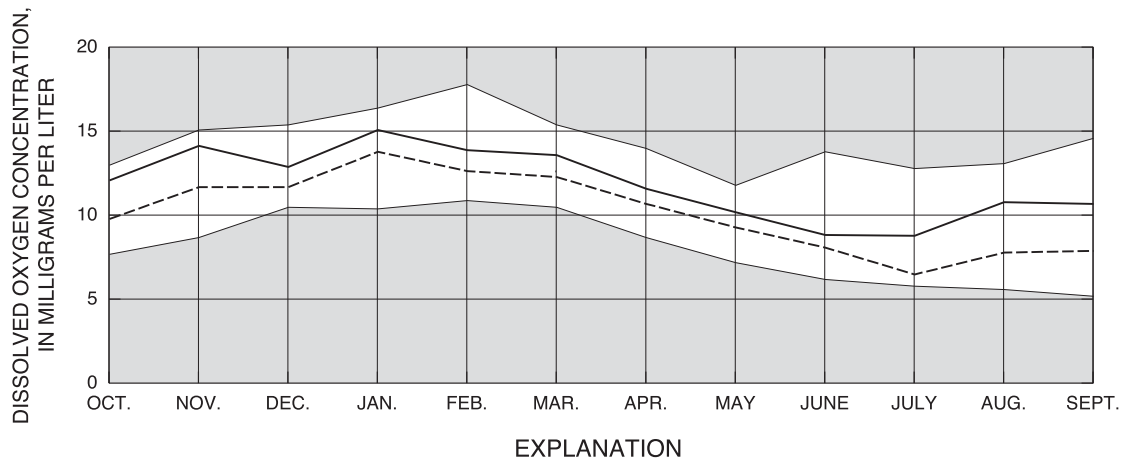
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly mean values and the lowest monthly mean values, water years 1968-2001.

SOLID LINE--Indicates the monthly mean values for water year 2002.

BROKEN LINE--Indicates the mean-monthly values for water years 1968-2001.

Figure 4. Monthly mean water temperature at Delaware River at Trenton, New Jersey, water year 2002.



UNSHADED AREA--Indicates the range between the highest monthly median of daily maximum values and the lowest monthly median of daily minimum values, water years 1968-2001.

SOLID LINE--Indicates the monthly median of daily maximum values for water year 2002.

BROKEN LINE--Indicates the monthly median of daily minimum values for water year 2002.

Figure 5. Monthly medians of daily maximum and minimum dissolved oxygen concentrations at Delaware River at Trenton, New Jersey, water year 2002.

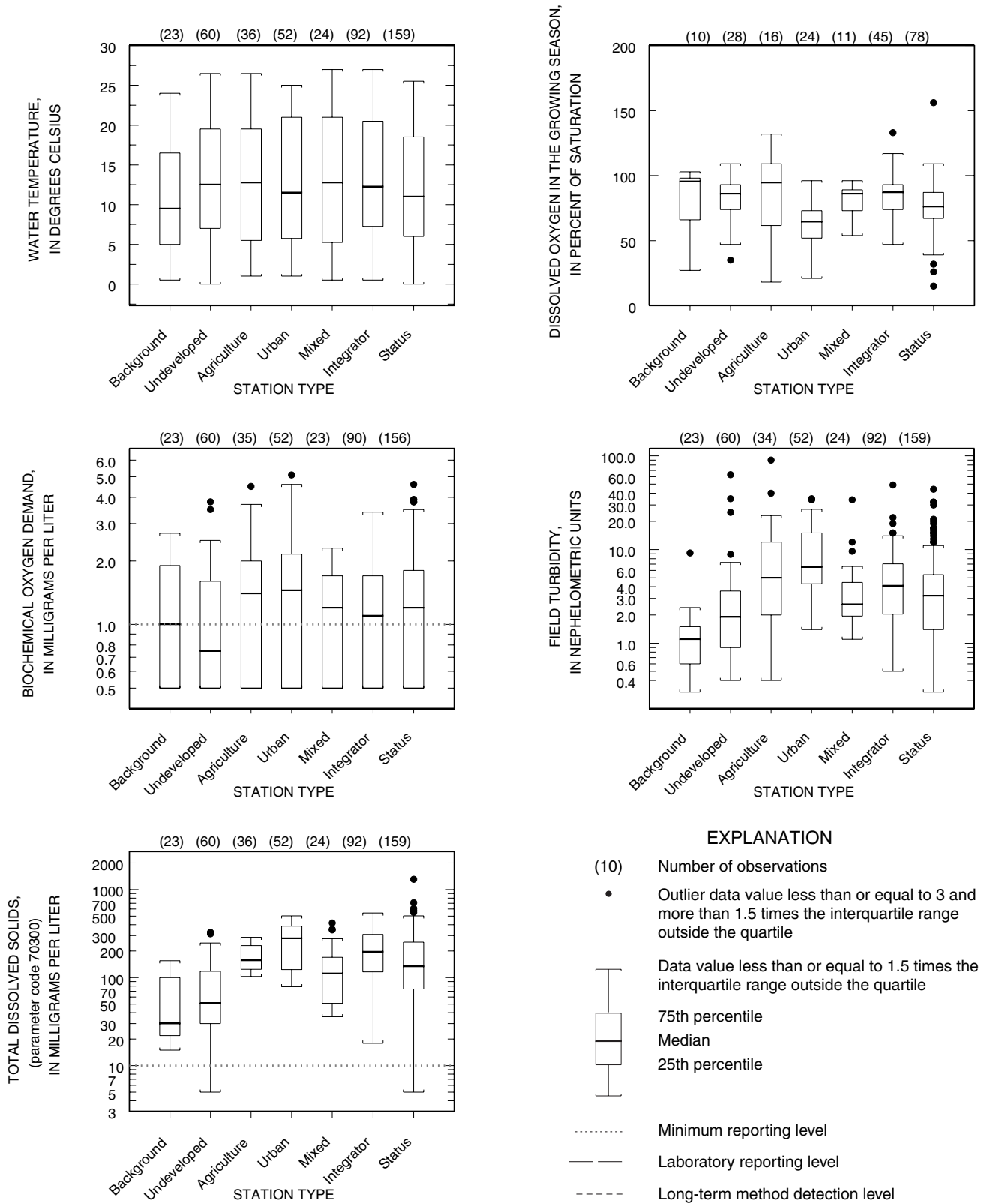


Figure 6. Distribution of physical characteristics of, and constituent concentrations in, samples from 112 stations in the Ambient Stream Monitoring Network, water year 2002. ["Less-than" values reported as equal to one-half the minimum reporting level or laboratory reporting level; excludes data from Delaware River main stem stations 01438500, 01443000, 01457500, 01461000, and 01463500]

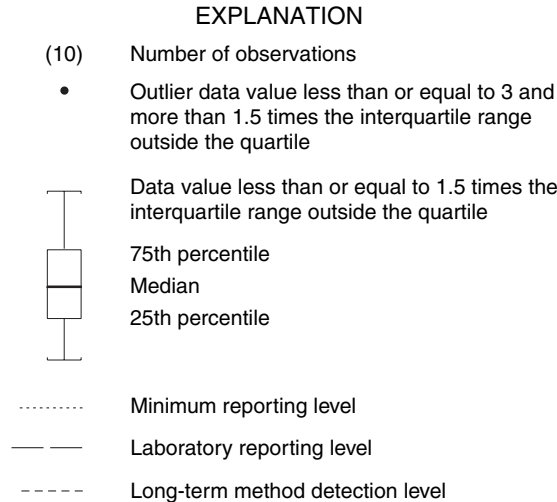
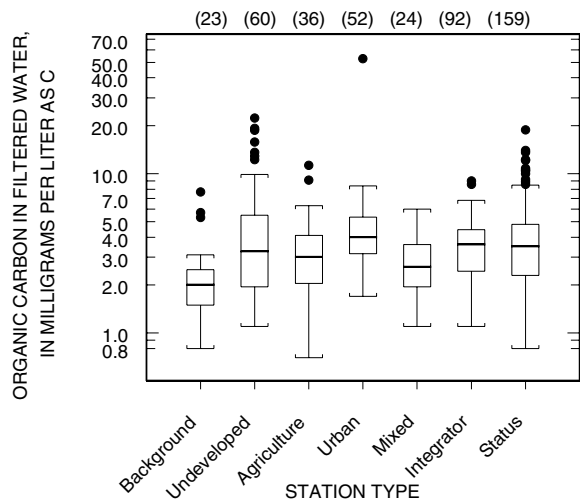
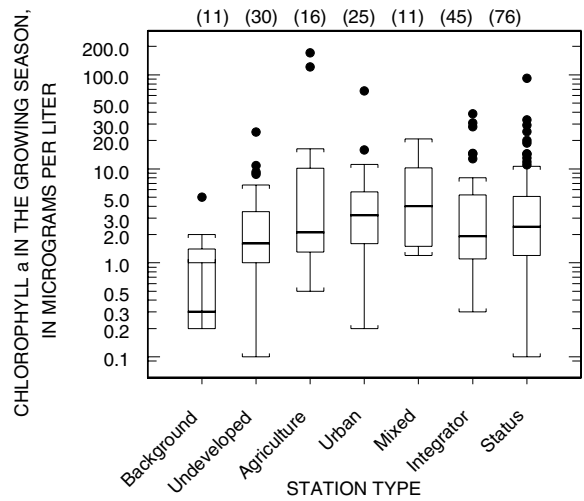
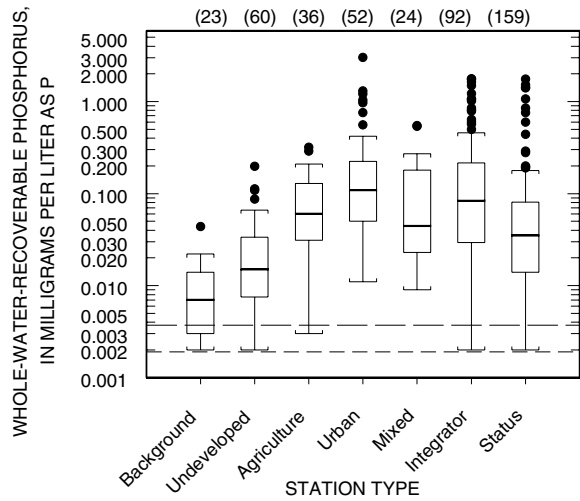
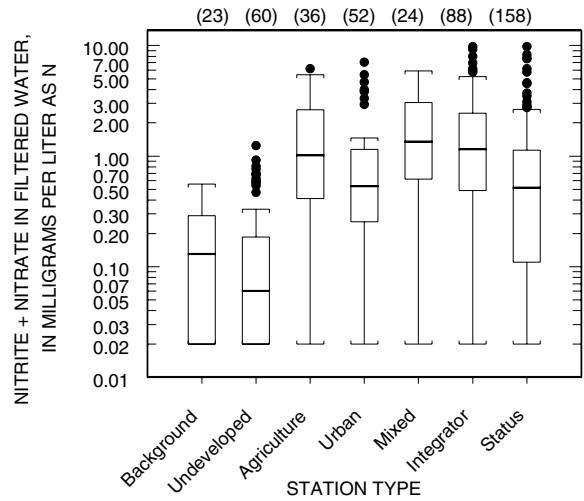
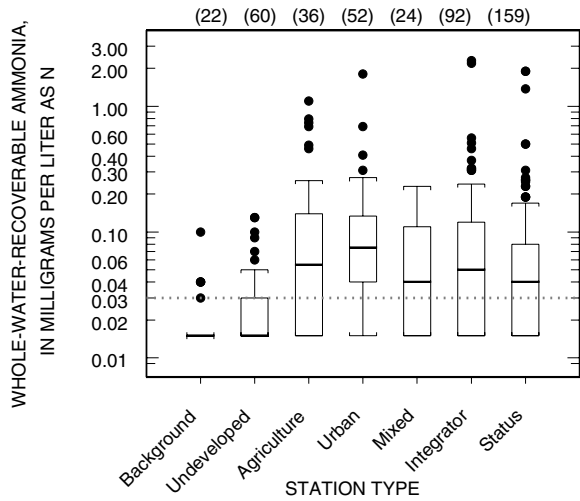


Figure 6. Distribution of physical characteristics of, and constituent concentrations in, samples from 112 stations in the Ambient Stream Monitoring Network, water year 2002--continued. ["Less-than" values reported as equal to one-half the minimum reporting level or laboratory detection level; excludes data from Delaware River main stem stations 01438500, 01443000, 01457500, 01461000, and 01463500]

WATER RESOURCES DATA - NEW JERSEY, 2002

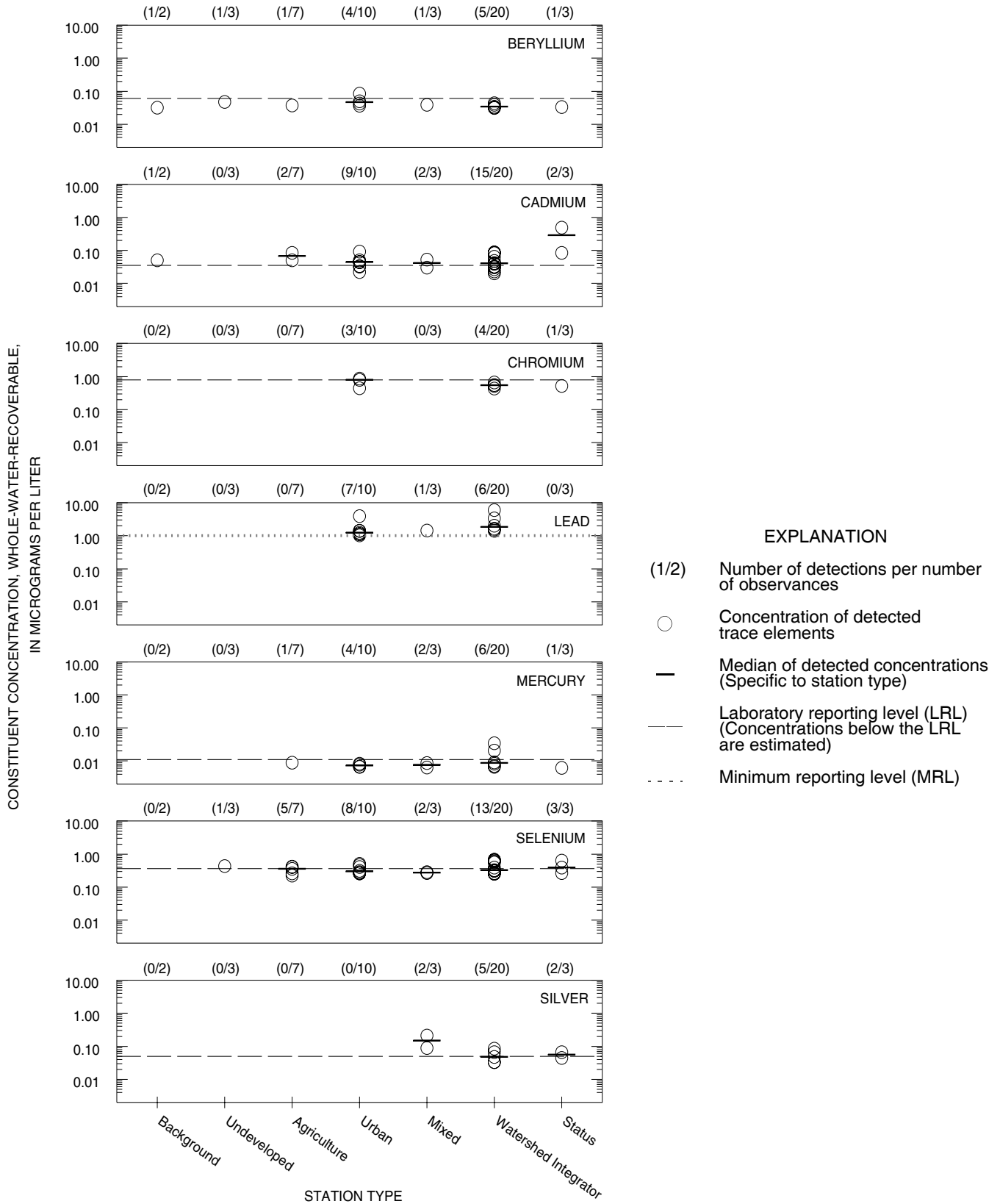


Figure 7. Concentration and detection frequency of whole-water-recoverable trace elements detected in samples from 46 stations in the Ambient Stream Monitoring Network, water year 2002. [Two of the status stations are colocated at other station types; data were included in both distributions. Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

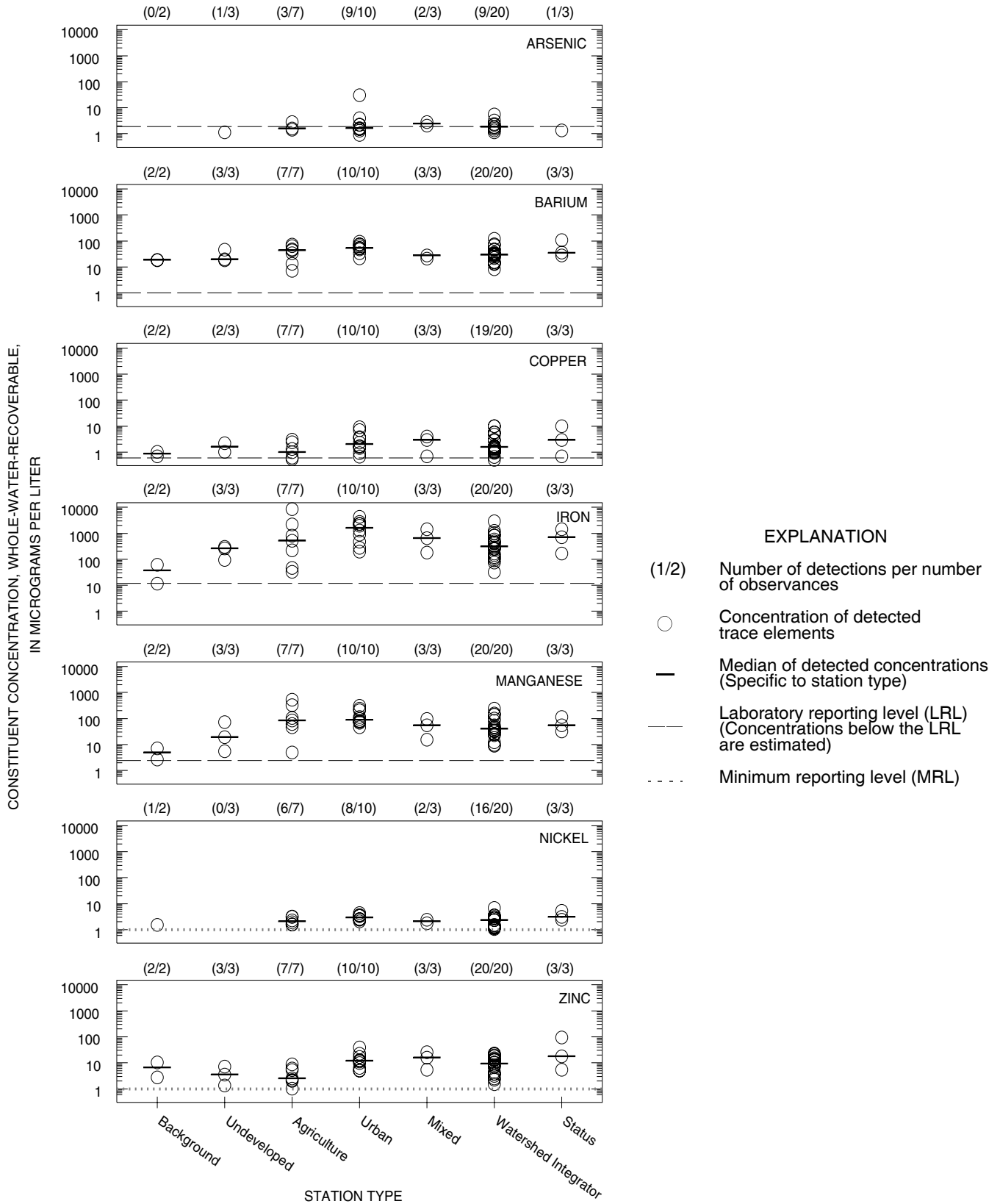
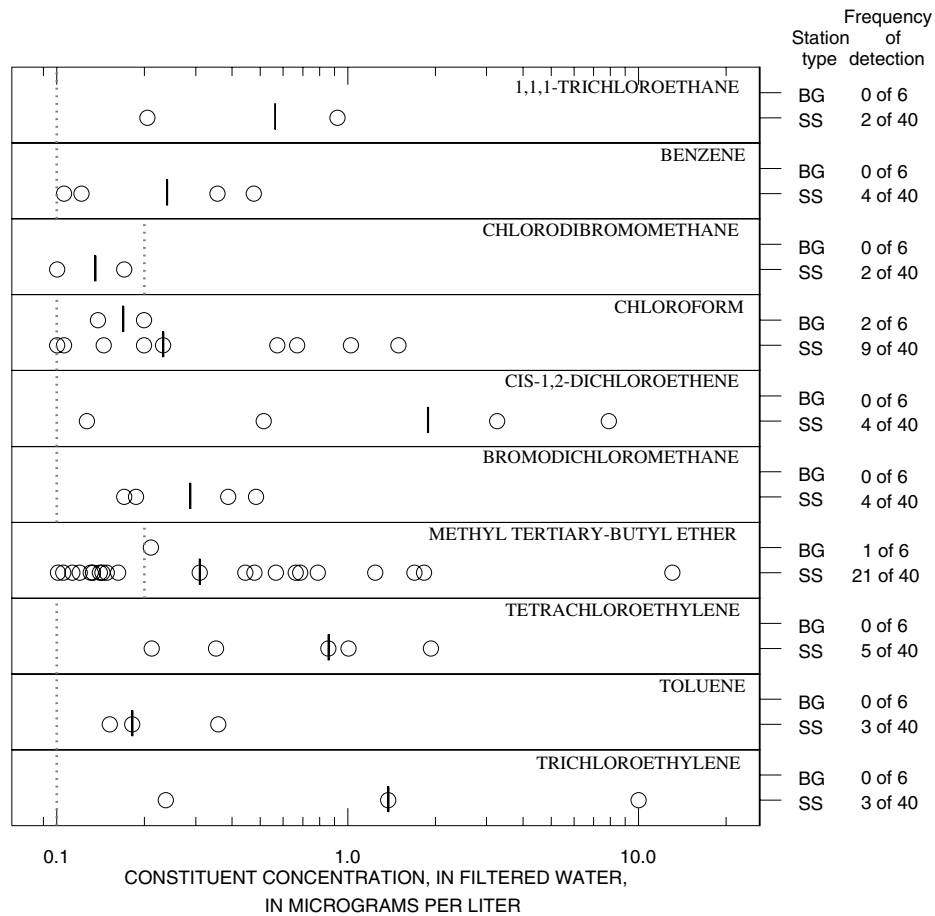


Figure 7. Concentration and detection frequency of whole-water-recoverable trace elements detected in samples from 46 stations in the Ambient Stream Monitoring Network, water year 2002--continued. [Two of the status stations are collocated at other station types; data were included in both distributions. Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

WATER RESOURCES DATA - NEW JERSEY, 2002



EXPLANATION

- BG Background stations
- SS Statewide status stations
- Concentration of detected compounds
- | Median of detected concentrations (Specific to station type)
- ⋮ Minimum reporting level (MRL)

Figure 8. Concentration and detection frequency of volatile organic compounds detected in samples from 46 stations in the Ambient Stream Monitoring Network, water year 2002. [Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

Table 1. Concentration of volatile organic compounds detected only once in samples from 46 stations in the Ambient Stream Monitoring Network, water year 2002. [SS, statewide status]

CONSTITUENT	CONCENTRATION (micrograms per liter)	STATION TYPE
1,1-DICHLOROETHANE	0.6	SS
1,2-DICHLOROETHANE	0.2	SS
ORTHO DICHLOROBENZENE	0.2	SS
CHLOROBENZENE	1.5	SS
DIISOPROPYLETHER	0.5	SS
ETHYL ETHER	0.3	SS
ETHYLBENZENE	0.1	SS
META+PARA XYLENE	0.3	SS
ORTHO XYLENE	0.1	SS
VINYL CHLORIDE	3.0	SS

- EXPLANATION**
- BG Background stations
 - SS Statewide status stations
 - Concentration of detected compounds
 - | Median of detected concentrations (Specific to station type)
 - Laboratory reporting level (LRL) (Concentrations below the LRL are estimated)

Table 2. Detection frequency of selected pesticides in filtered samples from 46 stations in the Ambient Stream Monitoring Network, water year 2002. [All values are estimated due to poor recovery or poor precision]

CONSTITUENT	STATEWIDE STATUS	BACKGROUND STATUS
ALPHA BHC	1 of 40	0 of 6
BENFLURALIN	2 of 40	0 of 6
CARBARYL	19 of 40	1 of 6
DEETHYLATRAZINE	31 of 40	3 of 6
METHYLAZINPHOS	3 of 40	0 of 6
TEBUTHIURON	3 of 40	0 of 6
TERBACIL	3 of 40	0 of 6
TRIFLURALIN	2 of 40	0 of 6

Table 3. Concentration of pesticides detected only once in filtered samples from 46 stations in the Ambient Stream Monitoring Network, water year 2002. [SS, statewide status]

CONSTITUENT	CONCENTRATION (micrograms per liter)	STATION TYPE
LINURON	0.3	SS

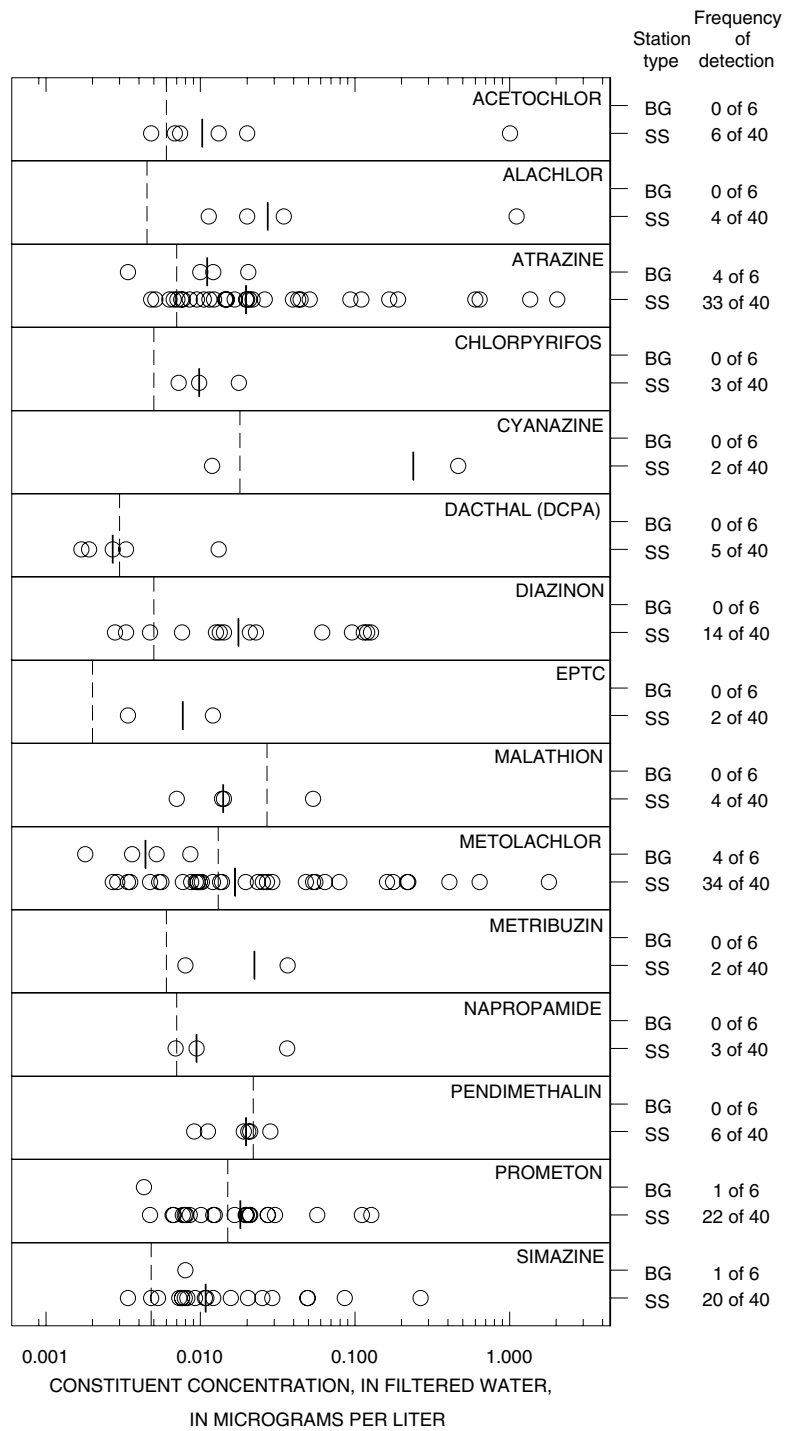


Figure 9. Concentration and detection frequency of pesticides detected in filtered samples from 46 stations in the Ambient Stream Monitoring Network, water year 2002. [Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

Values reported by the analyzing laboratory as “<” (less than the MRL or LRL) were considered to be not detected and were excluded from the plots. Values reported as “E” (estimated below the LRL) were included in the plots. Refer to “Definition of Terms” in the “Introduction” for more information about MRLs and LRLs.

Samples for the analysis of trace elements were collected at two background stations to develop a baseline with which to compare the water quality at other stations. Forty-four samples were collected from a random selection of long-term fixed station types. Every trace element in the USGS National Water Quality Laboratory schedule was detected in more than one sample and, therefore, was included in figure 7. Estimated values, concentrations below the LRL line in each plot, also were included. Barium, iron, manganese, and zinc were detected in 100 percent of the samples. Chromium and silver had the lowest percentages of detection, 16.7 and 18.7, respectively. In general, trace elements were detected more often in samples from mixed LUI and statewide status stations. They were detected less often and in smaller concentrations in samples from undeveloped LUI and background stations, which were located on reaches of streams that remain relatively unaffected by human activity.

Concentrations of VOCs and pesticides in samples from background stations were determined to develop a baseline and from SS stations to provide a general overview of the water quality statewide and of the aerial distribution of these compounds. Samples from 6 background and 40 SS stations were analyzed for 34 VOCs. Ten compounds were detected in more than one sample and are presented in figure 8. Ten compounds were detected only once and are presented in table 1. Refer to individual station records for tables that list all the compounds. The most frequently detected VOCs in 46 samples were Methyl tert-butyl ether (MTBE), in 48 percent of samples; chloroform, in 24 percent; and tetrachloroethylene, in 11 percent. Chloroform and MTBE were the only two compounds detected in samples from background stations. Chloroform is a by-product of the disinfection of drinking water and wastewater by chlorination; MTBE is a gasoline additive.

Filtered samples from 6 background and 40 SS stations were analyzed for 47 pesticides by use of laboratory schedule 2001. Only compounds detected in one or more samples are included in figure 9 and tables 2 and 3. Refer to “Laboratory Measurements” in the “Introduction” for the complete list of those pesticides and the LRL for each compound. Estimated values, concentrations to the left of the LRL line in each plot in figure 9, also are included. Pesticides, in low concentrations, were widely distributed throughout the State; twenty-four compounds were detected at one or more SS stations. Six compounds also were detected at background stations, indicating that atmospheric deposition is a possible source. Four of the detected compounds are insecticides—Carbaryl, Chlorpyrifos, Diazinon, and Malathion. The remaining compounds are herbicides. The most frequently detected pesticides in 46 samples were Metolachlor, in 83 percent of

samples; Atrazine, in 80 percent; Deethylatrazine (a degradation product of Atrazine), in 74 percent; and Prometon, in 50 percent. The six compounds detected at background stations are commonly used herbicides, with the exception of carbaryl, which is an insecticide.

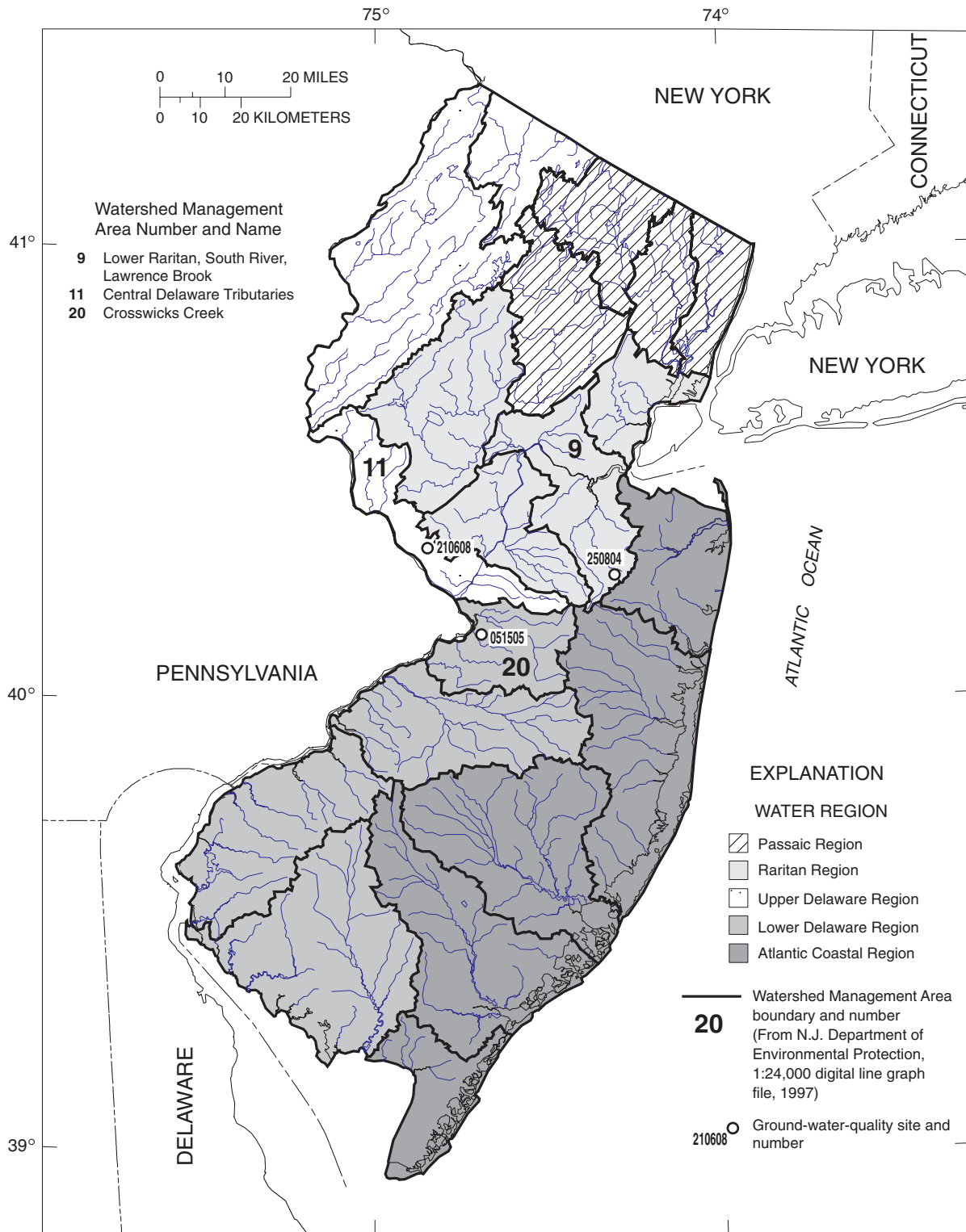
Ambient Stream Monitoring Network Reconnaissance Study

The water year 2002 reconnaissance study documented the occurrence of base-flow extremes of continuously monitored water temperature, dissolved oxygen (DO) concentration, percent of dissolved oxygen saturation, specific conductance, and pH at three network stations in the Passaic River basin. In situ multi-constituent sensors, or monitors, recorded the occurrence and magnitude of diurnal variations that could not be observed during normal station visits, which generally took place between the hours of 8 a.m. and 2 p.m. The monitors were deployed for five 1-week periods during the summer months. Graphs of hourly values are included in the individual station records for Pompton River at Pompton Plains (01388500), Passaic River at Little Falls (01389500), and Saddle River at Lodi (01391500) (figs. 19-23, 27-31, and 32-36, respectively).

The Reconnaissance stations were placed in the Passaic River basin, the most intensely used river basin in the State, to better characterize fluctuations of the characteristics and the relation of the characteristics to surface-water quality during a State-declared Drought Emergency with modified allowable passing flows in the basin (William Honachefsky, New Jersey Department of Environmental Protection, written commun., April 2003). Diurnal variation of DO during days of base flow and suppression of variation during days of higher flow were recorded at the three stations. About 1 inch of rain fell throughout the period June 10 to 14; subsequently, the monitors recorded relatively stable DO values (\pm 1 mg/L from the daily mean) during the period. Stable, low base-flow conditions were recorded during the first few days of two periods, June 24 to July 1 and July 16 to 23; subsequently, the monitors recorded wide variations (\pm 4 mg/L from the daily mean) during those times. Significant rainfall in the middle of the periods resulted in immediate suppression of diurnal fluctuation, which gradually resumed as flow returned to near base flow. The causes of diurnal DO fluctuation are photosynthesis and aerobic respiration. The process of photosynthesis is driven by sunlight and produces free oxygen, which causes an increase in DO levels during the day. The process of algal respiration consumes free oxygen and causes a decrease in DO levels during the night. High stream-flow, which carries an increased load of suspended material, increases turbidity that effectively blocks sunlight, and interrupts the photosynthetic process.

Ground Water Quality

The USGS, in cooperation with the NJDEP, operates the Ambient Ground-Water-Quality Network (AGWQN), which was designed to monitor the quality of ground water at or near the water table throughout the State. Shallow ground water is generally the first



Base from U.S. Geological Survey digital line graph files, 1:24,000

Figure 10. Location of sites in the Ambient Ground-Water-Quality Network, water year 2002.

Table 4. Hydrogeologic unit and land use at three wells sampled as part of U.S. Geological Survey-N.J. Department of Environmental Protection (cooperative) Ambient Ground-Water-Quality Network, water year 2002.

[WMA, Watershed Management Area; VOCs, volatile organic compounds; mg/L, milligrams per liter; NO₂+NO₃, nitrite plus nitrate; ft bls, feet below land surface; 211RDBK, Red Bank Sand; 211EGLS, Englishtown Formation; 231LCKG, Lockatong Formation; ---, data not available]

NJ-WRD well number	WMA number	Hydrogeologic unit aquifer code	Predominant land use ¹	Water type (dominant cation-anion)	Dissolved oxygen (mg/L)	Nitrogen			Number of pesticides detected ²	Number of VOCs detected ²	Number of trace elements detected ²	Well depth (ft bls)
						NO ₂ +NO ₃ , dissolved (mg/L)	Total dissolved solids (mg/L)					
210608	11	231LCKG	Agricultural	Calcium-bicarbonate	0.4	1.02	307	None	None	9	14.0	
250804	9	211RDBK	Agricultural	Calcium-sulfate	1.3	E0.02	222	None	None	8	16.8	
51505	20	211EGLS	Urban	Calcium-sulfate	---	0.33	122	None	1	8	27.8	

¹Land use based on New Jersey geographic information system (New Jersey Department of Environmental Protection, 1996).

²Includes compounds with estimated concentrations, defined as positive detections of a compound, but measured as less than the laboratory's reporting levels.

and most significantly affected part of the ground-water system, and the quality of this water is directly related to human activities at the land surface. The AGWQN is a long-term monitoring network with goals to assess the status of ground-water quality by examining the concentrations of various constituents that can be used as environmental indicators, assess water-quality trends by examining data collected on a 5-year cycle, determine the effects of land use on shallow ground-water quality, identify threats from nonpoint sources of contamination, and identify emerging or new environmental issues of concern to the public.

The network will consist of 150 shallow ground-water wells distributed throughout New Jersey within three land-use types. Sixty wells are, or will be located, in agricultural areas, 60 in urban/suburban areas, and 30 in undeveloped areas within New Jersey's five watershed management regions (WMRs)—the Passaic, the Raritan, the Upper Delaware, the Lower Delaware, and the Atlantic Coastal. These five WMRs are further divided into 20 watershed management areas (WMAs). Every year approximately 30 sites are sampled in one or several of the five WMRs. The cycle of sampling all 150 wells will be completed every 5 years. Water year 2002 was the fourth year of operation of the first 5-year cycle of the AGWQN.

Because of the difficulty of locating suitable sites north of the fall line, only three wells were installed and sampled during water year 2002 (fig. 10). The first 5-year cycle, however, will most likely be finished by the end of water year 2003. Because few samples were collected, statistical analyses are not presented in this volume. Selected location, construction, and analytical data for the three wells are summarized in table 4. Samples from the wells were analyzed for physical characteristics, major ions, nutrients, trace elements, organic constituents, and gross alpha and beta radioactivity. The records of chemical constituents are in the section, "Water-Quality at Miscellaneous Ground-Water Sites."

SPECIAL NETWORKS AND PROGRAMS

The USGS/New Jersey Department of Environmental Protection (NJDEP) cooperative Ambient Stream Monitoring Network (ASMN) and Ambient Ground Water Quality Network (AGWQN) are designed to meet the expanding need for surface and ground-water-quality data in the State of New Jersey. The major objectives of the network are to (1) support the National Environmental Performance Partnership System agreement (a program set up to control long-term environmental planning) and the watershed-management process; (2) to work synergistically with the NJDEP Ambient Biomonitoring Network, and atmospheric, ground-water, and coastal water-quality networks; (3) determine statewide water-quality status and trends; (4) measure water-quality near the downstream end of each Watershed Management Area (WMA); (5) define background water quality in each of the four physiographic provinces of New Jersey; (6) measure nonpoint-source contributions from major landuse areas, atmospheric deposition, and ground-water; (7) facilitate response of state and local water-manage-

ment officials to emerging or watershed-specific water-quality issues.

The surface-water network consists of 112 stations located in 20 WMA's. These stations are segregated into five distinct types that together are used to define the surface-water-quality in the State. Background stations are located on reaches of streams that have remained relatively unaffected by human activity, to develop a baseline water-quality data base. Data from these stations are used in the development of water-quality standards and initiatives. Watershed Integrator stations are located at the furthest downstream point possible in each WMA to provide information on the combined water-quality effects within each WMA. Land Use Indicator stations are used to monitor the effects of the dominant land use in each WMA and provide data on nonpoint-source loading of contaminants to streams. Statewide Status stations are chosen randomly each year within the 20 WMA's to obtain a statistical basis that can be used to estimate water-quality indicators statewide. Five stations are located on the Delaware Main Stem—the border between New Jersey and Pennsylvania. Watershed Reconnaissance stations are also selected annually on the basis of specific project needs, determined by a committee of USGS and NJDEP personnel.

The surface-water network is sampled in four periods throughout the water year: November 1 to December 31, February 1 to March 31, May 1 to June 30, and August 1 to September 30. Samples for analysis for nutrients, major ions, biochemical-oxygen demand, and suspended solids are collected for the entire network each sampling period. Samples for the analysis of water-column volatile organic compounds during February and March, filtered organic pesticides during May and June, and whole-water-recoverable trace elements during August and September are collected at all Statewide Status and Background stations. Samples for the analyses of trace elements and polyaromatic hydrocarbons in streambed sediments are also collected in August and September at 19 Statewide Status stations and 2 Background stations. [In water year 2002, samples for the analysis of whole-water-recoverable trace elements were collected at 44 randomly selected long-term fixed station types and 2 Background stations. Samples for the analyses of trace elements and polyaromatic hydrocarbons in streambed sediments were collected at 20 of the 44 randomly selected long-term fixed station types and both the Background stations where whole-water-recoverable trace metals were collected.] Samples for the analyses of fecal coliform, *E. coli*, and enterococcus bacteria were collected synoptically in May, June, July, and August.

The Ambient Ground-Water-Quality Network (AGWQN) is designed to monitor the water quality of shallow wells. The quality of water from wells located at the water table is generally the first and most significantly affected part of the ground water system, and can be directly related to human activity at the land surface. The ground-water network will consist of 150 sites distributed throughout the State of New Jersey within three land-use types. Sixty wells are, or will be located,

in agricultural areas, 60 in urban/suburban areas, and 30 in undeveloped areas. These areas are located throughout New Jersey's five Watershed Management Regions (WMR), which are further divided into 20 watershed-management areas (WMA) (fig. 10). The Passaic Region encompasses WMAs 3-6; the Lower Delaware Region, WMAs 17-20; the Raritan Region, WMAs 7-10; the Upper Delaware Region, WMAs 1, 2, and 11; and, the Atlantic Coastal Region, WMAs 12-16. Approximately 30 wells in one or several of the five WMR are sampled each year. Thus, the entire network is sampled over a 5-year cycle.

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 streamflow representative of 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. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the affects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. 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. Additional information about the NASQAN Program can be found at <http://water.usgs.gov/nasqan/>

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation

chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at <http://bqs.usgs.gov/acidrain/>.

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 59 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.

NAWQA study units are divided into three groups that are studied intensively on a rotational basis. Two NAWQA studies are currently run out of the New Jersey District of the USGS. The Long Island-New Jersey Coastal Plain (LINJ) study unit conducted intensive sampling from 1996 through 1998 and is currently in a low-intensity phase. The LINJ study unit is slated to resume intensive sampling starting in 2006. The Delaware River Basin (DELR) study unit conducted intensive sampling from 1999 through 2001, and is currently in a low-intensity phase. The DELR is scheduled to resume intensive sampling in 2009.

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 semi-annually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program is available through the world wide web at <http://water.usgs.gov/nawqa/>

Long Island-New Jersey Coastal Plain (LINJ) NAWQA fixed stations published in this report (fig.13)

are: Raritan River at Queens Bridge, at Bound Brook, NJ (01403300) and Bound Brook at Middlesex, NJ (01403900). The location of ground-water sites that are sampled as part of the low-intensity-phase of the LINJ-NAWQA study are shown in figure 41. Ground-water data collected for the LINJ-NAWQA study are published in this report in the section titled "Water Quality at Miscellaneous Ground-Water Sites."

Delaware River Basin (DELR) NAWQA fixed stations published in this report (fig. 14) are: Delaware River at Trenton, NJ (01463500); Little Neshaminy Creek at Valley Rd. near Neshaminy, PA (01464907); French Creek near Phoenixville, PA (01472157); and Schuylkill River at Philadelphia, PA (01474500).

EXPLANATION OF THE RECORDS

The water-quality records published in this report are for the 2002 water year that began October 1, 2001, and ended September 30, 2002. A calendar of the water year is provided on the inside of the front cover. The records contain surface-water and ground-water-quality data. The locations of the stations where the data were collected are shown in figures 12-14, and 40-41. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

Downstream Order System

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

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

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude (fig. 11). 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.

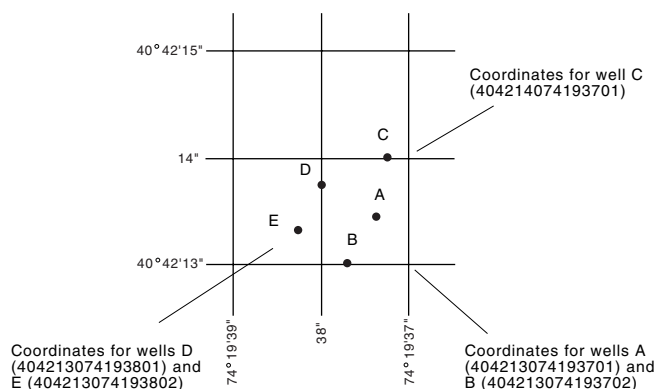


Figure 11.--System for numbering wells and miscellaneous sites (latitude and longitude)

Water Quality Records

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 figures 12-14.

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 from continuing-record and continuous-recording stations are listed in downstream order immediately after the "Introduction." Water-quality records from miscellaneous surface-water and ground-water sites are listed immediately after the continuing-record stations.

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 on site 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; Book 9, Chap. A1-A9. 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 continuous water-quality monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly recordings beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey, New Jersey District Office whose address is given on the back of the title page of this report.

Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value did not exceed recalibration criteria were considered to be reliable and were not adjusted. Differences between sensor responses documented during cleaning or verification of sensor calibration that exceeded the criteria listed below (recalibration criteria) indicated the need for sensor recalibration and adjustment of the recorded data for the period between inspections.

Water Temperature	±0.2 °C
Specific Conductance	greater of ±5 uS/cm or 3%
pH	±0.3 units
Dissolved Oxygen	greater of ±0.3 mg/L or 5%
Turbidity	greater of ±2 NTU or 5%

Continuous-record water-quality data for periods for which the differences between the sensor's response and a known value exceeded the criteria listed below (deletion criteria) were considered to be unreliable and were not published.

Water Temperature	±1.5 °C
Specific Conductance	±25 %
pH	±1.5 units
Dissolved Oxygen	greater of ±1.5 mg/L or 25%
Turbidity	±25 %

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, fecal coliform, E. coli, enterococcus bacteria, hexavalent chromium, total suspended solids in surface water, kjeldahl nitrogen in bottom material, and total phosphorus in bottom material are analyzed at the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Chlorophyll A samples are analyzed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Samples for nutrients are analyzed at the New Jersey Department of Health or at the U.S. Geological Survey National Water-Quality Laboratory (NWQL) in Denver, Colorado. Sediment samples--parameter codes, 80154, 80157, and 80164--are analyzed in the U.S. Geological Survey Laboratories in Iowa City, Iowa. Replicate samples for the ASMN were analyzed by the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment. All other samples are analyzed in the U.S. Geological Survey laboratory in Denver, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the U.S. Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

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

Selected water samples from ASMN, AGWQN, and NAWQA study sites were analyzed for pesticides by use of NWQL schedule 2001. This table lists the

pesticides on the schedule, the unit of measure (micrograms per liter, ug/L), the U.S. Geological Survey National Water Information System parameter code, and the reporting level. **Only pesticides measured at or above the minimum reporting level for one or more samples are listed in the water-quality tables.**

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

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

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

PCODE.--The USGS/EPA parameter code.

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

LRL.--Laboratory reporting level

PCode	Common Name	LRL (ug/L)
82660	2,6-Diethylaniline	0.006
49260	Acetochlor	0.006
46342	Alachlor	0.0045
34253	alpha-HCH	0.0046
39632	Atrazine	0.007
82686	Azinphos-methyl	0.05
82673	Benfluralin	0.010
04028	Butylate	0.002
82680	Carbaryl	0.041
82674	Carbofuran	0.020
38933	Chlorpyrifos	0.005
82687	cis-Permethrin	0.006
04041	Cyanazine	0.018
82682	Dacthal	0.0030
04040	Deethylatrazine	0.006
39572	Diazinon	0.005
39381	Dieldrin	0.0048
82677	Disulfoton	0.021
82668	EPTC	0.0020
82663	Ethalfuralin	0.009
82672	Ethoprophos	0.005
04095	Fonofos	0.0027
39341	Lindane	0.0040
82666	Linuron	0.035
39532	Malathion	0.027
39415	Metolachlor	0.013
82630	Metribuzin	0.006
82671	Molinate	0.0016
82684	Napropamide	0.007
34653	p,p'-DDE	0.0025
39542	Parathion	0.010

PCode	Common Name	LRL (ug/L)
82667	Parathion-methyl	0.006
82669	Pebulate	0.0041
82683	Pendimethalin	0.022
82664	Phorate	0.011
04037	Prometon	0.015
04024	Propachlor	0.010
82679	Propanil	0.011
82685	Propargite	0.023
82676	Propyzamide	0.0041
04035	Simazine	0.005
82670	Tebuthiuron	0.016
82665	Terbacil	0.034
82675	Terbufos	0.017
82681	Thiobencarb	0.0048
82678	Tri-allate	0.0023
82661	Trifluralin	0.009

Analyses of volatile organic compounds in surface-water and ground-water samples (schedule 2020/2021)

Selected samples from NAWQA study sites were analyzed for volatile organic compounds (VOCs) by use of NWQL schedules 2020/2021. The NWQL created this schedule to provide a method for accurate determination of VOCs in water in the nanogram per liter range. The method described in USGS Open-File Report 97-829 (Connor and others) is similar to USEPA method 524-2 (Mund, 1995) and the method described by Rose and Schroeder (1995). Minor improvements to instrument operating conditions include the following: additional compounds, quantitation ions that are different from those recommended in USEPA Method 524.2 because of interferences from the additional compounds, and a data reporting strategy for measuring detected compounds extrapolated at less than the lowest calibration standard or measured at less than the reporting limit. The laboratory reporting limit (LRL) is introduced as a statistically defined reporting limit designed to limit false positives and false negatives to less than 1 percent.

This table lists the volatile organic compounds on the schedule, the unit of measure (micrograms per liter (ug/L), the U.S. Geological Survey National Water Information System parameter code, the Union of Pure and Applied Chemistry (IUPAC) compound name, and the National Water Quality Laboratory compound name. Positive detections measured at less than LRL but greater than or equal to the long-term method-detection limit are reported as estimated concentrations (E) to alert the data user to decreased confidence in accurate quantitation. Values for analytes in the 2020/2021 schedules are preceded by an "E" in the following situations:

1. When the calculated concentration is less than the lowest calibration standard. The analyte meets all identification criteria to be positively

identified, but the amount detected is below where it can be reliably quantified.

2. If a sample is diluted for any reason. The method reporting level is multiplied by the dilution factor to obtain the adjusted method reporting level. Values below the lowest calibration standard, multiplied by the dilution factor are qualified with an "E". For example, a value of 0.19 in a 1:2 dilution is reported as E0.1.
3. If the set spike has recoveries out of the specified range (60-140%).
4. If the analyte is also detected in the set blank. If the value in the sample is less than five times the blank value and greater than the blank value plus the long term method detection limit, the value is preceded by an "E" to indicate that the analyte is positively identified but not positively quantified because the analyte was also detected in the blank.

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

SCHEDULE DESCRIPTION.--The sample water is actively purged with helium to extract the volatile organic compounds. The volatile compounds are trapped onto a sorbent trap, thermally desorbed, separated by a megabore gas chromatographic capillary column, and finally determined by a full scan quadrupole mass spectrometer. Compound identification is confirmed by the gas chromatographic retention time and by the resultant mass spectrum, typically identified by three unique ions.

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.

LRL.--Laboratory reporting level.

PCode	Compound Name	LRL (ug/L)
77041	Carbon disulfide	0.075
34506	1,1,1-Trichloroethane	0.032
34516	1,1,2,2-Tetrachloroethane	0.09
34511	1,1,2-Trichloroethane	0.064
34496	1,1-Dichloroethane	0.035

PCode	Compound Name
49406	2, 6-Dimethylnaphthalene
49948	2-Ethyl-naphthalene
49399	9h-Fluorene
49466	Fluoranthene
49400	Isophorone
49435	2-methylantracene
49398	1-Methyl-9h-fluorene
49390	1-Methylindeno(1,2,3-c,d)pyrene
49410	1-Methylphenanthrene
49388	1-Methylpyrene
49402	Naphthalene
49409	Phenanthrene
49393	Phenanthridine
49387	Pyrene
49405	2, 3, 6-Trimethylnaphthalene

Methylene blue active substances

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

$$\text{MBASCOR} = \text{M} - 0.0088\text{N} - 0.00019\text{C}$$

where:

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

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

Analysis of acid neutralizing capacity (ANC)

Prior to October 1, 1996, ANC was called ALKALINITY, LAB.

Analysis of inorganic carbon in bottom material

Prior to October 1996, the analysis of total inorganic carbon in bottom material by the National Water Quality Laboratory (NWQL) was subject to a systematic positive bias of 3 percent. That is, results calculated before this date were found to be about 3 percent higher than results calculated correctly with a new computer system. The average agreement between analysis results for duplicate samples (a measure of the NWQL's precision for this analysis) is 98 percent. The 3-percent bias, therefore, approximates the preci-

sion of the analytical method. The overall effect on historical data from New Jersey is minor. Ninety-three percent of the reported concentrations for this analysis were less than 1.7 grams per kilogram; values of this magnitude are unaffected because the difference is obscured by rounding prior to publication of the analysis results. The magnitude of the error is such that the 3 percent difference, effective October 1, 1996, is indiscernible in the relatively small data set for any station.

Data Presentation

Precision varies for different analytical methods used to determine the same constituent. The presence of trailing zeros after the decimal in values printed in this report does not necessarily indicate that the method used for the determination is as precise as the level implied by the rightmost zero.

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.

Station manuscript

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.--Information on locations is obtained from the most accurate maps available. The location of the station with respect to the cultural and physical features in the vicinity and with respect to the reference place.

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

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

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

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

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

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [<http://water.usgs.gov/nwis/nwis>]. 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 NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

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 continuous record data. 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 section:

PRINTED

OUTPUT REMARK

- E Value is estimated.
- > Actual value is known to be greater than the value shown.
- < Actual value is known to be less than the value shown.

- M Presence of material verified, but not quantified.
- N Presumptive evidence of presence of material.
- U Material specifically analyzed for, but not detected.
- A Value is an average.
- V Analyte was detected in both the environmental sample and the associated blanks.
- S Most probable value.

Quality-control data

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

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

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

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

Field blank - a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and

laboratory handling as an environmental sample.

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

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

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

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

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

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

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

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

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

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

REPLICATE SAMPLES.--Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case

for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this District are:

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

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

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

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

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

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

Dissolved Trace-Element Concentrations

Note.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) 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). Data above the mg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant

contamination, the U.S. Geological Survey began using new trace-element protocols in water year 1994. Full implementation of the protocols took place during the 1995 water year.

CURRENT WATER RESOURCES PROJECTS IN NEW JERSEY

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

- Aquifer Flow and Chemistry in Salem County
- Assessment of Current Ground-Water and Surface-Water Conditions within the NJ-NY Highlands Area
- Delaware River Basin National Water Quality Assessment
- Development of Database, Models, and Determination of Vulnerability of Public Supply Wells and Surface-Water Intakes in New Jersey for Chemicals of Concern to Support Source Water Assessment Program
- Distribution of MTBE and Related Volatile Organic Compounds in Lakes in Northern NJ and Investigation of Lake-Well Interactions
- Distribution of Radium and Related Radionuclides in Coastal-Plain Aquifers
- Effects of Land Use, Septic Systems, and Sewering on the Distribution of Nitrate in Shallow Ground Water
- EPA Technical Assistance Program
- Estimation of the Relative Importance of Nonpoint Source Loads in the Raritan River Basin
- Flood Characteristics of New Jersey Streams
- Flow Characteristics and Basis for Development of Ecological Goals for New Jersey Streams
- Geohydrology of the Naval Air Warfare Center, West Trenton, New Jersey
- Ground-Water Data Collection Network
- Ground-Water Levels and Chloride Concentrations in Major Aquifers of the Coastal Plain
- Ground-Water Supply Availability in Southern Ocean County
- Head of Tide Sampling Program for the New Jersey Harbour Toxic Contaminant Assessment Reduction Program
- High-Flow Water Quality Management Objectives
- Hydrogeologic Investigation to Ensure Sustainable Water Supply for Cape May County
- Hydrogeologic Support to McGuire Air Force Base, Burlington County, New Jersey
- Investigation of Ground-Water/Surface-Water Interaction in the Northern Passaic River Valley, New Jersey
- Investigation of Hydrogeology and Volatile Organic Compound Contamination in Fair Lawn, New Jersey
- Investigation of Hydrogeology and Volatile Organic Compound Contamination in the Pohatcong Valley, New Jersey
- Investigation of Potential Threats to Water Supply from the Potomac-Raritan-Magothy Aquifer in Salem and Western Gloucester Counties, New Jersey
- Lower Delaware Non-Point Source
- Low Flow Characteristics of New Jersey Streams
- Modeling and Experimental Investigation of Hydrocarbon Transport and Biodegradation in the Unsaturated Zone
- Movement of Chromium in the Ground Water of Pennsauken Township, Camden County
- Natural Radionuclide Occurrence in Principal New Jersey Aquifers
- New Jersey Drought Monitoring System
- New Jersey-Long Island National Water Quality Assessment
- New Jersey Tide Telemetry System
- Pascack Brook Flood Warning System
- Passaic Flood Warning System
- Passaic River Basin Flow Model
- Program to Maintain and Update Ground-Water Models to Evaluate Continued Water-Supply Development
- Quality of Water Data Collection Network
- Quantification of Radium Mass Loading and Radioactivity in the Shallow Aquifer from the Water-Softening-Treatment Backwash Waste Stream that is Discharged to Septic Systems
- Rahway Flood Warning System
- Refinement of a Data Model for Watershed Water Transfer Analysis
- Small Watershed Flood Data Collection
- Somerset County Flood-Information System
- Surface Water Data Collection Network
- Vulnerability Assessment of the Kirkwood-Cohansey Aquifer System to Radium, Mercury, and Trace Metals
- Water-Quality Characteristics of Upper-Delaware Watershed

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

- Ayers, M.A., Kennen, J.G., and Stackelberg, P.E., 2000, Water quality in the Long Island-New Jersey Coastal drainages, New York and New Jersey, 1996-98: U.S. Geological Survey Water Resources Circular 1201, 40 p.
- Baehr, A.L., and Reilly, T.J., 2001, Water quality and occurrence of Methyl tert-butyl ether (MTBE) and other fuel-related compounds in lakes and ground water at lakeside communities in Sussex and Morris Counties, New Jersey, 1998-1999: U.S. Geological Survey Water-Resources Investigations Report 01-4149, 86 p.
- Barringer, J.L., Barringer, T.H., Lacombe, P.J., and Holmes, C.W., 2001, Arsenic in soils and sediments adjacent to Birch Swamp Brook in the vicinity of Texas Road (downstream from the Imperial Oil Company Superfund site), Monmouth County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 00-4185, 111 p.
- Barringer, J.L., and MacLeod, C.L., 2001, Relation of mercury to other chemical constituents in ground water in the Kirkwood-Cohansey aquifer system, New Jersey Coastal Plain, and mechanisms for mobilization of mercury from sediments to ground water: U.S. Geological Survey: Water-Resources Investigations Report 00-4230, 162 p.
- Barringer, T.H., Reiser, R.G., and Price, C.V., 2000, Use of low-flow trend and transfer-function models to determine relation of low flows to regional urbanization and precipitation, Rahway River Basin, New Jersey, 1940-91: U.S. Geological Survey Open-File Report 99-257, 24 p.
- Buxton, D.E., Hunchak-Kariouk, K., and Hickman, R.E., 1999, Relations of surface-water quality to stream flow in the Walkkill and upper Delaware River Basins, New Jersey and vicinity, water years 1976-93: U.S. Geological Survey Water-Resources Investigations Report 99-4016, 98 p.
- Carleton, G.B., Welty, C., and Buxton, H.T., 1999, Design and analysis of tracer tests to determine effective porosity and dispersivity in fractured sedimentary rocks, Newark Basin, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 98-4126A, 80 p.
- Cauler, S.J., Carleton, G.B., and Storck, M.J., 1999, Hydrogeology of water withdrawal from, and water levels and chloride concentrations in the major Coastal Plain aquifers of Gloucester and Salem Counties, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 98-4136, 123 p., 6 pl.
- Chang, M., Tasker, G., and Nieswand, S., 2001, Model simulation of the Manasquan water-supply system in Monmouth County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 01-4172, 51 p.
- Charles, E.G., Storck, D.A., and Clawges, R.M., 2001, Hydrology of the unconfined aquifer system, Maurice River area: Maurice and Cohansey River basins, New Jersey, 1994-95: U.S. Geological Survey Water-Resources Investigations Report 01-4229, 5 sheets.
- DeLuca, M.J., Hoppe, H.L., Doyle, H.A., and Gray, B.J., 2002 Water resources data for New Jersey - water year 2001, Volume 3. Water-quality data: U.S. Geological Survey Water-Data Report NJ-01-3, 580 p.
- DeLuca, M.J., Mattes, G.L., Burns, H.L., Thomas, A.M., Gray, B.J., and Doyle, H.A., 2001, Water-resources data for New Jersey - water year 2000, Volume 3, Water-quality data: U.S. Geological Survey Water-Data Report NJ-00-3, 618 p. (year of publication erroneously listed as 2000 in the previous edition of this report)
- DeLuca, M.J., Romanok, K.M., Riskin, M.L., Mattes, G.L., Thomas, A.M., and Gray, B.J., 2000, Water-resources data for New Jersey - water year 1999, Volume 3, Water-quality data: U.S. Geological Survey Water-Data Report NJ-99-3, 517 p.
- Focazio, J.J., Szabo, Z., Kraemer, T.F., Mullin, A.H., Barringer, T.H., and dePaul, V.T., 2001, Occurrence of selected radionuclides in ground water used for drinking water in the United States: A reconnaissance survey, 1998: U.S. Geological Survey Water-Resources Investigations Report 00-4273, 39 p.
- Gibs, J., Gray, B.J., Rice, D.E., Tessler, S., and Barringer, T.H., 2001, Water quality of the Delaware and Raritan Canal, New Jersey, 1998-99: U.S. Geological Survey Water Resources Investigations Report 01-4072, 67 p.
- Gordon, A.D., 2002, Simulation of transient ground-water flow in the valleyfill aquifers of the upper Rockaway River Basin, Morris County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 01-4174, 41 p.
- Hickman, R.E., and Barringer, T.H., 1999, Trends in water quality of New Jersey streams, water years 1986-95: U.S. Geological Survey Water-Resources Investigations Report 98-4204, 174 p.
- Hunchak-Kariouk, K., 2000, Comparisons of water quality during various streamflow conditions in five streams in northern New Jersey, 1982-97: U.S. Geological Survey Water-Resources Investigations Report 01-4249, 50 p.

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

- Hunchak-Kariouk, K., 1999, Relation of water quality to land use in the drainage basins of four tributaries to the Toms River, New Jersey, 1994-95: U.S. Geological Survey Water-Resources Investigations Report 99-4001, 120 p.
- Hunchak-Kariouk, K., Buxton, D.E., and Hickman, R.E., 1999, Relations of surface-water quality to stream flow in the Atlantic Coastal, lower Delaware River, and Delaware Bay Basins, New Jersey, water years 1976-93: U.S. Geological Survey Water-Resources Investigations Report 98-4244, 158 p.
- Jacobsen, E., 2000, Ground-water quality, water levels, and precipitation at the biosolids study site, Lakehurst Naval Air Engineering Station, New Jersey, 1995-97: U.S. Geological Survey Open-File Report 00-197, 61 p.
- Jones, W.D., and Edwards, R.W., 2002, Water resources data for New Jersey - water year 2001, volume 2, Ground-water data: U.S. Geological Survey Water-Data Report NJ-01-2, 232 p.
- Jones, W.D., 2001, Water resources data for New Jersey - water year 2000, volume 2, Ground-water data: U.S. Geological Survey Water-Data Report NJ-00-2, 233 p.
- Jones, W.D., 2000, Water-resources data for New Jersey - water year 1999, Volume 2. Ground-water data: U.S. Geological Survey Water-Data Report NJ-99-2, 233 p.
- Kauffman, L.J., Baehr, A.L., Ayers, M.A., and Stackelberg, P.E., 2001, Effects of land use and travel time on the distribution of nitrate in the Kirkwood-Cohansey aquifer system in southern New Jersey: U.S. Geological Survey Water-Resources Investigations Report 01-4117, 58 p.
- Kennen, J.G., and Ayers, M.A., 2002, Relation of environmental characteristics to the composition of aquatic assemblages along a gradient of urban land use in New Jersey, 1996-98: U.S. Geological Survey Water-Resources Investigations Report 02-4069, 77 p.
- Lacombe, P.J., 2002, Ground-water levels and potentiometric surfaces, Naval Warfare Center, West Trenton, New Jersey, 2000: U.S. Geological Survey Water-Resources Investigations Report 01-4197, 48 p.
- Lacombe, P.J., and Carleton, G.B., 2002, Hydrogeologic framework, availability of water supplies, and saltwater intrusion, Cape May County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 01-4246, 165 p.
- Lacombe, P.J. and Rosman, R., 2001, Water levels in, extent of freshwater in, and water withdrawals from ten confined aquifers, New Jersey and Delaware Coastal Plain, 1998: U.S. Geological Survey Water-Resources Investigations Report 00-4143, 10 sheets.
- Lacombe, P.J., 2000, Hydrogeologic framework, water levels, and trichloroethylene contamination, Naval Air Warfare Center, West Trenton, New Jersey, 1993-97: U.S. Geological Survey Water-Resources Investigations Report 98-4167, 139 p.
- Lewis-Brown, J.C., and Rice, D.E., 2002, Simulated ground-water flow, Naval Air Warfare Center, West Trenton, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 02-4019, 44 p.
- Lewis-Brown, J.C., dePaul, V., 2000, Ground-water flow and distribution of volatile organic compounds, Rutgers University Busch Campus and vicinity, Piscataway Township, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 99-4256, 72 p.
- Long, G.R., Chang, M., Kennen, J.G., 2000, Trace elements and organochlorine compounds in bed sediment and fish tissue at selected sites in New Jersey streams--Sources and effects: U.S. Geological Survey Water-Resources Investigations Report 99-4235, 29 p.
- McAuley, S.D., Barringer, J.L., Paulachok, G.N., Clark, J.S., Zapecza, O.S., 2001, Ground-water flow and quality in the Atlantic City 800-foot sand, New Jersey: New Jersey Department of Environmental Protection Geological Survey Report GSR 41, 86 p.
- Nicholson, R.S., and Watt, M.K., 1998, Simulation of ground-water-flow patterns and areas contributing recharge to streams and water-supply wells in a valley-fill and carbonate-rock aquifer system, southwestern Morris County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 97-4216, 40 p.
- Pope, D.A., and Gordon, A.D., 1999, Simulation of ground-water flow and movement of the freshwater-saltwater interface in the New Jersey Coastal Plain: U.S. Geological Survey Water-Resources Investigations Report 98-4216, 159 p.
- Reed, T.J., White, B.T., Centinaro, G.L., Dudek, J.F., Corcino, V., Spehar, A.B., and Protz, A.R., 2002, Water resources data for New Jersey - water year 2000, Volume 1. Surface-water data: U.S. Geological Survey Water-Data Report NJ-01-1, 297 p.
- Reed, T.J., Centinaro, G.L., Dudek, J.F., Corcino, V., and Steckroat, G.C., 2001, Water resources data for New Jersey - water year 2000, Volume 1. Surface-water data: U.S. Geological Survey Water-Data Report NJ-00-1, 233 p.

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

- Reed, T.J., Centinaro, G.L., Dudek, J.F., Corcino, V., and Steckroat, G.C., 2000, Water-resources data for New Jersey - water year 1999, Volume 1. Surface-water data: U.S. Geological Survey Water-Data Report NJ-99-1, 293 p.
- Reiser, R.G., and Schopp, R.D., 2002, Sparta, New Jersey, flood of August 11-14, 2000: U.S. Geological Survey Investigations Report 02-4099, 95 p.
- Reiser, R.G., and O'Brien, A.K., 1999, Pesticides in streams in New Jersey and Long Island, New York, and relation to land use: U.S. Geological Survey Water-Resources Investigations Report 98-4261, unpaginated.
- Spitz, F.J., 2001, Method and computer programs to improve pathline resolution near weak sinks representing wells in MODFLOW and MODPATH ground-water-flow simulations: U.S. Geological Survey Open-File Report 00-392, 51 p.
- Spitz, F.J., Nicholson, R.S., and Pope, D.A., 2001, A nested rediscritization method to improve pathline resolution by eliminating weak sinks representing wells: Ground Water vol. 39, no. 5, p. 778-785. Geological Survey Open-File Report 01-406, 74 p.
- Spitz, F.J., and Nicholson, R.S., 2001, Simulated effects of alternative pumping strategies on ground-water-flow patterns and areas contributing recharge to selected wells near Kenvil, Morris County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 01-4180, 32 p.
- Stackelberg, P.E., Kauffman, L.J., Baehr, A.L., and Ayers, M.A., 2000, Comparison of nitrate, pesticides, and volatile organic compounds in samples from monitoring and public-supply wells, Kirkwood-Cohansey aquifer system, southern New Jersey: U.S. Geological Survey Water-Resources Investigations Report 00-4123, 78 p.
- Storck, D.A., and Nawyn, J.P., 2001, Reconstruction of streamflow records in the Passaic and Hackensack River Basins, New Jersey and New York, water years 1993-96: U.S. Geological Survey Water-Resources Investigations Report 01-4078, 95 p.
- Walker, R.L., 2001, Effects of pumping on ground-water flow near water-supply wells in Lower Potomac-Raritan-Magothy aquifer, Pennsauken Township, Camden County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 00-4012, 12 p.
- Watt, M.K., 2001, A hydrologic primer for New Jersey watershed management: U.S. Geological Survey Water-Resources Investigations Report 00-4140, 116 p.

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

- Baehr, A.L., 1999, Evaluation of the atmosphere as a source of volatile organic compounds in shallow groundwater: Water Resources Research, v. 35, no. 1, p. 127-136.
- Gibs, J., Szabo, Z., Ivahnenko, T., and Wilde, F.D., 2000, Change in field turbidity and trace element concentrations during well purging: Ground Water, v. 38, no.4, p.577-588.
- Ivahnenko, T., Szabo, Z., and Gibs, J., 2001, Changes in sample collection and analytical techniques and effects on retrospective comparability of low-level concentrations of trace elements in ground water: Water Resources, v. 35, no. 15, p. 3611-3624.
- Mast, M.A., and Turk, J.T., 1999, Environmental characteristics and water quality of hydrologic benchmark network stations--McDonalds Branch in Lebanon State Forest, New Jersey, *in* Environmental characteristics and water quality of hydrologic benchmark network stations in the eastern United States, 1963-95: U.S. Geological Survey Circular 1173-A, p. 63-71.
- Spitz, F.J., Nicholson, R.S., and Pope, D.A., 2001, A nested rediscritization method to improve pathline resolution by eliminating weak sinks representing wells: Ground Water vol. 39, no. 5, p. 778-785
- Szabo, Z., Oden, J.H., Gibs, J., Rice, D.E., and Ding Yuan, 2002, Variation in aluminum, iron, and particle concentrations in oxic ground-water samples by use of tangetial-flow ultrafiltration with low-flow sampling, in Jensen, J.L., and Burggraf, L.W., eds., Chemical and biological early warning monitoring for water, food, and ground: Proceedings of SPIE, November 1-2, 2001, v. 4575, 42-61
- Szabo, Z., Focazio, M.J., Landmeyer, J.E., Senior, L.A., Ayotte, J.D., dePaul, V.T., Oden, T.D., and Kozar, M.D., 2001, Naturally occurring radionuclides in ground water in the Appalachian Physiographic Province
- WATER-RELATED FACT SHEETS FOR NEW JERSEY COMPLETED BY THE GEOLOGICAL SURVEY IN RECENT YEARS**
- Fischer, J.M., 1999, National Water-Quality Assessment Program, Delaware River Basin: U.S. Geological Survey Fact Sheet FS-056-99.
- Jones, W.D., Navoy, A.S., Pope, D.A., 2002, Real-time ground-water-level monitoring in New Jersey, 2001: U.S. Geological Survey Fact Sheet FS-011-02, unpaginated.
- Modica, E., 1999, Source and age of ground-water seepage to streams: U.S. Geological Survey Fact Sheet FS-063-99, unpaginated.

WATER-RELATED FACT SHEETS FOR NEW JERSEY COMPLETED BY THE GEOLOGICAL SURVEY IN RECENT YEARS--CONTINUED

Reiser, R.G., and Schopp, R.D., 2001, Sparta, New Jersey, flood of August 11-14, 2000: U.S. Geological Survey Fact Sheet FS-104-01, unpaginated.

ACCESS TO USGS WATER DATA

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

<http://water.usgs.gov>

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (see address on the back of the title page).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Definitions of common terms such as algae, water level, and precipitation are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting inch/pound units to International System (SI) units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP 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.

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. (See also "Biomass" and "Dry weight")

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. 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.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. 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. (See also "Substrate")

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 xC for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²). (See also "Biomass" and "Dry mass")

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typi-

cally spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas 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.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 foot) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. 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 mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) 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. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved solids content of the pore water and lithology and porosity of the rock.

Cells/volume refers to the number of cells of any organism that 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 volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (mm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere $\frac{4}{3} \pi r^3$ cone $\frac{1}{3} \pi r^2 h$ cylinder $\pi r^2 h$.

π (p) is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

From cell volume, total algal biomass expressed as biovolume (mm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cfs-day (See "Cubic foot per second-day")

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

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. [See also "Biochemical oxygen demand (BOD)"]

***Clostridium perfringens* (*C. perfringens*)** is a spore-forming bacterium that is common in the feces of human and other warmblooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

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

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

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

Cubic foot per second (CFS, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to

approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft³/s)/d]) 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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, (ft³/s)/mi²] 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. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Sediment" and "Suspended-sediment concentration")

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

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

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

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. (See also "Phytoplankton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or **flow**, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It 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, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the

sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105°C, 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. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65°C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

Enterococcus bacteria are commonly found in the feces of humans and other warmblooded 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 that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41°C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5°C on mTEC medium (nutrient medium for bacterial growth). Their concentrations

are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) concentration value is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Euglenoids (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatiles and extractable by ethyl acetate from air-dried streambed sediment. 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 streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are 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. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that 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. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th per-

centile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

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

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatiles organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

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. (See also "Phytoplankton")

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually

included. Measurements of habitat are typically made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

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

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \text{sum} \frac{(n)(a)}{N}$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

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

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. [Note: In several previous NWQL documents (NWQL Technical Memorandum 98.07, 1998), the LRL was called the nondetection value or NDV—a term that is no longer used.]

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

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L}$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o}$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

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

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

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

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

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

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

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

Micrograms per gram (UG/G, mg/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 kilogram (UG/KG, mg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, mg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, mS/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 water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

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

Multiple-plate samplers are artificial substrates of

known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See NOAA web site: <http://www.ngs.noaa.gov/faqs.html#WhatVD29VD88> (See "North American Vertical Datum of 1988")

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

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or volatile mass of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

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

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

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedimentograph) 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, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows

Classification	Size (mm)	Method of Analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation/sieve
Gravel	2.0 - 64.0	Sieve
Cobble	64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, 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.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** 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, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

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

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

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected,

in part, by the hydrogen-ion activity of water.

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 commonly are known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 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. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

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

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photo-synthetic 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 (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. The carbon method defines 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 with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. The oxygen method defines 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. (See also "Primary productivity")

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable from bed (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. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum

peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment 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 affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of pre-cipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also "Annual 7-day minimum" and "Recurrence interval")

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

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. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at $105 \times C$; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at $25^{\circ}C$. Specific electrical conductance is a function of the types and quantity of dissolved substances in water 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.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to

evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

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

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.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

- 0 no gravel or larger substrate
- 1 > 75 percent
- 2 51-75 percent
- 3 26-50 percent
- 4 5-25 percent
- 5 < 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) 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 defined operationally as 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 suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolu-

tion 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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

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 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. 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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by dif-

ference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Suspended solids, total residue at 105°C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

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

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

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

Kingdom:	Animal
Phylum:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (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, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) 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 at least 95 percent of the constituent in the sample.)

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 warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that 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 milliliters of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. 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 judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended

load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Total sediment load or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-sediment load," and "Total load")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS

include those that conform to U.S. EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Vertical datum (See "Datum")

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

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS 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, 2002, is called the "2002 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.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are 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. (See also "Plankton")

SELECTED REFERENCES

- Anderson, P.W., and George, J.R., 1966, Water-quality characteristics of New Jersey streams: U.S. Geological Survey Water-Supply Paper 1819-G, 48 p.
- Ayers, M.A., and Pustay, E.A., 1988, New Jersey ground-water quality: in National Water Summary 1986, U.S. Geological Survey Water Supply Paper 2325, p. 369-376.
- Fusillo, T.V., Hochreiter, J.J., Jr., and Lord, D.G., 1984, Water-quality data for the Potomac-Raritan-Magothy aquifer system in southwestern New Jersey, 1923-83: U.S. Geological Survey Open-File Report 84-737, 127 p, 1 plate.
- Hem, J.D., 1985, Study and interpretation of the chemical characteristics of natural water, 3d ed.: U.S. Geological Survey Water-Supply Paper 2254, 263 p.
- Langbein, W.B., and Iseri, K.T., 1960, General introduction of hydrologic definitions: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.
- New Jersey Department of Environmental Protection, 1996, New Jersey geographic information system: Trenton, N.J., CD-ROM series 1, v.2.
- Rantz, S.E., and others, 1982, Measurement and computation of streamflow; Volume 1. Measurement of stage and discharge, Volume 2. Computation of Discharge: U.S. Geological Survey Water-Supply Paper 2175, 631 p.

- Rooney, J.G., 1971, Ground-water resources, Cumberland County, New Jersey: New Jersey Department of Environmental Protection Special Report 34, 83 p.
- Schaefer, F.L., 1983, Distribution of chloride concentrations in the principal aquifers of the New Jersey Coastal Plain, 1977-81: U.S. Geological Survey Water-Resources Investigations Report 83-4061, 56 p.
- Schaefer, F.L., 1987, Selected literature on the water resources of New Jersey by the U.S. Geological Survey, through 1986: U.S. Geological Survey Open-File Report 87-767, 45 p.
- Schopp, R.D., and Bauersfeld, W.R., 1986, New Jersey surface-water resources: in National Water Summary 1985 - Hydrologic events and surface-water resources, U.S. Geological Survey Water-Supply Paper 2300, p. 335-340.
- Seaber, P.R., 1963, Chloride concentrations of water from wells in the Atlantic Coastal Plain of New Jersey, 1923-61: New Jersey Division of Water Policy and Supply, Special Report 22, 250 p.
- Shelton, T.B., Interpreting drinking water quality analysis, Rutgers Cooperative Extension booklet, 63 p.
- U.S. Environmental Protection Agency, 1996, Drinking water regulations and health advisories: Office of Water, Washington, D.C., EPA 822-R-96-001, 16 p.

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

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

Reports in the Techniques of Water-Resources Investigations series, which are listed below, are online at <http://water.usgs.gov/pubs/twri/>. Printed copies are for sale by the USGS, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office), telephone 1-888-ASK-USGS. Please telephone 1-888-ASK-USGS for current prices, and refer to the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations." Products can then be ordered by telephone, or online at <http://www.usgs.gov/sales.html>, or by FAX to (303)236-469 of an order form available online at <http://>

mac.usgs.gov/isb/pubs/forms/. Prepayment by major credit card or by a check or money order payable to the "U.S. Geological Survey" is required.

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

- 1-D1. *Water temperature—Influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.

- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow -- Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation**Section A. Statistical Analysis**

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.
- 4-A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS–TWRI book 4, chap. A3. 1991. Available only online at <http://water.usgs.gov/pubs/twri/twri4a3/>. (Accessed August 30, 2002.)

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis**Section A. Water Analysis**

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*,

edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.

- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

- 5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques**Section A. Ground Water**

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 p.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain

and Eliezer J. Wexler: USGS–TWRI book 6, chap. A5, 1996. 125 p.

- 6-A7. User's guide to *SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

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

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

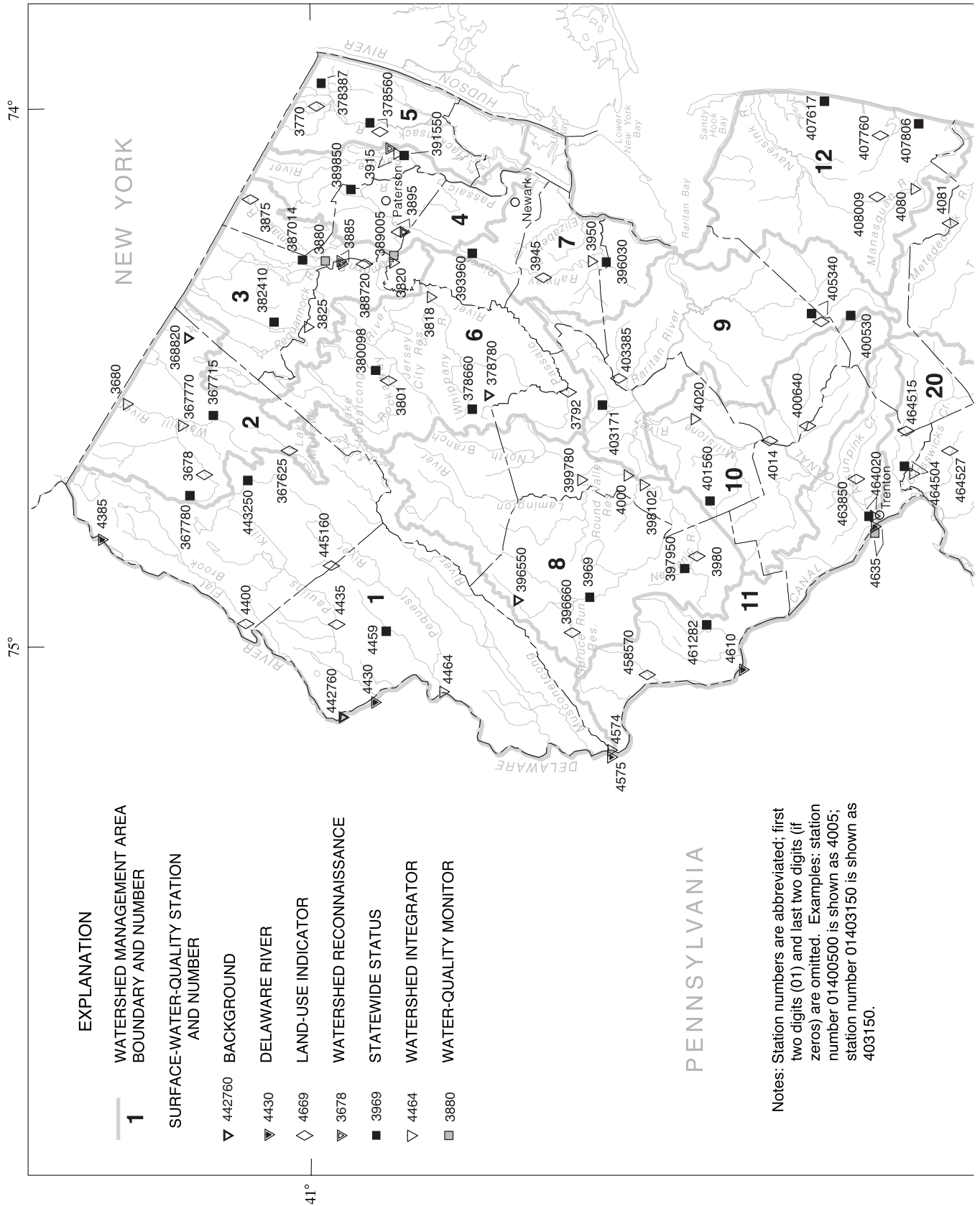
- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for*

Water Sampling, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.
- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.



01409815 West Branch Wading River at Maxwell
Undeveloped Land Use Indicator Station
Ambient Stream Monitoring Network
(file photograph, U.S. Geological Survey, West Trenton, New Jersey)



EXPLANATION

1 WATERSHED MANAGEMENT AREA BOUNDARY AND NUMBER

▽ 442760 SURFACE-WATER-QUALITY STATION AND NUMBER

▽ 4430 BACKGROUND

◇ 4669 DELAWARE RIVER

▽ 3678 LAND-USE INDICATOR

■ 3969 WATERSHED RECONNAISSANCE

▽ 4464 STATEWIDE STATUS

□ 3880 WATERSHED INTEGRATOR

□ 3880 WATER-QUALITY MONITOR

Notes: Station numbers are abbreviated; first two digits (01) and last two digits (if zero) are omitted. Examples: station number 01400500 is shown as 4005; station number 01403150 is shown as 403150.

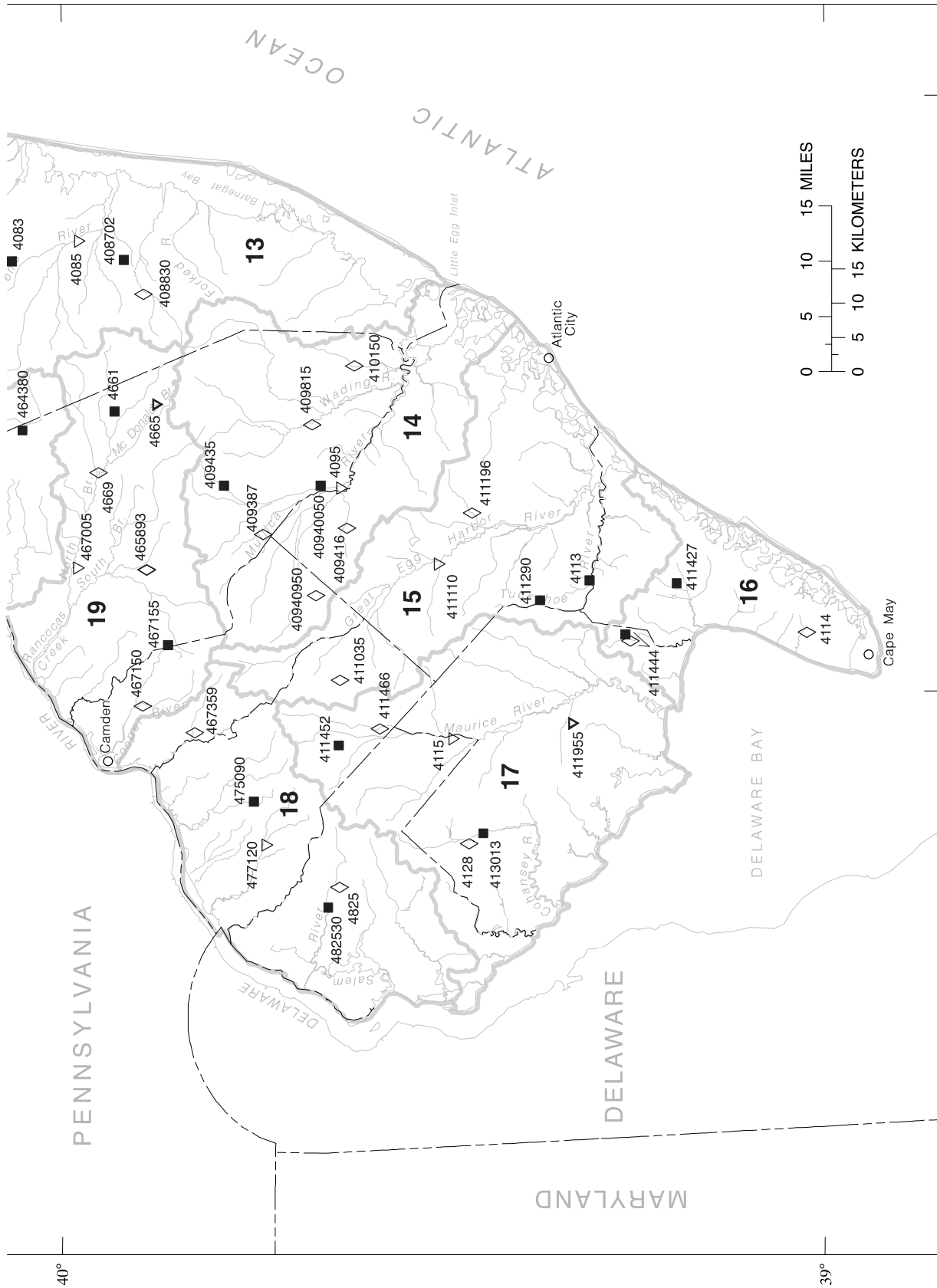


Figure 12. Locations and types of surface-water quality stations.

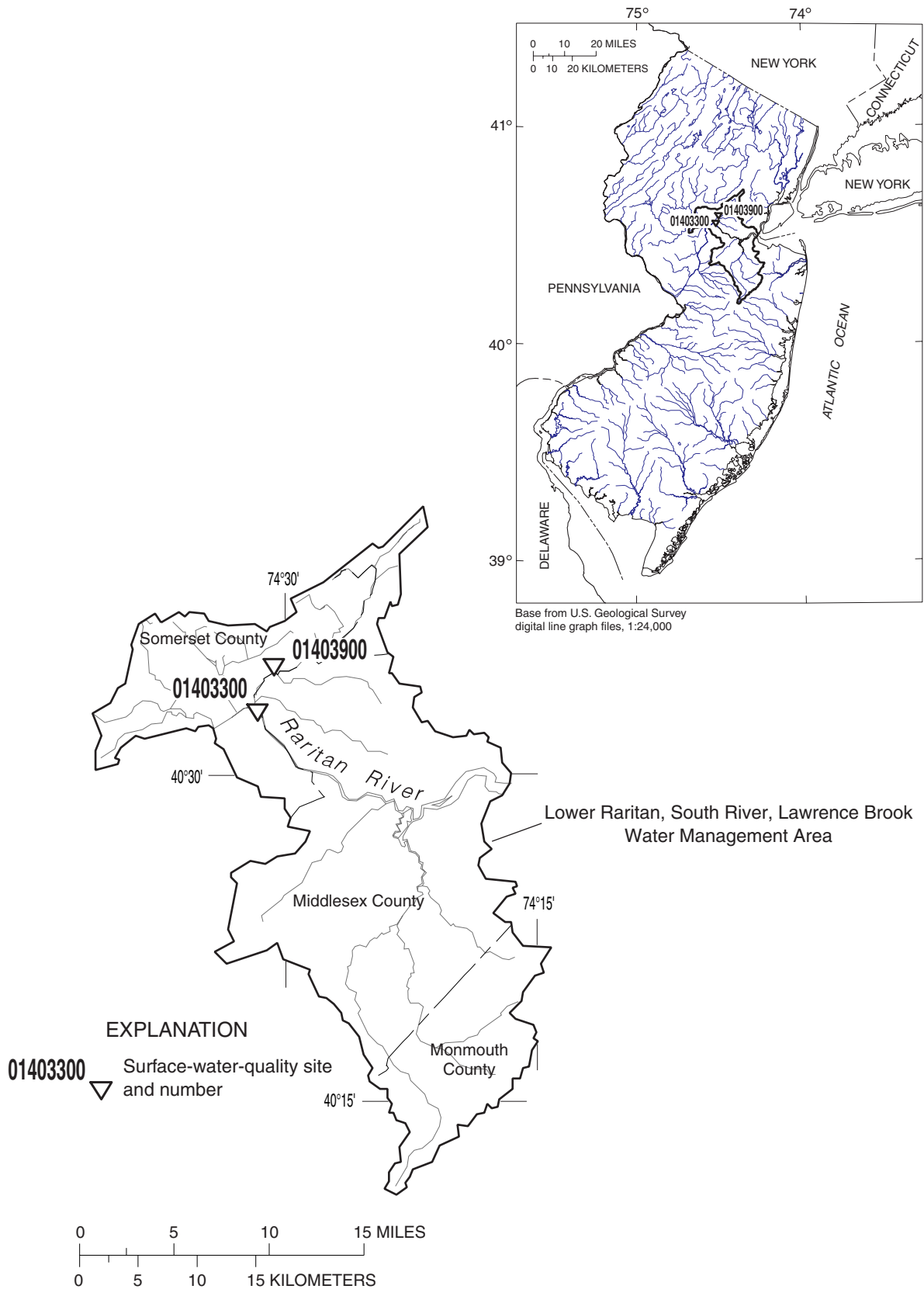


Figure 13. Location of stations in the Long Island-New Jersey National Water-Quality Assessment Program, surface-water low-intensity-phase network, water year 2002.



Figure 14. Location of the stations in the Delaware River National Water-Quality Assessment Program, surface-water fixed station network, water year 2002.

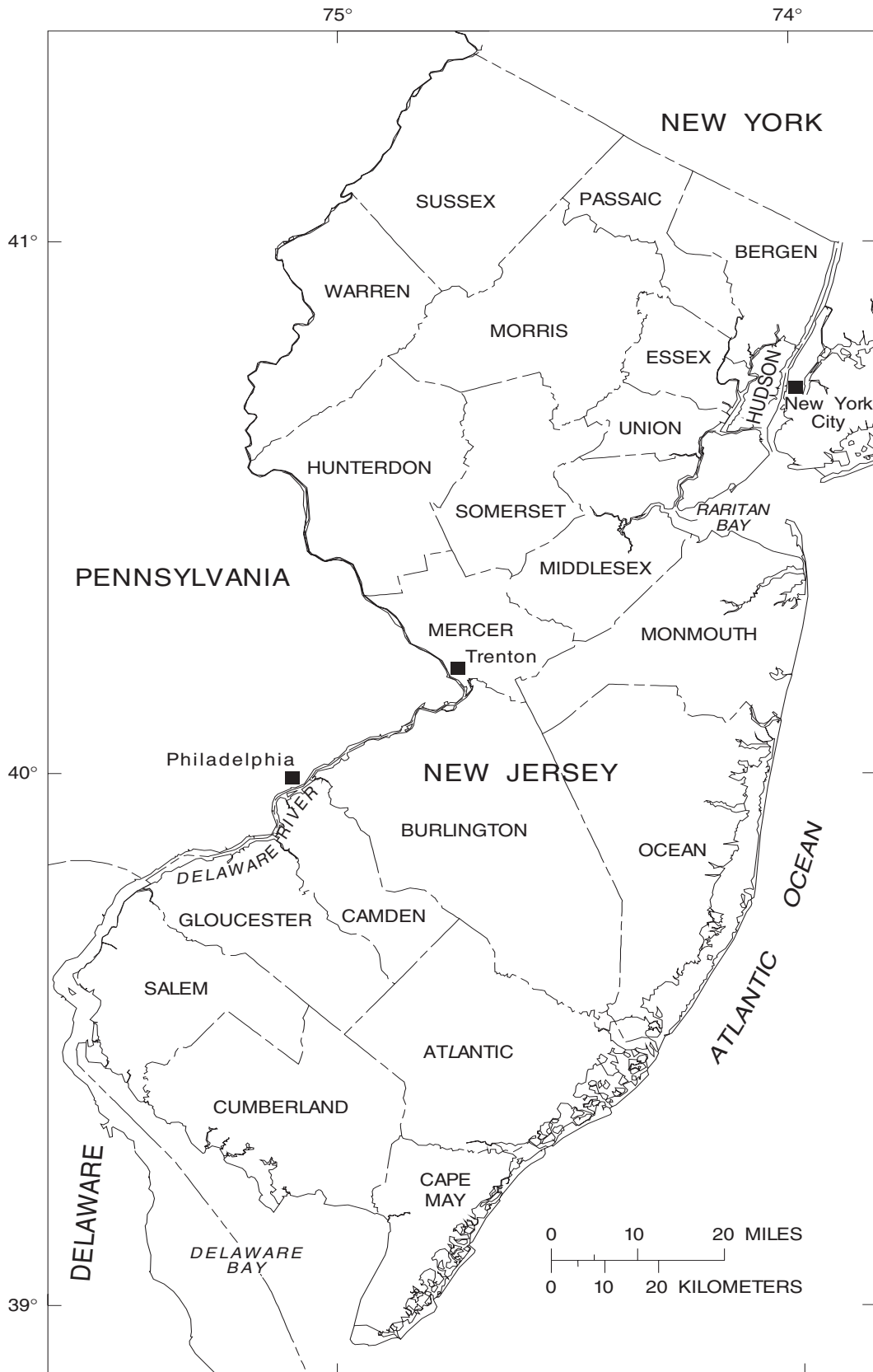


Figure 15. Counties in New Jersey.

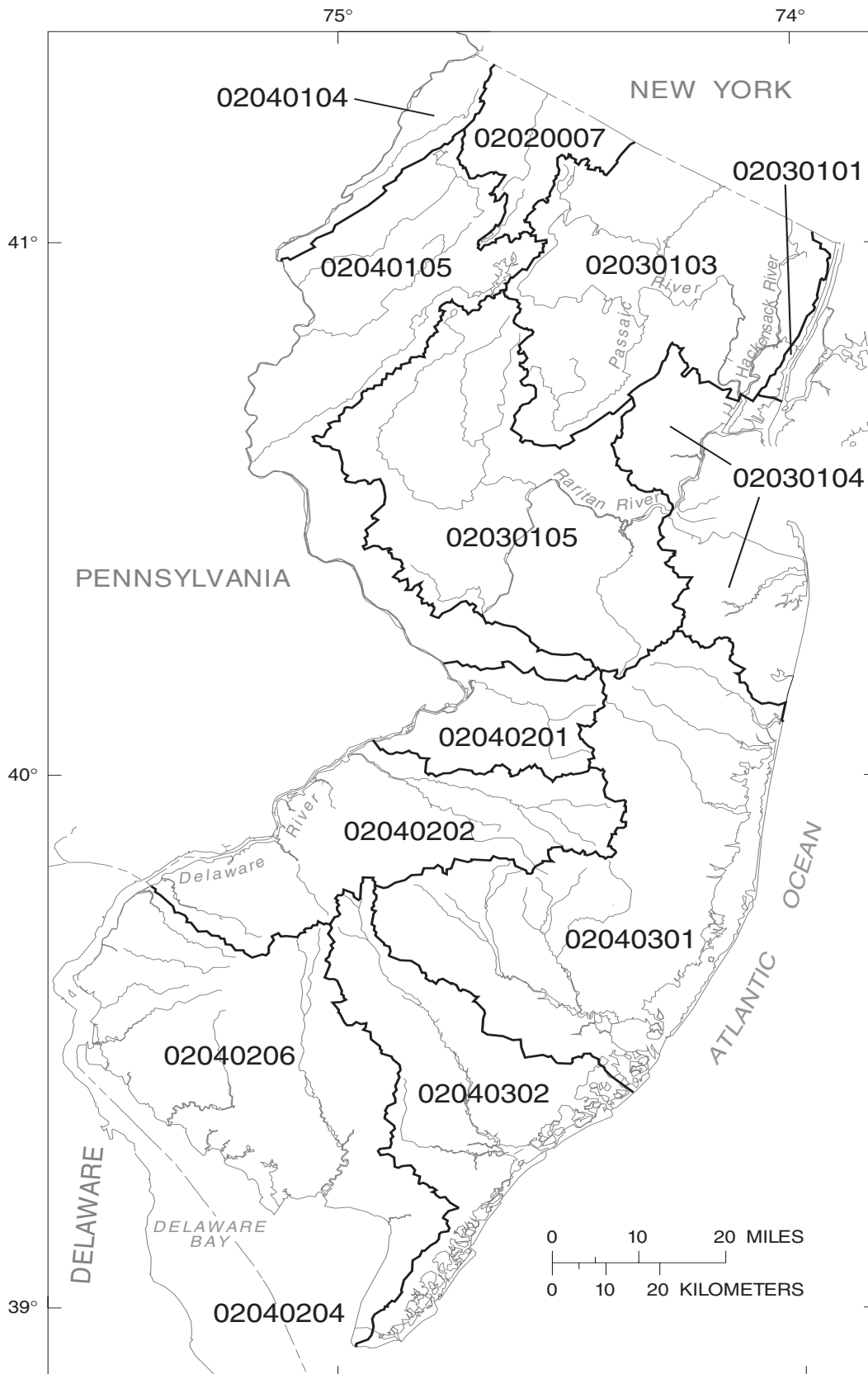


Figure 16. Cataloging units and codes in New Jersey. (Modified from Seaber and others, 1987)

01367625 WALLKILL RIVER AT SPARTA, NJ

LOCATION.--Lat 41°02'25", long 74°37'48", Sussex County, Hydrologic Unit 02020007, 0.4 mi northeast of Sparta, 1.2 mi downstream of outlet of Lake Mohawk, and 1.8 mi east of Fox Hollow Lake.

DRAINAGE AREA.--5.88 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DATE							CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDEED (MG/L) (00530)					
NOV 28...	1310	1.6	1.4	.059	.041	758		102	11.3	8.1	857	18.0	10.5	240
FEB 14...	1240	3.6	1.6	.051	.036	751		110	14.5	8.3	818	6.0	3.0	210
JUN 13...	1500	9.5	3.4	.070	.051	729		--	--	8.1	658	20.0	21.0	170
AUG 06...	1140	.87	1.6	.060	.045	743		96	8.8	8.1	783	24.0	18.0	250
NOV 28...	56.8	24.1	1.94	71.1	174	152		.2	10.8	18.5	480	447	<.030	.15
FEB 14...	50.0	20.8	1.51	70.4	145	151		E.1	4.8	21.6	422	410	<.030	.24
JUN 13...	39.9	17.4	1.56	57.1	126	115		.1	3.1	18.2	388	330	.030	.34
AUG 06...	58.4	25.4	2.26	57.1	198	125		.1	10.2	14.9	440	418	<.030	.19
NOV 28...	<.030	1.40	.008	1.6	.06	.008		--	.016	.3	<.1	2.4	.3	<1.1
FEB 14...	<.030	.61	.007	.85	.04	.011		<.020	.018	.4	<.1	2.6	.4	E1.8
JUN 13...	.040	.35	.014	.69	.12	.026		<.020	.045	1.5	<.1	3.5	1.5	<1.2
AUG 06...	<.030	1.27	.003	1.5	.07	.043		.037	.056	.5	<.1	2.1	.5	<1.0
NOV 28...								30						2
FEB 14...								30						7
JUN 13...						5.70		20						8
AUG 06...						.800		30						<1

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01367625 WALLKILL RIVER AT SPARTA, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)
MAY					JUN				
08...	1105	<20	<100	<10	05...	1107	80	<100	90
15...	1100	300	<100	240					
22...	1120	20	<100	10					
29...	1052	40	<100	170					

Remark codes used in this report:
 < -- Less than

01367715 WALLKILL RIVER AT SCOTT ROAD, AT FRANKLIN, NJ

LOCATION.--Lat 41°08'00", long 74°34'44", Sussex County, Hydrologic Unit 02020007, at bridge on on Scott Road, 1.2 mi north of Franklin, 1.7 mi south of Hamburg, and 3.4 mi downstream of Franklin Pond.

DRAINAGE AREA.--40.6 mi².

PERIOD OF RECORD.--Water years 1999, 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 07...	0800	2.2	.086	.065	747	85	10.4	8.0	632	--	6.0	230	50.3
FEB 06...	0830	4.0	.088	.065	752	86	12.4	7.7	784	-3.0	.0	210	50.3
MAY 23...	0745	4.1	.145	.109	751	87	9.0	7.6	412	5.0	13.0	130	30.8
AUG 07...	0730	2.6	.152	.113	750	66	5.8	8.0	671	10.0	20.5	230	53.8
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 07...	26.0	2.04	32.7	202	69.5	E.1	8.0	19.5	334	330	.040	.24	.050
FEB 06...	21.0	1.60	58.3	155	116	.2	7.1	29.4	390	379	.070	.30	.100
MAY 23...	11.9	.95	32.9	95	62.5	<.1	4.6	15.9	223	217	<.030	.27	<.030
AUG 07...	23.7	2.21	44.8	200	92.3	.2	9.3	13.5	406	361	<.030	.35	<.030
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 07...	.23	<.003	.46	.06	.005	--	.013	.6	<.1	3.7	.6	3.2	--
FEB 06...	.49	.007	.78	.03	E.002	<.020	.015	.4	<.1	3.1	.4	<1.0	--
MAY 23...	.16	.003	.43	.07	.009	<.020	.024	1.0	<.1	4.2	1.0	E1.8	2.70
AUG 07...	.27	<.003	.62	.03	.029	.039	.042	.4	<.1	5.3	.4	E2.1	2.30

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01367715 WALLKILL RIVER AT SCOTT ROAD, AT FRANKLIN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
NOV	07...													
FEB	06...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	06...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	E.2
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)					
FEB	06...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2					

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	23...	<.006	<.004	<.005	.007	<.010	<.041	<.005	<.018	<.003	E.004	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

HUDSON RIVER BASIN

01367715 WALLKILL RIVER AT SCOTT ROAD, AT FRANKLIN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 23...	<.004	<.035	E.007	<.050	E.003	<.006	<.007	<.022	E.01	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 23...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
08...	1033	1100	<100	70	05...	1035	300	300	170
15...	1028	1100	400	660					
22...	1100	40	<100	40					
29...	1018	500	400	240					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

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, 0.6 mi upstream from Papakating Creek, 1.7 mi southwest of Independence Corner, and 2.0 mi southeast of Sussex.

DRAINAGE AREA.--60.8 mi².

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 28...	1040	--	6.9	.152	.114	758	88	10.0	7.6	608	15.0	9.5	240
FEB 20...	1000	7.3	2.4	.082	.063	752	110	14.0	7.9	720	9.5	4.5	230
JUN 04...	1220	47	4.0	.172	.130	756	93	8.6	7.8	564	--	18.5	180
AUG 13...	1140	6.5	3.0	.120	.092	756	73	6.1	7.7	917	--	24.0	270

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 28...	55.5	24.7	3.39	40.0	192	84.0	.1	8.0	29.3	390	365	<.030	.38
FEB 20...	52.2	23.5	2.85	51.0	169	103	E.1	4.3	29.8	384	380	<.030	.35
JUN 04...	44.4	17.8	1.85	37.4	159	72.3	.1	6.7	16.4	343	296	.020	.40
AUG 13...	61.3	29.5	8.28	69.6	215	128	.1	7.9	24.7	514	481	.050	.51

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 28...	<.030	1.02	.010	1.4	<.02	.023	--	.058	<.1	<.1	5.0	<.1	E1.9
FEB 20...	.030	2.72	.027	3.1	.02	.015	<.020	.033	.4	<.1	3.5	.3	E1.1
JUN 04...	.050	.71	.010	1.1	.08	.036	.025	.054	.6	<.1	4.8	.6	E1.5
AUG 13...	.040	4.78	.046	5.3	.07	.074	.056	.089	.4	<.1	4.0	.4	<1.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

HUDSON RIVER BASIN

01367770 WALLKILL RIVER NEAR SUSSEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)
NOV 28...	--	30	4
FEB 20...	--	30	4
JUN 04...	1.70	30	11
AUG 13...	1.50	90	4

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
08...	1010	110	40	<100	05...	1010	80	100	60
15...	1050	230	100	280					
22...	1010	110	100	40					
29...	0950	500	500	450					

Remark codes used in this report:
< -- Less than

01367780 PAPAKATING CREEK NEAR WYKERTOWN, NJ

LOCATION.--Lat 41°10'00", long 74°43'38", Sussex County, Hydrologic Unit 02020007, at bridge at intersection of County Route 629 and Gunn Road, 0.7 mi north of intersection of County Routes 629 and 519, 1.5 mi southwest of Wykertown, and 1.7 mi northeast of Culvers Lake.

DRAINAGE AREA.--1.99 mi².

PERIOD OF RECORD.--Water years 1999, 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TURBIDITY FIELD WATER UNFLTRD (61028)	UV ABSORBANCE 254 NM, WTR FLT (50624)	UV ABSORBANCE 280 NM, WTR FLT (61726)	BAROMETRIC PRESURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WHOLE FIELD ARD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL AS CaCO3 (00900)	CALCIUM DISSOLVED AS Ca (00915)
DEC 12...	1100	.6	.067	.050	760	101	13.7	7.7	378	5.0	2.5	120	38.6
FEB 13...	1100	.8	.064	.048	748	102	14.2	7.6	384	2.0	1.0	110	35.2
MAY 29...	1045	4.0	.187	.146	750	105	9.9	7.6	306	20.0	17.5	84	27.1
AUG 07...	1030	.9	.108	.080	745	87	8.2	8.0	430	23.0	17.0	130	42.5
DATE		MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC SODIUM, UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, AMMONIA + DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00610)
DEC 12...	5.48	2.72	20.5	62	59.0	E.1	6.2	25.1	220	196	<.030	.21	<.030
FEB 13...	5.23	1.87	26.2	42	62.5	<.1	4.4	36.7	208	198	<.030	.16	.500
MAY 29...	4.09	1.25	22.6	49	51.2	E.1	3.7	15.1	182	155	<.030	.33	.040
AUG 07...	6.04	1.81	29.6	80	76.4	E.1	11.3	10.3	264	229	<.030	.22	<.030
DATE		NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORGANIC + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	CHLOROPHYLL A FLUOREMETRIC METHOD CORR. (UG/L) (32209)
DEC 12...	.18	<.003	.39	.05	.010	--	.015	.3	<.1	2.7	.3	E1.6	--
FEB 13...	.26	<.003	.42	.03	.007	<.020	.012	.3	<.1	2.5	.3	<1.0	--
MAY 29...	.13	.005	.46	.12	.030	<.020	.060	.8	<.1	4.6	.8	E1.6	7.20
AUG 07...	.51	<.003	.73	.03	.049	.053	.053	.3	<.1	3.4	.3	E1.1	.600

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

HUDSON RIVER BASIN

01367780 PAPAKATING CREEK NEAR WYKERTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL											
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)											
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)
DEC	12...							10					2
FEB	13...							<13					<1
MAY	29...							E12					10
AUG	07...							E11					<1

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	13...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
FEB	13...				METHYL CHLORIDE UNFLTRD REC (UG/L)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL CHLORIDE TOTAL (UG/L)	
					(34423)	(85795)	(77135)	(77128)	(34475)	(34010)	(39180)	(34488)	(39175)	
FEB	13...				<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2	

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED REC (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED REC (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED REC (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	29...	<.006	<.004	<.005	.009	<.010	<.041	<.005	<.018	<.003	E.006	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01367780 PAKATING CREEK NEAR WYKERTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LIN- URON WATER	MALA- THION, DIS-	METHYL AZIN- PHOS WAT FLT	METO- LACHLOR WATER	METRI- BUZIN SENCOR WATER	NAPROP- AMIDE WATER	PENDI- METH- ALIN WAT FLT	PRO- METON, WATER, DISS,	PRO- PANIL WATER FLTRD	SI- MAZINE, WATER, DISS,	TEBU- THIURON WATER FLTRD	TER- BACIL WATER FLTRD	
	0.7 U SOLVED (UG/L) (39341)	0.7 U SOLVED (UG/L) (39532)	0.7 U SOLVED (UG/L) (82686)	0.7 U DISSOLV (UG/L) (39415)	0.7 U DISSOLV (UG/L) (82630)	0.7 U GF, REC (UG/L) (82684)	0.7 U GF, REC (UG/L) (82683)	0.7 U DISS, REC (UG/L) (04037)	0.7 U GF, REC (UG/L) (82679)	0.7 U DISS, REC (UG/L) (04035)	0.7 U GF, REC (UG/L) (82670)	0.7 U GF, REC (UG/L) (82665)	
MAY 29...	<.004	<.035	<.027	<.050	E.006	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 29...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
08...	1115	40	200	100	05...	1115	130	800	90
15...	1120	170	<100	90					
22...	1053	40	100	100					
29...	1118	500	200	250					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

HUDSON RIVER BASIN

01367800 PAPAKATING CREEK AT PELLETOWN, NJ

LOCATION.--Lat 41°09'45", long 74°40'31", Sussex County, Hydrologic Unit 02020007, at bridge on County Route 565 in Pelletown, 1.5 mi southeast of Wykertown, and 4.8 mi upstream of confluence with West Branch.

DRAINAGE AREA.--15.8 mi².

PERIOD OF RECORD.--Water years 1959-63, 1999 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE OF (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV	20...	1150	2.1	1.7	.059	.046	746	103	12.4	7.8	458	16.5	6.5	180
FEB	20...	1210	3.6	1.3	.065	.049	750	112	14.2	7.9	472	14.0	4.5	160
JUN	13...	1310	12	17	.237	.179	729	--	--	7.8	353	--	18.0	110
AUG	22...	1110	.85	3.5	.091	.069	755	117	10.5	8.2	487	27.5	20.0	190

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	
NOV	20...	59.1	7.93	1.54	17.2	144	42.1	<.1	7.6	34.2	276	262	<.030	.15
FEB	20...	53.6	7.47	1.65	24.3	85	54.0	<.1	5.6	58.0	274	258	.030	.16
JUN	13...	35.9	5.07	1.25	22.2	83	44.8	.1	8.5	17.4	226	188	.040	.43
AUG	22...	63.9	8.41	2.20	18.3	145	40.0	E.1	9.4	33.6	276	269	<.030	.24

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV	20...	<.030	1.29	<.003	1.4	.05	.007	--	.013	.2	<.1	2.0	.2	<1.0
FEB	20...	<.030	.56	.005	.72	<.02	.006	<.020	.010	.3	<.1	2.4	.3	<1.0
JUN	13...	.040	.63	.004	1.1	.08	.034	<.020	.060	.6	<.1	6.3	.6	E1.6
AUG	22...	<.030	1.32	.054	1.6	.11	.029	.063	.045	.7	<.1	3.1	.6	E1.1

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01367800 PAPA KATING CREEK AT PELLET TOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A FLUORO-METRIC METHOD			RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED								
DATE		CORR. (UG/L) (32209)			(UG/L) AS B (01020)			(MG/L) (00530)					
NOV 20...		--			<13			5					
FEB 20...		--			E10			7					
JUN 13...		2.10			10			17					
AUG 22...		16.3			10			6					

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)	
AUG	22...	1110	<13	13.2	<.06	13	<.04	<.8	1.0	220	<1	83.1	<.01	<1

DATE		SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
AUG 22...		E.2	<.05	2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
08...	1030	80	200	50	05...	1030	1700	1200	290
15...	1035	230	200	200					
22...	1115	80	100	200					
29...	1010	1300	1500	1300					

Remark codes used in this report:
< -- Less than
E -- Estimated value

HUDSON RIVER BASIN

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'56", Sussex County, New Jersey, Hydrologic Unit 02020007, at bridge on Quarryville-Milton Road, 2.0 mi south of New York-New Jersey State line, 3.0 mi south of Unionville.

DRAINAGE AREA.--140 mi².

PERIOD OF RECORD.--Water years 1963-78, 1991-97, and 2001 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 20...	0940	14	7.2	.116	.090	746	95	11.3	7.5	646	7.5	7.0	230
FEB 12...	1200	68	7.3	.094	.070	749	102	13.8	7.9	608	5.0	2.0	180
JUN 04...	1000	175	19	.242	.182	756	73	6.8	7.1	437	19.0	18.0	140
AUG 13...	0920	62	6.5	.150	.111	755	98	8.0	7.9	644	--	25.0	200

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 20...	53.8	22.7	2.90	38.3	204	78.5	E.1	4.4	25.3	360	354	.060	.33
FEB 12...	48.3	15.1	2.36	40.2	114	85.6	E.1	4.6	44.1	342	315	<.030	.33
JUN 04...	37.3	11.5	1.55	30.1	109	57.6	E.1	6.5	21.2	280	233	.030	.47
AUG 13...	49.2	19.8	4.59	45.2	162	87.3	.1	3.5	20.0	351	333	<.030	.40

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 20...	.050	1.25	.005	1.6	.08	.020	--	.045	.5	<.1	3.8	.5	<1.0
FEB 12...	<.030	1.44	.010	1.8	.06	.014	<.020	.029	.8	<.1	3.6	.8	<1.0
JUN 04...	.070	.40	.012	.86	.12	.038	.022	.080	1.3	<.1	6.0	1.3	<1.2
AUG 13...	<.030	1.37	.024	1.8	.22	.034	<.020	.067	1.2	<.1	4.2	1.2	2.2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A		RESIDUE	
		FLUORO-METRIC METHOD		BORON, DIS-SOLVED	
DATE		CORR. (UG/L) (32209)		(UG/L) AS B (01020)	
				TOTAL AT 105 DEG. C, SUS-PENDEED (MG/L) (00530)	
NOV 20...		--		30	10
FEB 12...		--		20	11
JUN 04...		2.30		20	26
AUG 13...		30.9		<13	10

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)
AUG	13...	E2	28.5	<.06	48	<.04	<.8	1.7	290	<1	140	<.01	3

		SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)		SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)		ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	
DATE							
AUG 13...		E.3		<.05		9	

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)
MAY					JUN				
08...	0950	80	300	10	05...	0945	110	<100	60
15...	1110	1300	1500	600					
22...	1050	130	300	20					
29...	0930	5000	2400	570					

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

HUDSON RIVER BASIN

01368820 DOUBLE KILL AT WAWAYANDA, NJ

LOCATION.--Lat 41°11'13", long 74°25'13", Sussex County, Hydrologic Unit 02020007, 1,500 ft east of Wawayanda, 0.4 mi downstream of Wawayanda Lake, 3.5 mi east of Vernon, and 4.6 mi upstream of Wawayanda Creek.

DRAINAGE AREA.--6.46 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). This station was sampled only three times in water year 2002 because of no-flow conditions in the August-September sampling period.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTDR (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
DEC 17...	1050	.44	2.1	.067	.053	733	73	9.5	7.0	236	4.0	3.0	97
FEB 14...	0950	3.5	1.3	.122	.088	739	97	13.2	6.9	260	-1.0	1.5	66
JUN 13...	1030	9.2	1.4	.172	.128	729	--	--	7.8	264	15.0	21.5	66
DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTDR SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC 17...	26.9	7.27	1.36	6.62	77	10.6	E.1	13.1	24.9	128	138	<.030	.13
FEB 14...	16.7	5.87	1.01	20.5	49	38.8	E.1	3.5	11.5	132	127	<.030	.26
JUN 13...	16.6	5.86	.77	22.5	50	44.1	.13	1.4	8.3	156	129	<.030	.33
DATE	TIME	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 17...		<.030	.17	<.003	.30	.005	--	.015	.3	<.1	1.9	.3	<1.1
FEB 14...		<.030	<.04	<.003	--	.006	<.020	.022	.9	<.1	5.3	.9	2.3
JUN 13...		.030	E.02	<.003	--	.011	<.020	.022	.5	<.1	5.7	.5	<1.4
DATE	TIME	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)									
DEC 17...		--	E10	1									
FEB 14...		--	20	9									
JUN 13...		2.00	E10	3									

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01368820 DOUBLE KILL AT WAWAYANDA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYLENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)
FEB	14...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2
DATE	TIME	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (34301)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL-METHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL-METHYL UNFLTRD RECOVER (UG/L) (50005)	BENZENE ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL-ETHER WAT REC (UG/L) (78032)
FEB	14...	<.1	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L) (34423)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-XYLENE WATER WHOLES TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYLENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYLENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)		
FEB	14...	<.2	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2		

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR-WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR-WATER, DISS, SOLVED REC, (UG/L) (46342)	ALPHA-BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL-WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	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)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC-WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	
JUN	13...	<.006	<.004	<.005	.012	<.010	<.041	<.005	<.018	<.003	E.005	<.005	<.002	
DATE	TIME	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-SENCOR WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
JUN	13...	<.004	<.035	<.027	<.050	E.004	<.006	<.007	<.022	M	<.011	<.005	<.02	<.034
							TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)							
						JUN	13...	<.009						

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

HUDSON RIVER BASIN

01368820 DOUBLE KILL AT WAWAYANDA, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
08...	0945	<20	<100	<10	05...	0950	<20	<100	40
15...	0945	<20	<100	20					
22...	0930	<20	<100	20					
29...	0935	40	<100	20					

Remark codes used in this report:
 < -- Less than

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'57", long 73°59'23", Bergen County, Hydrologic Unit 02030103, at bridge on Westwood Avenue in Rivervale, 1.5 mi upstream from Pascack Brook, 4.6 mi upstream from Oradell Dam, and 27.2 mi upstream from mouth.

DRAINAGE AREA.--58.0 mi².

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)
NOV													
14...	0800	29	7.5	.108	.076	768	66	8.3	7.8	518	1.0	6.0	130
FEB													
14...	0830	17	5.1	.077	.054	768	76	10.8	7.8	564	-2.0	1.0	140
MAY													
14...	0715	94	27	.353	.278	747	71	7.6	7.1	202	10.0	11.5	56
AUG													
29...	0715	48	20	.130	.091	754	64	5.6	7.8	435	17.0	21.5	110

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV													
14...	40.4	7.37	1.94	43.0	103	85.0	E.1	5.9	14.4	268	261	.090	.29
FEB													
14...	43.2	7.95	1.86	47.0	98	93.8	E.1	2.3	18.2	290	276	<.030	.32
MAY													
14...	16.9	3.36	2.12	13.7	44	22.2	<.1	4.5	10.5	122	102	.100	.63
AUG													
29...	33.5	6.64	1.97	42.8	74	76.1	<.1	3.3	11.8	257	221	<.030	.48

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV													
14...	.090	.24	E.010	.53	.26	.006	--	.046	1.5	<.1	5.1	1.5	2.0
FEB													
14...	.040	.60	<.003	.92	.19	.010	<.020	.041	1.5	<.1	4.0	1.4	2.5
MAY													
14...	.100	.47	.009	1.1	1.27	.074	.037	.175	3.3	<.1	8.4	3.2	2.9
AUG													
29...	.047	.17	.007	.65	.65	.015	--	.110	3.5	<.1	5.9	3.5	2.4

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

HACKENSACK RIVER BASIN

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

			CHLORO- PHYLL A FLUORO- METRIC METHOD	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED																		
DATE	TIME	SAMPLE TYPE	CORR. (UG/L) (32209)	BORON, DIS- SOLVED AS B (01020)	PHOS- PHORUS TOTAL IN BOT. MATERIAL (MG/KG) (00668)	CARBON, INORG + ORGANIC TOTAL (GM/KG) (00693)	CARBON, INOR- GANIC, TOTAL (G/KG) (00686)	ARSENIC TOTAL (UG/L) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L) (01022)											
NOV	14...		--	50																		
FEB	14...		--	50																		
MAY	14...		3.40	30																		
AUG	29...		67.4	50																		
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG) AS N (00626)	IN BOT. MATERIAL (MG/KG) AS P (00668)	TOT IN BOT MAT (GM/KG) AS C (00693)	TOT IN BOT MAT (G/KG) AS C (00686)	ARSENIC TOTAL (UG/L) AS AS (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L) AS BA (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE (01012)	BORON, TOTAL RECOV- ERABLE (UG/L) AS B (01022)											
AUG	29...	0715 ENVIRONMENTAL	--	--	--	--	--	E2	75.0	<.06	58											
AUG	29...	0715 BED MATERIAL	7.70	70	4700	1.1	<.2	--	--	--	--											
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	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)	SILVER, TOTAL RECOV- ERABLE (UG/L) AS AG (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G) AS AS (01003)	CADMIUM FM BOT- TOM MA- TERIAL (UG/G) AS CD (01028)							
AUG	29...	E.02	<.8	9.0	470	1	210	E.01	<1	<.4	<.05	22	--	--	--							
AUG	29...	--	--	--	--	--	--	--	--	--	--	--	--	<1	.017							
DATE	TIME	SAMPLE TYPE	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 (01043)	IRON, SEDIMT, BED MA- TERIAL (UG/G) AS FE (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS PB (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS HG (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS NI (01068)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/G) AS SE (01148)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS ZN (01093)	4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)							
AUG	29...	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
AUG	29...	1.1	1.1	6	5000	3.9	180	.03	2.1	<1	22	M	E3	E3								
DATE	TIME	SAMPLE TYPE	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT WS, <2MM DW, REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)							
AUG	29...	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
AUG	29...	M	E6	E13	E14	E22	E28	E26	E8	E20	E24	E10	E48	E26								
DATE	TIME	SAMPLE TYPE	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPHTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)							
AUG	29...	--	--	--	--	--	--	--	--	--	--	--	--	--								
AUG	29...	<50	<50	<50	<50	<50	<50	E5	<5	<50	E12	E28	<50	E8								

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

HACKENSACK RIVER BASIN

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	BED MAT.		BED MAT.	
	PYRENE, SED, BM		FALL SIEVE	
	WS, <2MM		DIAM. DIAM.	
	DW, REC	% FINER	% FINER	% FINER
	(UG/KG)	.004 MM	.062 MM	
	(49387)	(80157)	(80164)	
AUG				
29...	--	--	--	--
29...	E39	1	1	1

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC	E COLI, MTEC MF WATER	ENTERO-COCCI, ME MF, WATER	DATE	TIME	COLI-FORM, FECAL, EC	E COLI, MTEC MF WATER	ENTERO-COCCI, ME MF, WATER
		BROTH (MPN) (31615)	(COL/100 ML) (31633)	(COL/100 ML) (31649)			BROTH (MPN) (31615)	(COL/100 ML) (31633)	(COL/100 ML) (31649)
JUL					AUG				
10...	0925	5000	3400	5100	07...	1059	800	200	130
17...	1105	20	<100	100					
24...	1103	800	100	240					
31...	1112	140	<100	80					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

HACKENSACK RIVER BASIN

01378387 TENAKILL BROOK AT OLD CLOSTER DOCK ROAD, AT CLOSTER, NJ

LOCATION.--Lat 40°58'43", long 73°58'02", Bergen County, Hydrologic Unit 02030103, at bridge on Old Closter Dock Road, 0.4 mi upstream of Oradell Reservoir, 0.4 mi north of Closter, and 1.6 mi north of Demarest.

DRAINAGE AREA.--8.69 mi².

PERIOD OF RECORD.--Water years 1999, 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)		
DEC	11...	1000	2.2	.132	.104	772	72	8.9	7.6	431	8.0	6.5	140	43.5
FEB	06...	1000	3.9	.061	.045	767	95	13.4	7.9	681	1.0	1.5	210	65.7
JUN	27...	1030	2.7	.091	.067	757	66	5.8	7.6	571	24.5	21.0	210	65.5
SEP	12...	1000	2.2	.078	.058	760	79	7.7	7.5	603	18.0	16.5	230	70.9
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
DEC	11...	8.26	2.86	21.0	111	48.6	<.1	12.1	20.9	244	229	.030	.29	.080
FEB	06...	11.4	2.36	45.0	154	97.8	<.1	14.0	27.9	376	363	.130	.32	.130
JUN	27...	11.2	2.32	30.9	150	70.7	<.1	16.5	26.4	367	320	.150	.38	.130
SEP	12...	11.8	2.40	39.4	161	79.2	<.1	16.0	28.1	397	351	<.030	.37	<.030
DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	
DEC	11...	1.06	.010	1.4	.08	.041	--	.076	.5	<.1	3.9	.5	E1.6	--
FEB	06...	1.49	.027	1.8	.09	.014	<.020	.037	.6	<.1	2.4	.6	<1.0	--
JUN	27...	1.30	.071	1.7	.04	.062	.046	.089	.5	<.1	2.9	.5	<1.0	1.40
SEP	12...	1.42	.029	1.8	.07	.035	.036	.044	.3	<.1	3.0	.3	E2.2	2.70

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01378387 TENAKILL BROOK AT OLD CLOSTER DOCK ROAD, AT CLOSTER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (01020) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE (UG/L)	1,1-DI-CHLORO-ETHANE (UG/L)	1,1-DI-CHLORO-ETHYL-ETHANE (UG/L)	1,2-DI-CHLORO-ETHANE (UG/L)	1,2-DI-CHLORO-PROPANE (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE (UG/L)	BENZENE (UG/L)	BENZENE (UG/L)	BENZENE (UG/L)	BENZENE (UG/L)	BROMO-FORM (UG/L)	CARBON TETRA-CHLORIDE (UG/L)	
DEC	11...													
FEB	06...	.9	.6	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE (UG/L)	BROMO-METHANE (UG/L)	CHLORO-FORM (UG/L)	CIS-1,2-DI-CHLORO-ETHENE (UG/L)	BROMO-DI-METHANE (UG/L)	DI-CHLORO-DI-FLUORO-METHANE (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL-TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	06...	<.1	<.2	.1	.5	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	1.8
DATE	TIME	METHYL-CHLORIDE (UG/L)	METHYL-CHLORIDE UNFLTRD REC (UG/L)	META/PARA-XYLENE WATER (UG/L)	O-XYLENE WATER (UG/L)	STYRENE (UG/L)	TETRA-CHLORO-ETHYL-ENE (UG/L)	TOLUENE (UG/L)	TRI-CHLORO-ETHYL-ENE (UG/L)	TRI-CHLORO-FLUORO-METHANE (UG/L)	VINYL-CHLORIDE (UG/L)			
FEB	06...			<.2	<.2	<.1	<.1	1.9	<.1	.2	<.2	<.2		

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER, FLTRD REC (UG/L)	ALA-CHLOR, WATER, DISS, REC (UG/L)	ALPHA-BHC, DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN, WAT FLD, 0.7 U, GF, REC (UG/L)	CAR-BARYL, WATER, FLTRD, 0.7 U, GF, REC (UG/L)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA, WATER, FLTRD, 0.7 U, GF, REC (UG/L)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC, WATER, FLTRD, 0.7 U, GF, REC (UG/L)	
JUN	27...	1030	<.006	<.004	<.005	E.005	E.004	E.134	.018	<.018	<.003	E.004	.096	<.002

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

HACKENSACK RIVER BASIN

01378387 TENAKILL BROOK AT OLD CLOSTER DOCK ROAD, AT CLOSTER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 27...	<.004	<.035	E.014	<.050	E.003	<.006	<.007	<.022	E.01	<.011	E.005	<.02

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

JUN
27... E.005

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0935	>16000	340000	7000	07...	1040	300	<100	330
17...	1118	300	500	500					
24...	1055	16000	3900	4200					
31...	1102	500	100	520					

Remark codes used in this report:
 < -- Less than
 > -- Greater than
 E -- Estimated value

HACKENSACK RIVER BASIN

01378560 COLES BROOK AT HACKENSACK, NJ

LOCATION.--Lat 40°54'40", long 74°02'26", Bergen County, Hydrologic Unit 02030103, at bridge on Main Street in Hackensack, 0.8 mi above mouth, and 1.9 mi northwest of Teaneck.

DRAINAGE AREA.--7.0 mi².

PERIOD OF RECORD.--Water years 1962, 1965, 1967, 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT OF SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
NOV											
14...	1030	ENVIRONMENTAL	.66	1.5	.124	.097	770	42	5.4	7.2	722
MAR											
13...	1110	ENVIRONMENTAL	.62	4.4	.123	.089	762	103	11.7	8.5	649
13...	1110	SPLIT REPLICATE	--	--	--	--	--	--	--	8.5	649
13...	1111	CONCURRENT REPLICATE	--	--	--	--	--	--	--	7.9	649
MAY											
28...	1200	ENVIRONMENTAL	4.0	6.0	.215	.159	767	70	6.5	7.4	656
AUG											
07...	1200	ENVIRONMENTAL	1.2	2.1	.172	.127	764	70	6.4	7.4	535

DATE	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV													
14...	16.0	5.5	250	72.9	17.0	3.35	41.8	187	113	<.1	14.1	23.9	396
MAR													
13...	9.5	9.5	200	59.3	12.9	2.08	43.2	137	99.2	E.1	8.3	25.1	360
13...	--	--	210	60.0	14.0	2.30	48.0	140	100	.11	--	30.0	390
13...	--	--	200	58.0	13.0	2.20	44.0	130	100	<.10	--	32.0	390
MAY													
28...	24.5	19.0	210	64.1	12.4	2.93	40.7	142	99.2	E.1	12.6	22.9	396
AUG													
07...	23.5	20.0	180	52.9	11.4	2.88	31.8	126	77.8	E.1	11.7	18.0	343

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS, ORTHO-TOTAL (MG/L AS P) (70507)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
NOV													
14...	399	.090	.37	.070	.42	.17	.007	.54	.04	.029	--	--	.052
MAR													
13...	336	.050	.28	.050	--	.84	.018	1.1	.20	.016	<.020	--	.068
13...	342	.060	.20	.050	.33	.730	.015	.93	--	<.010	.030	.03	.052
13...	331	.060	.17	.050	.33	.720	.013	.89	--	<.010	.029	.03	.052
MAY													
28...	347	.270	.83	.270	--	1.46	.108	2.3	.21	.066	.040	--	.140
AUG													
07...	285	.080	.41	.080	--	.59	.021	1.0	.07	.090	.076	--	.133

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

HACKENSACK RIVER BASIN

01378560 COLES BROOK AT HACKENSACK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE		CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)				
NOV 14...		.4	<.1	4.3	.4	E1.4	--	40	1				
MAR 13...		1.4	<.1	4.1	1.4	2.7	--	30	5				
		--	--	3.9	--	--	--	40	<10				
		--	--	3.3	--	--	--	40	<10				
MAY 28...		1.3	<.1	7.7	1.3	4.6	10.6	50	1				
AUG 07...		.6	<.1	5.4	.6	<1.0	5.20	40	2				

DATE	TIME	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)
MAR 13...	1110	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	.1	<.2	<.2

DATE	TIME	CHLORO- BENZENE TOTAL (UG/L) (34301)	BROMO- METHANE (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BROMO- DI- METHANE TOTAL (UG/L) (32101)	DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER REC (UG/L) (78032)
MAR 13...		<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	13.1

DATE	TIME	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	
MAR 13...		<.2	<.2	<.1	<.1	<.1	.2	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)
MAY 28...	1200	<.006	<.004	<.005	.026	<.010	E.037	.010	<.018	E.002	E.014	.021	<.002

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

HACKENSACK RIVER BASIN

01378560 COLES BROOK AT HACKENSACK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 28...	<.004	<.035	.053	<.050	.013	<.006	<.007	E.019	.11	<.011	.011	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 28...	<.010

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0855	>16000	400000	7400	07...	0954	1300	<100	220
17...	1040	500	900	570					
24...	1020	504	8500	4400					
31...	1028	300	<100	410					

Remark codes used in this report:
 < -- Less than
 > -- Greater than
 E -- Estimated value

PASSAIC RIVER BASIN

01378660 PASSAIC RIVER AT TEMPE WICK ROAD, NEAR MENDHAM, NJ

LOCATION.--Lat 40°46'17", long 74°34'12", Morris County, Hydrologic Unit 02030103, at bridge on Tempe Wick Road, 1.2 mi east of intersection of Tempe Wick Road and State Route 24, 0.6 mi upstream of Ledells Pond, and 1.7 mi east of Mendham.

DRAINAGE AREA.--1.80 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)		
NOV	15...	0800	2.3	.048	.040	757	75	9.1	7.1	197	5.5	7.0	63	15.2
FEB	20...	0800	.9	.048	.039	755	92	11.8	7.2	230	2.0	4.5	60	14.4
MAY	21...	0715	6.4	.212	.167	751	75	8.2	7.1	253	7.0	10.5	84	20.6
AUG	08...	0715	6.3	.102	.076	743	54	4.9	7.0	314	15.0	18.5	120	28.8
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
NOV	15...	6.01	1.04	11.0	43	22.9	E.1	26.3	15.3	138	124	<.030	E.05	<.030
FEB	20...	5.83	.81	15.7	35	33.2	E.1	23.1	16.7	136	132	<.030	E.10	<.030
MAY	21...	7.82	1.75	13.7	52	30.0	E.1	16.2	14.7	168	139	.110	.39	.120
AUG	08...	10.7	2.04	16.6	66	46.2	E.1	18.5	17.2	195	181	<.030	.29	<.030
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN,PAR TICULATE SUSP SOLVED (MG/L AS P) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV	15...	.12	<.003	--	.05	.008	--	.060	.3	<.1	1.5	.3	E1.6	--
FEB	20...	.18	<.003	--	.04	.011	<.020	.015	.7	E.1	1.8	E.7	E1.6	--
MAY	21...	.66	.009	1.1	.06	.019	.019	.049	.6	<.1	4.7	.6	E1.4	13.1
AUG	08...	.26	.007	.55	.19	.015	<.020	.069	1.1	<.1	3.2	1.1	2.1	18.8

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01378660 PASSAIC RIVER AT TEMPE WICK ROAD, NEAR MENDHAM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105												
		DIS-SOLVED SUS-PENDE												
DATE	TIME	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)
		AS B (01020) (00530)												
NOV														
	15...													
FEB														
	20...													
MAY														
	21...													
AUG														
	08...													

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)
FEB	20...	0800	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	DI-BROMO-METHANE (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-CHLORO-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L)	BENZENE ETHYL-TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER (UG/L)
FEB	20...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)
FEB	20...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER, DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)	
MAY	21...	0715	E.005	<.004	<.005	.012	E.003	E.130	<.005	<.018	<.003	E.007	E.003	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01378660 PASSAIC RIVER AT TEMPE WICK ROAD, NEAR MENDHAM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 21...	<.004	<.035	<.027	<.050	E.009	<.006	<.007	.028	.06	<.011	E.003	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 21...	E.005

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	1134	1700	<100	2800	15...	1258	9000	6500	6600
07...	1206	140	<100	30	22...	1155	230	100	50
					29...	1154	80	<100	30

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ

LOCATION.--Lat 40°45'54", long 74°31'48", Morris County, Hydrologic Unit 02030103, at bridge on Camp Trail Road in Morristown National Historical Park, 20 ft downstream of unnamed tributary, 500 ft west of Mount Kemble, and 2.4 mi northeast of Bernardsville.

DRAINAGE AREA.--1.07 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT OF SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	
DEC	12...	1020	ENVIRONMENTAL	.40	2.4	.037	.030	760	95	12.0	6.8	128
MAR	13...	1110	ENVIRONMENTAL	.60	.8	.053	.039	748	93	11.6	6.9	125
	13...	1110	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
	13...	1111	CONCURRENT REPLICATE	--	.8	--	--	--	--	--	--	--
JUN	11...	1000	ENVIRONMENTAL	.80	2.1	.051	.040	751	96	9.5	7.2	112
AUG	20...	0940	ENVIRONMENTAL	.35	9.2	.070	.055	750	95	8.6	7.0	143

DATE	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	
DEC	12...	7.0	5.5	50	12.4	4.52	.90	5.31	40	5.97	.1	24.6	15.4	100
MAR	13...	5.5	5.0	47	11.7	4.32	.72	5.05	36	5.63	E.1	23.4	15.8	102
	13...	--	--	48	12.0	4.40	.83	5.20	35	6.3	.11	--	17.0	92
	13...	--	--	48	12.0	4.30	.82	5.40	36	8.1	.12	--	18.0	110
JUN	11...	23.0	15.0	44	11.3	3.96	.80	5.36	37	5.36	.1	24.7	13.9	96
AUG	20...	22.0	19.5	52	13.2	4.59	1.07	5.87	45	6.12	.1	26.3	13.3	70

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR-TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (70507)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	
DEC	12...	93	<.030	<.10	<.030	.11	<.003	--	.05	E.003	--	--	.008	.3
MAR	13...	89	<.030	E.07	<.030	.20	<.003	--	<.02	.005	<.020	--	.008	.2
	13...	68	<.050	<.10	<.050	.160	<.010	--	--	<.010	.065	.07	<.010	--
	13...	71	<.050	<.10	<.050	.160	<.010	--	--	<.010	.068	.06	<.010	--
JUN	11...	93	<.030	E.09	<.030	.29	.030	--	.03	.008	1.18	--	.014	.6
AUG	20...	99	<.030	.11	<.030	.46	<.003	.56	.11	.021	.027	--	.044	1.6

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC, PARTICULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A, FLUORO-METRIC CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)
DEC 12...	<.1	1.4	.3	E2.0	--	E8	5
MAR 13...	<.1	2.0	.2	E1.9	--	E8	6
13...	--	1.5	--	--	--	E8	<10
13...	--	1.5	--	--	--	E8	<10
JUN 11...	<.1	1.5	.6	2.3	.200	E10	26
AUG 20...	<.1	2.3	1.6	E1.5	.300	E7	15

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-ETHYLENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE UNFLTRD REC (UG/L) (34566)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)	
MAR 13...	1110	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-ETHYLENE WATER TOTAL (UG/L) (77093)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER REC (UG/L) (78032)
MAR 13...		<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.2
DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L) (34423)	METHYL-CHLORIDE UNFLTRD REC (UG/L) (85795)	META-PARA-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)				
MAR 13...			<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2			

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD, GF, REC (UG/L) (82673)	CAR-BARYL, WATER, FLTRD, 0.7 U, GF, REC (UG/L) (82680)	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)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC, WATER, FLTRD, 0.7 U, GF, REC (UG/L) (82668)
JUN 11...	1000	<.006	<.004	<.005	.020	<.010	<.041	<.005	<.018	<.003	E.004	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 11...	<.004	<.035	<.027	<.050	E.005	<.006	<.007	<.022	<.01	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 11...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	1200	40	<100	<10	15...	1220	20	<100	70
07...	1233	20	<100	30	22...	1210	<20	<100	40
					29...	1223	<20	<100	20

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01379200 DEAD RIVER NEAR MILLINGTON, NJ

LOCATION.--Lat 40°38'56", long 74°31'26", Morris County, Hydrologic Unit 02030103, at bridge on King George Road (Spur County Route 527), 100 ft upstream from mouth, 2.0 mi south of Millington, and 4.2 mi south of Basking Ridge.

DRAINAGE AREA.--20.8 mi².

PERIOD OF RECORD.--Water years 1962, 1963-65, 1967, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
DEC 12...	1230	7.3	8.4	.100	.075	760	91	11.3	7.3	554	8.5	6.0	140
FEB 06...	1000	7.1	8.6	.078	.059	760	93	13.2	7.1	883	6.0	1.0	180
JUN 11...	1220	9.4	25	.116	.088	751	76	6.6	7.4	508	32.0	21.5	140
AUG 12...	0940	4.5	34	.120	.091	763	76	6.6	8.1	694	26.0	22.0	140
DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC 12...	36.2	11.9	6.03	51.1	82	79.8	.2	11.8	50.6	332	321	<.030	.39
FEB 06...	45.0	16.0	5.50	87.5	75	183	.2	14.0	43.6	504	463	.050	.44
JUN 11...	35.4	12.4	4.80	48.8	91	79.8	.2	14.7	35.2	331	299	.050	.44
AUG 12...	36.7	12.5	9.83	73.8	93	100	.3	11.3	52.2	433	393	.030	.63
DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 12...	.040	5.43	.009	5.8	.04	1.17	--	1.21	.6	<.1	4.0	.5	<1.0
FEB 06...	.050	4.68	.016	5.1	.06	.93	.870	.97	.5	<.1	3.2	.5	<1.1
JUN 11...	.060	2.94	<.003	3.4	.09	1.21	<.020	1.31	.8	<.1	3.8	.8	<1.0
AUG 12...	.050	7.05	.026	7.7	.17	2.99	2.83	3.02	1.2	<.1	4.6	1.2	<1.0

Remark codes used in this report:
 < -- Less than

PASSAIC RIVER BASIN

01379200 DEAD RIVER NEAR MILLINGTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A		BORON, DIS-SOLVED		RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED							
DATE		CORR. (UG/L) (32209)		(UG/L) (01020)		(MG/L) (00530)							
DEC 12...		--		240		4							
FEB 06...		--		230		9							
JUN 11...		1.20		230		4							
AUG 12...		3.80		320		33							

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)
AUG	12...	30	33.4	E.04	322	.09	.8	7.1	880	1	114	<.01	3

DATE		SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
AUG 12...		.5	<.05	39

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)		
MAY 01...		0915	3000	400	400	MAY 15...		0850	3000	4300	8800
08...		0900	800	700	280	22...		0910	220	600	170
						30...		0915	300	900	190

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01380098 BEAVER BROOK AT MORRIS AVENUE, AT DENVILLE, NJ

LOCATION.--Lat 40°54'21", long 74°29'50", Morris County, Hydrologic Unit 02030103, at bridge on Morris Avenue, 0.8 mi upstream of mouth, 1.3 mi northeast of Denville, and 1.4 mi downstream of White Meadow Lake.

DRAINAGE AREA.--22.1 mi².

PERIOD OF RECORD.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)		
NOV	15...	1000	4.3	.100	.073	750	72	8.6	7.8	317	15.0	7.0	94	24.4
FEB	27...	1000	3.9	.099	.077	738	92	11.0	7.5	178	6.0	6.5	52	12.7
MAY	16...	0900	3.4	.168	.130	750	82	8.7	7.6	160	17.5	12.0	47	11.8
SEP	05...	1000	3.2	.140	.109	750	84	7.6	7.4	159	20.5	19.5	54	13.3
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV	15...	8.04	2.28	27.6	69	55.5	.1	4.7	15.5	190	180	.030	.34	.040
FEB	27...	5.02	.79	14.9	30	31.7	E.1	6.8	14.2	122	104	.020	.20	.050
MAY	16...	4.20	.90	15.5	29	27.7	E.1	8.7	11.5	116	98	.030	.25	.060
SEP	05...	5.00	.73	11.1	32	22.7	E.1	8.1	12.2	106	99	<.030	.28	.031
DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN,PAR TICULATE SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV	15...	.07	<.003	.40	.08	.011	--	.036	.7	<.1	4.9	.7	E1.7	--
FEB	27...	.06	<.003	.26	.09	.006	<.020	.032	.7	<.1	3.2	.7	<1.0	--
MAY	16...	.09	<.003	.34	.06	.014	<.020	.029	.5	<.1	4.9	.5	E1.1	1.20
SEP	05...	1.58	.003	1.9	.19	<.05	<.020	E.05	1.0	<.1	4.7	1.0	2.4	1.10

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01380098 BEAVER BROOK AT MORRIS AVENUE, AT DENVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL											
		BORON, AT 105 DEG. C, SUS-PENDEDED (MG/L)											
		AS B (00530)											
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)
NOV	15...							20					15
FEB	27...							E8					8
MAY	16...							E10					3
SEP	05...							10					8

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	27...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	E.1

DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)
FEB	27...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN, 0.7 U GF, REC (UG/L)	CAR-BARYL, WATER FLTRD, 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA, WATER FLTRD, 0.7 U GF, REC (UG/L)	DEETHYL, ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC, WATER FLTRD, 0.7 U GF, REC (UG/L)
MAY	16...	<.006	<.004	<.005	E.006	<.010	<.041	<.005	<.018	<.003	E.003	.008	<.002

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

PASSAIC RIVER BASIN

01380098 BEAVER BROOK AT MORRIS AVENUE, AT DENVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 16...	<.004	<.035	<.027	<.050	E.003	<.006	<.007	<.022	M	<.011	<.005	<.02

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

MAY
16... <.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	1045	170	100	110	15...	1106	800	<100	310
07...	1039	130	400	110	22...	1035	130	300	120
					29...	1049	170	200	110

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

01380100 BEAVER BROOK AT ROCKAWAY, NJ

LOCATION.--Lat 40°54'08", long 74°30'06", Morris County, Hydrologic Unit 02030103, at bridge on Gill Road in Rockaway, and 0.2 mi above mouth.

DRAINAGE AREA.--22.7 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 13...	1140	7.7	3.6	.133	.101	760	85	10.8	6.9	320	15.0	5.0	88
FEB 06...	1040	7.7	4.0	.087	.066	751	99	14.1	7.5	207	3.5	.5	49
MAY 29...	1110	20	4.6	.161	.127	753	90	8.2	7.2	211	23.0	19.0	55
AUG 05...	1120	5.0	4.6	.169	.132	748	92	7.3	7.3	193	34.0	26.0	61

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 13...	22.4	7.69	1.85	25.0	64	50.8	E.1	5.9	15.1	168	167	<.030	--
FEB 06...	12.0	4.69	.83	15.7	26	32.3	E.1	8.5	13.6	118	104	<.030	.21
MAY 29...	14.0	4.80	.86	16.6	36	33.7	.1	9.7	11.7	125	114	.080	.30
AUG 05...	15.7	5.33	.92	12.5	46	24.8	.1	8.9	8.2	116	104	<.030	.29

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR-TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 13...	.030	.07	<.003	--	.12	.012	--	.032	.6	<.1	5.3	.6	3.5
FEB 06...	<.030	.13	.003	.35	<.02	.005	<.020	.017	.4	<.1	2.8	.4	<1.0
MAY 29...	.060	.17	.007	.46	.09	.018	<.020	.043	.5	<.1	3.7	.5	E1.6
AUG 05...	<.030	.14	<.003	.43	.05	.024	<.020	.054	.5	<.1	4.0	.5	<1.1

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 13...	--	20	7
FEB 06...	--	10	5
MAY 29...	1.50	E10	2
AUG 05...	4.20	20	<1

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01380100 BEAVER BROOK AT ROCKAWAY, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)
MAY					MAY				
01...	1055	90	100	160	15...	1122	500	200	260
07...	1123	230	300	60	22...	1048	110	200	80
					29...	1100	230	200	130

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ

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

DRAINAGE AREA.--68.5 mi².

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV 27...	1000	38	8.5	.126	.095	763	78	8.8	7.6	598	11.0	10.0	170	
FEB 13...	1100	38	7.7	.105	.078	762	87	11.4	7.6	752	2.5	4.0	170	
JUN 12...	1030	15	14	.415	.319	754	56	4.6	7.2	485	30.0	24.0	140	
AUG 08...	0930	19	4.0	.111	.082	761	87	7.8	7.8	789	25.0	20.5	210	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 27...	41.4	14.9	4.20	46.5	103	101	<.1	14.8	30.9	342	327	.050	.45	
FEB 13...	44.0	15.3	3.65	71.5	89	147	E.1	12.3	39.2	404	397	.040	.39	
JUN 12...	35.1	11.8	3.39	41.4	82	80.6	E.1	14.2	22.6	302	268	.190	.77	
AUG 08...	51.2	18.9	5.96	68.8	104	145	.1	14.3	40.0	449	430	.030	.49	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULTE (MG/L AS P) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 27...	.040	2.60	.009	3.0	.13	.21	--	.26	1.1	<.1	4.1	1.1	2.8	
FEB 13...	.050	2.45	.017	2.8	.08	.10	.079	.20	.9	<.1	3.9	.9	<1.0	
JUN 12...	.180	2.01	.026	2.8	.17	.16	.140	.34	1.8	<.1	9.0	1.8	E1.6	
AUG 08...	.060	5.03	.017	5.5	.09	.59	.536	.64	.5	<.1	4.0	.4	E1.1	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)				
NOV	27...		--	--	90	2									
FEB	13...		--	--	90	10									
JUN	12...		3.30		90	25									
AUG	08...		5.40		150	2									
AUG	08...	0930 ENVIRONMENTAL	--	--	--	--	--	<2	29.5	<.06	135				
AUG	08...	0930 BED MATERIAL	7.50	260	9700	4.1	<.2	--	--	--	--				
AUG	08...	0930 ENVIRONMENTAL	--	--	--	--	--	<.05	10	--	--				
AUG	08...	0930 BED MATERIAL	7.50	260	9700	4.1	<.2	--	--	--	--				
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)				
DATE	TIME	SAMPLE TYPE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	
AUG	08...	0930 ENVIRONMENTAL	.08	<.8	5.7	250	2	55.3	<.01	3	.6	<.05	10	--	--
AUG	08...	0930 BED MATERIAL	--	--	--	--	--	--	--	--	--	--	<1	.093	
DATE	TIME	SAMPLE TYPE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	
DATE	TIME	SAMPLE TYPE	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01043)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G) (71921)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01068)	SELE-NIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01093)	4HCYPEN PHENAN THRENE WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU-ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU-ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)
AUG	08...	0930 ENVIRONMENTAL	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	08...	0930 BED MATERIAL	6.7	3.1	<2	8500	32	170	.11	4.6	<1	37	E22	E7	E10
DATE	TIME	SAMPLE TYPE	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA-CENE, 2-METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY-SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR-ANTHENE BED MAT DRY WGT REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)
AUG	08...	0930 ENVIRONMENTAL	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	08...	0930 BED MATERIAL	E6	E38	E24	E48	110	120	140	92	100	140	E39	240	110
DATE	TIME	SAMPLE TYPE	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPTHAL ENE, 236 TRIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPTHAL ENE, 2-ETHYL- SED BM WS, <2MM DW, REC (UG/KG) (49948)	NAPHTH-ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	P-CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN-THRI-DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1-METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)
AUG	08...	0930 ENVIRONMENTAL	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	08...	0930 BED MATERIAL	<50	<50	E13	E11	E14	E10	E17	<5	E25	E20	110	<50	E25

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN .004 MM (80157)	% FINER THAN .062 MM (80164)
AUG			
08...	--	--	--
08...	220	1	3

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	1005	800	400	780	15...	1020	16000	3300	6100
07...	1005	80	<100	130	22...	1014	260	<100	120
					29...	1017	500	300	110

Remark codes used in this report:
< -- Less than

PASSIAC RIVER BASIN

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'50", long 74°16'23", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, and 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 TEMPERATURE: October 1962 to May 1969 (once daily), June 1969 to September 1974.

DISSOLVED OXYGEN: June 1969 to September 1974.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD CON- (STAND-ARD ANCE UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 26...	1000	255	4.7	.104	.077	759	92	10.3	7.5	833	16.0	10.0	190	
FEB 19...	1300	128	4.3	.115	.088	764	129	16.0	8.4	836	14.0	6.0	170	
MAY 29...	0950	329	15	.278	.212	762	--	--	7.1	469	25.0	21.0	110	
AUG 14...	0940	83	13	.121	.090	748	96	7.5	8.0	824	32.5	27.0	180	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, SUM OF AT 180 DEG. C DIS-SOLVED (70300)	SOLIDS, CONSTI-TUENTS, DIS-SOLVED (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 26...	47.1	17.6	7.70	81.7	129	141	E.1	13.4	52.2	502	462	.070	.59	
FEB 19...	43.5	15.9	6.25	87.7	100	153	.1	7.9	52.7	456	448	.030	.59	
MAY 29...	29.0	10.3	3.23	42.6	66	77.0	.1	12.1	26.1	286	252	.150	.73	
AUG 14...	46.2	16.5	8.55	80.8	110	136	.2	13.6	53.7	462	446	<.030	.51	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 26...	.070	5.22	.024	5.8	.08	1.16	--	1.22	.6	<.1	4.5	.5	E1.0	
FEB 19...	.050	4.09	.039	4.7	.09	.73	.662	.81	.9	<.1	4.9	.9	<1.0	
MAY 29...	.160	2.43	.053	3.2	.14	.42	.360	.57	1.4	<.1	6.8	1.3	E1.2	
AUG 14...	<.030	4.90	.038	5.4	.21	1.02	.958	1.02	1.2	<.1	4.7	1.2	E2.1	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

PASSIAC RIVER BASIN

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	
NOV	26...						--	190	1								
FEB	19...						--	160	9								
MAY	29...						5.10	90	23								
AUG	14...						38.5	200	16								
AUG	14...	2	24.9	<.06	198	.09	E.4	4.7	430	2	97.9	E.01	7				
							SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)								
AUG	14...						.7	E.03	14								

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)		
JUN	20...	1040	170	100	60	JUN	02...	0940	230	400	50
	27...	0900	210	100	20		10...	0920	170	<100	40
							17...	0905	130	<100	10

Remark codes used in this report:
< -- Less than
E -- Estimated value

PASSAIC RIVER BASIN

01382410 MACOPIN RIVER AT ECHO LAKE, NJ

LOCATION.--Lat 41°02'53", long 74°24'25", Passaic County, Hydrologic Unit 02030103, at bridge on Echo Lake Road, 0.1 mi downstream of Echo Lake, 1.0 mi southwest of community of Echo Lake, and 1.6 mi east of Newfoundland.

DRAINAGE AREA.--4.42 mi².

PERIOD OF RECORD.--Water years 1998 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV 27...	1100	1.2	.053	.036	744	83	9.5	7.4	343	--	8.4	110	28.5
FEB 21...	1030	1.3	.054	.039	731	64	7.5	7.4	347	13.0	6.5	110	28.0
JUN 06...	0950	3.4	.098	.077	734	76	6.7	7.3	268	25.0	19.5	99	26.1
AUG 13...	1000	32	.067	.050	740	156	13.2	8.0	308	29.0	22.0	120	32.9
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 27...	9.55	1.15	19.5	89	47.5	.1	13.1	10.5	190	186	<.030	.16	<.030
FEB 21...	9.50	1.02	20.9	66	51.9	.2	10.2	13.4	192	178	<.030	.16	<.030
JUN 06...	8.25	1.16	13.0	85	25.6	.2	11.4	9.5	175	147	.030	.22	.030
AUG 13...	10.2	.76	15.0	109	28.8	.2	14.4	9.9	183	185	<.030	.12	<.030
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR- TICULATE SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 27...	.64	<.003	.80	.05	.005	--	.013	.4	<.1	1.9	.4	E1.8	--
FEB 21...	.78	.003	.94	.04	.004	<.020	.009	.4	<.1	2.3	.4	<1.0	--
JUN 06...	.23	.003	.45	.09	.019	<.020	.035	2.8	<.1	3.2	2.8	E1.9	3.90
AUG 13...	.07	<.003	.18	.04	.018	.026	.149	.2	<.1	2.5	.2	<1.0	2.50

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01382410 MACOPIN RIVER AT ECHO LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	RESIDUE TOTAL																
		1,1,1-TRI-CHLOROETHANE TOTAL (UG/L)	1,1-DI-CHLOROETHANE TOTAL (UG/L)	1,1-DI-CHLOROETHYLENE TOTAL (UG/L)	1,2-DI-CHLOROETHANE TOTAL (UG/L)	1,2-DI-CHLOROPROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLOROETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLOROWATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLOROWATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLOROWATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMOFORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)					
NOV	27...																	
FEB	21...																	
JUN	06...																	
AUG	13...																	
FEB	21...	1030	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2			
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	CIS-1,2-DI-CHLOROETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUOROMETHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-METHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)				
FEB	21...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2				
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	TETRA-CHLOROETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLOROETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)									
FEB	21...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2								

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)	
JUN	06...	0950	<.009	<.004	<.005	.015	<.010	<.041	<.005	<.018	<.003	E.011	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01382410 MACOPIN RIVER AT ECHO LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 06...	<.004	<.035	<.027	<.050	E.012	<.006	<.007	<.022	<.01	<.011	<.005	<.02

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

JUN
06... <.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
AUG					SEP				
05...	0940	20	500	710	03...	0955	<20	<100	<10
12...	1002	<20	<100	30					
19...	0957	<20	<100	<10					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ

LOCATION.--Lat 41°01'05", long 74°24'07", Passaic County, Hydrologic Unit 02030103, at culvert on 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.

PERIOD OF RECORD.--Water years 1924, 1962-69, 1973-79, 1991 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
DEC 06...	1030	.66	.5	.070	.054	748	88	10.4	7.7	345	17.5	7.5	96
FEB 28...	1000	.72	1.0	.066	.051	746	97	13.7	7.6	412	.0	.5	92
JUN 20...	1000	2.5	1.6	.103	.081	757	81	7.6	7.5	257	24.0	18.0	55
SEP 05...	1000	.33	.5	.075	.057	749	79	7.2	7.7	322	23.0	19.0	91

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC 06...	24.0	8.73	1.45	24.9	61	56.8	.1	8.9	16.2	190	178	<.030	.13
FEB 28...	23.0	8.35	1.21	37.6	51	75.7	E.1	7.6	17.2	218	203	.040	.14
JUN 20...	14.5	4.63	.93	25.1	37	44.8	E.1	10.6	12.0	141	136	.030	.14
SEP 05...	23.7	7.83	1.21	25.3	61	49.6	E.1	7.2	15.5	172	168	<.030	.18

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 06...	<.030	.12	<.003	.25	<.02	E.002	--	.006	.2	<.1	2.2	.1	E1.1
FEB 28...	.100	.38	.004	.52	.02	E.003	<.020	.008	.3	<.1	2.3	.3	E1.5
JUN 20...	.060	.24	.003	.38	<.02	.011	<.020	.018	.2	<.1	2.7	.2	<1.0
SEP 05...	<.030	.07	<.003	.25	<.02	.009	<.020	.012	<.1	<.1	2.5	<.1	E1.5

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A FLUORO-METRIC METHOD					RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED							
DATE		CORR. (UG/L) (32209)					(UG/L) AS B (01020)			(MG/L) (00530)				
DEC														
	06...	--				20			5					
FEB														
	28...	--				20			1					
JUN														
	20...	.700				10			7					
SEP														
	05...	.700				10			4					

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)
SEP	05...	<2	15.4	<.06	16	<.04	<.8	1.4	90	<1	39.0	<.01	1

DATE		SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
SEP				
	05...	<.4	<.05	2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	
AUG					SEP					
	05...	1000	300	400	180	03...	0935	20	200	20
	12...	0950	40	<100	210					
	19...	0940	<20	<100	70					

Remark codes used in this report:
< -- Less than

01387014 WANAQUE RIVER AT WANAQUE AVENUE, AT POMPTON LAKES, NJ

LOCATION.--Lat 41°00'25", long 74°17'34", Passaic County, Hydrologic Unit 02030103, at bridge on Wanaque Avenue in Pompton Lakes, 0.1 mi north of intersection of Wanaque Avenue and Paterson Hamburg Turnpike, and 0.1 mi downstream of Lake Inez.

DRAINAGE AREA.--48.0 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR-BID-ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
DEC	11...	0900	3.2	.065	.048	764	75	9.0	7.8	310	11.0	7.5	71	18.9
FEB	13...	0900	2.2	.069	.052	758	90	12.6	7.8	448	4.0	1.5	110	30.4
JUN	05...	1000	3.7	.083	.062	758	71	7.0	7.6	420	20.5	15.5	110	28.4
AUG	22...	1000	5.1	.098	.073	760	79	7.6	7.8	391	24.5	17.0	93	25.2
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00610)
DEC	11...	5.69	1.99	28.2	46	52.4	<.1	4.0	19.7	168	162	.520	.89	.500
FEB	13...	8.96	3.47	50.7	68	86.7	E.1	5.7	37.6	274	272	1.45	1.8	1.38
JUN	05...	8.90	3.39	44.5	57	81.6	E.1	6.2	32.6	278	245	.300	.69	.310
AUG	22...	7.43	3.15	38.4	56	70.7	E.1	5.5	23.3	221	211	.120	.44	.140
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)
DEC	11...	.66	.021	1.6	.10	.171	--	.20	.7	<.1	3.5	.7	E1.8	--
FEB	13...	1.27	.029	3.1	.10	.037	<.020	.081	.6	<.1	3.5	.6	2.1	--
JUN	05...	1.01	.052	1.7	.07	.036	<.020	.063	.6	<.1	3.6	.6	--	4.30
AUG	22...	.89	.009	1.3	.10	.064	.038	.113	.6	<.1	4.1	.6	E1.1	4.80

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

PASSAIC RIVER BASIN

01387014 WANAQUE RIVER AT WANAQUE AVENUE, AT POMPTON LAKES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)	
DEC	11...													
FEB	13...													
JUN	05...													
AUG	22...													
FEB	13...	0900	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-DI-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)
FEB	13...	<.1	<.2	.1	<.1	<.1	<.2	<.2	.3	<.1	<.2	<.1	<.1	E.1
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L) (34423)	METHYL-PARA-XYLENE WATER REC (UG/L) (85795)	O-XYLENE WATER WHOLE (UG/L) (77135)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)					
FEB	13...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2					

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED REC (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	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)	CHLOR-PYRIFOS DIS-SOLVED REC (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED REC (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	
JUN	05...	1000	<.006	<.004	<.005	<.008	<.010	<.041	<.005	<.018	<.003	<.006	<.006	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01387014 WANAQUE RIVER AT WANAQUE AVENUE, AT POMPTON LAKES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LIN- URON WATER	MALA- THION, DIS-	METHYL AZIN- PHOS WAT FLT	METO- LACHLOR WATER	METRI- BUZIN SENCOR WATER	NAPROP- AMIDE WATER	PENDI- METH- ALIN WAT FLT	PRO- METON, WATER, DISS, REC	PRO- PANIL WATER FLTRD	SI- MAZINE, WATER, DISS, REC	TEBU- THIURON WATER FLTRD	TER- BACIL WATER FLTRD	
	LINDANE DIS- SOLVED (UG/L) (39341)	0.7 U GF, REC (UG/L) (82666)	0.7 U SOLVED (UG/L) (39532)	0.7 U GF, REC (UG/L) (82686)	0.7 U DISSOLV (UG/L) (39415)	0.7 U DISSOLV (UG/L) (82630)	0.7 U GF, REC (UG/L) (82684)	0.7 U GF, REC (UG/L) (82683)	0.7 U DISS, REC (UG/L) (04037)	0.7 U GF, REC (UG/L) (82679)	0.7 U DISS, REC (UG/L) (04035)	0.7 U GF, REC (UG/L) (82670)	0.7 U GF, REC (UG/L) (82665)
JUN 05...	<.004	<.035	<.027	<.050	E.009	<.006	<.007	<.022	E.01	<.011	<.008	<.02	<.034
							TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)						
JUN 05...							<.009						

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
AUG					SEP				
05...	1030	3000	1400	270	03...	1022	900	300	140
12...	1027	700	900	170					
19...	1019	1300	1400	100					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'53", long 74°09'47", Bergen County, Hydrologic Unit 02030103, 350 ft downstream from bridge on 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.

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

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: February 1964 to June 1965.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 01...	0800	14	2.2	.064	.049	761	74	8.4	7.7	752	12.0	9.4	160	
FEB 07...	0830	37	1.4	.054	.044	754	75	10.1	7.6	720	.0	2.5	130	
MAY 07...	0715	189	2.9	.090	.068	754	88	8.8	7.7	314	13.0	15.0	66	
AUG 15...	0715	18	3.2	.080	.061	749	73	6.0	7.7	667	22.0	24.0	140	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 01...	43.1	12.1	3.40	83.3	97	153	E.1	9.2	25.9	416	410	.040	.35	
FEB 07...	35.6	9.75	2.35	78.4	70	138	E.1	6.3	24.6	354	351	.180	.51	
MAY 07...	18.2	5.04	1.08	30.7	40	56.2	E.1	4.7	14.0	169	157	<.030	.26	
AUG 15...	37.8	10.2	3.47	76.3	76	130	.1	6.9	21.9	350	352	.040	.34	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 01...	.030	4.93	.020	5.3	.07	.52	--	.54	.6	<.1	2.9	.6	E1.5	
FEB 07...	.180	3.06	.041	3.6	.06	.26	.234	.26	.3	<.1	2.5	.3	E1.6	
MAY 07...	.030	.62	.006	.88	.08	.06	.045	.09	1.0	<.1	2.9	1.0	<1.1	
AUG 15...	.050	4.04	.027	4.4	.16	.50	.518	.55	1.3	<.1	3.8	1.3	2.3	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN .004 MM (80157)	% FINER THAN .062 MM (80164)
AUG			
15...	--	--	--
15...	3600	.8	2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0742	>16000	15000	4300	07...	0848	1400	<100	170
17...	0930	1300	900	370					
24...	0902	3000	1400	2600					
31...	0935	700	400	360					

Remark codes used in this report:
< -- Less than
> -- Greater than

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ

LOCATION.--Lat 40°59'33", long 74°16'44", Passaic County, Hydrologic Unit 02030103, in Pompton Lakes, at bridge on Paterson-Hamburg Turnpike, 2.0 mi upstream from mouth, and 450 ft downstream from dam.

DRAINAGE AREA.--160 mi².

PERIOD OF RECORD.--Water years 1923, 1962-67, 1982, 1987 to current year.

NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1923, 1962-67, 1982, 1987-96.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: April 1989 to current year.

DISSOLVED OXYGEN PERCENT SATURATION: October 2001 to September 2002.

SPECIFIC CONDUCTANCE: April 1989 to current year.

WATER TEMPERATURE: April 1989 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1989, pumping system, data recorded hourly.

REMARKS.--Stage is measured on right end of dam at pumping station, 450 ft upstream from bridge. Nutrient and inorganic chemical data from 1987-96 was collected at the same location (above dam); data from earlier years was probably collected at bridge, 450 ft below dam. Interruptions in the daily record were due to instrument or pumping system malfunction. The calibration of water-quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following periods were adjusted:

DISSOLVED OXYGEN: Jan. 2 to Jan. 15, Feb. 21 to Apr. 2, June 10 to Jul. 11, Jul. 15 to Aug. 21, Sept. 19 to Sept. 30

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: Maximum, 15.4 mg/L, Jan. 15, 2000, Feb. 25, 2002; minimum, 4.5 mg/L, Aug. 4, 1999.

DISSOLVED OXYGEN PERCENT SATURATION: Maximum, 126, Feb. 24, 25, 2002; minimum, 67, June 2, 4, 2002.

SPECIFIC CONDUCTANCE: Maximum, 842 microsiemens/cm, Jan. 18, 1999; minimum, 88 microsiemens/cm, Sept. 7, 1999.

WATER TEMPERATURE: Maximum, 31.5 °C, July 5, 1999; minimum, 0.0 °C, on several days during winters.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 15.4 mg/L, Feb. 25; minimum, 5.7 mg/L, June 2, Aug. 1, 2.

DISSOLVED OXYGEN PERCENT SATURATION: Maximum, 126, Feb. 24, 25; minimum, 67, June 2, 4.

SPECIFIC CONDUCTANCE: Maximum, 801 microsiemens/cm, Feb. 6, 7; minimum, 223 microsiemens/cm, May 20.

WATER TEMPERATURE: Maximum, 29.5°C, July 4; minimum, 1.5°C, Dec. 31, Jan. 1, 2.

OXYGEN DISSOLVED DOWNSTREAM OF DAM, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	10.8	9.9	10.2	11.3	10.7	10.9	14.3	13.8	14.0
2	9.1	8.3	8.6	10.9	9.9	10.2	11.5	10.8	11.1	14.4	13.9	14.1
3	9.5	8.1	8.7	10.4	9.5	9.9	11.8	10.9	11.2	14.1	13.7	13.9
4	9.1	8.4	8.7	10.3	9.4	9.7	11.8	11.1	11.4	13.9	13.6	13.7
5	8.9	8.2	8.5	---	---	---	11.8	11.2	11.4	13.9	13.4	13.6
6	8.7	8.0	8.3	---	---	---	11.8	11.1	11.4	13.7	13.2	13.5
7	8.8	8.0	8.3	10.8	9.7	10.1	11.6	10.9	11.1	13.5	13.1	13.3
8	9.2	8.2	8.6	10.8	9.6	10.0	11.7	10.8	11.2	13.7	13.3	13.4
9	9.3	8.4	8.7	11.1	9.9	10.3	11.9	11.2	11.6	13.5	13.2	13.3
10	9.7	8.8	9.1	11.0	10.1	10.5	12.2	11.7	11.9	13.7	13.1	13.3
11	9.8	9.0	9.3	11.2	10.3	10.6	12.3	11.8	12.0	13.5	13.1	13.2
12	9.8	8.8	9.2	11.1	10.3	10.6	12.3	11.8	12.0	13.5	13.0	13.2
13	9.7	8.6	9.0	11.3	10.2	10.8	12.1	11.8	11.9	13.2	12.9	13.0
14	9.5	8.5	8.8	11.6	10.6	11.0	12.0	11.5	11.7	13.4	13.0	13.2
15	9.3	8.5	8.9	11.6	10.1	10.9	12.3	11.5	11.9	13.5	12.9	13.1
16	9.3	8.7	8.9	11.3	10.6	10.8	12.6	12.0	12.3	13.5	12.9	13.2
17	9.3	8.5	8.8	11.5	10.9	11.1	12.4	11.9	12.1	13.4	13.0	13.1
18	9.6	8.8	9.1	11.5	10.9	11.1	12.2	11.8	12.0	13.5	13.0	13.2
19	9.8	9.0	9.3	11.4	10.7	11.0	12.5	12.1	12.3	13.4	13.1	13.2
20	10.0	9.2	9.4	11.8	10.7	11.2	12.5	12.1	12.3	13.6	13.0	13.3
21	10.2	9.1	9.5	11.9	11.3	11.5	12.8	12.2	12.5	13.6	13.2	13.3
22	10.1	8.8	9.3	12.1	11.5	11.7	13.2	12.6	12.9	13.7	13.1	13.4
23	9.5	8.7	9.0	12.2	11.6	11.8	13.3	12.7	13.0	14.0	13.2	13.5
24	9.8	8.7	9.1	12.0	11.4	11.7	13.0	12.6	12.8	13.4	13.1	13.3
25	9.4	8.5	8.9	12.1	11.3	11.6	13.2	12.8	13.0	13.8	13.0	13.3
26	9.7	8.6	9.0	11.7	11.3	11.5	13.1	12.7	12.9	14.1	13.1	13.5
27	9.9	8.9	9.3	11.7	11.3	11.5	13.0	12.6	12.8	14.1	13.2	13.6
28	10.3	9.2	9.6	11.7	11.1	11.3	13.2	12.8	12.9	14.2	13.1	13.5
29	10.3	9.4	9.7	11.2	11.0	11.1	13.4	12.9	13.1	14.1	13.1	13.4
30	10.6	9.7	10.0	11.4	10.7	11.0	13.7	13.1	13.4	13.6	12.9	13.2
31	10.3	9.8	10.0	---	---	---	14.0	13.5	13.8	13.5	13.0	13.2
MONTH	10.6	8.0	9.0	12.2	9.4	10.9	14.0	10.7	12.2	14.4	12.9	13.4

PASSAIC RIVER BASIN

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

OXYGEN DIS. PERCENT DOWNSTREAM OF DAM, in % OF SATURATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	99	90	93	101	96	98	103	99	100
2	93	85	88	101	90	94	103	97	99	104	100	101
3	98	83	89	99	90	93	105	97	99	103	100	101
4	95	86	89	98	88	92	104	96	99	103	99	101
5	93	85	88	---	---	---	104	98	100	104	99	101
6	91	84	86	---	---	---	104	98	100	102	98	101
7	91	82	86	98	87	91	104	97	99	102	98	100
8	93	83	87	97	86	90	103	95	98	103	99	101
9	93	83	87	99	88	91	103	98	100	102	99	100
10	95	85	89	97	89	92	104	99	101	103	99	100
11	97	88	91	98	90	93	104	99	101	103	99	100
12	99	87	91	96	88	91	103	98	100	103	99	100
13	101	86	92	96	86	91	101	98	99	101	98	99
14	98	86	90	98	88	92	101	97	98	104	99	101
15	96	87	91	99	85	92	102	97	99	104	99	101
16	96	89	92	98	89	92	103	99	100	104	99	101
17	94	86	89	99	94	96	101	97	98	104	100	101
18	94	86	89	99	93	95	99	96	97	104	100	101
19	96	87	90	98	91	94	101	97	99	103	100	101
20	97	88	91	101	91	96	101	97	99	105	99	101
21	100	88	92	101	95	97	102	97	99	103	100	101
22	100	88	92	101	95	98	103	98	100	104	99	102
23	95	86	90	102	96	98	102	98	99	106	99	102
24	99	86	91	101	97	98	101	97	99	102	100	101
25	95	85	89	104	96	99	101	98	99	106	98	101
26	95	84	88	102	98	100	100	97	98	108	99	103
27	95	85	89	103	99	100	99	96	97	109	101	104
28	98	86	90	104	99	100	100	96	97	110	100	104
29	96	87	90	100	98	99	101	96	98	111	100	104
30	99	89	92	102	96	98	101	97	99	106	100	103
31	94	89	92	---	---	---	101	98	99	104	101	102
MONTH	101	82	90	104	85	95	105	95	99	111	98	101
	FEBRUARY			MARCH			APRIL			MAY		
1	103	99	101	120	104	111	---	---	---	100	98	99
2	107	99	103	120	105	111	109	91	99	102	98	99
3	108	100	103	108	102	105	104	92	95	101	98	99
4	106	101	103	104	100	102	106	91	97	102	99	101
5	108	100	103	105	94	99	108	89	99	104	99	101
6	109	101	103	100	91	95	103	91	98	104	97	100
7	108	101	103	103	88	96	111	93	100	103	94	99
8	109	101	104	103	90	96	109	97	101	108	92	99
9	111	103	106	106	90	97	112	95	102	93	83	88
10	111	104	106	99	89	94	113	96	103	107	81	92
11	107	102	105	104	85	95	115	94	103	106	82	94
12	109	104	105	105	90	96	107	93	100	99	82	92
13	110	103	106	101	91	95	107	90	97	107	96	101
14	112	103	107	111	90	100	117	92	101	100	97	98
15	113	105	108	---	---	---	102	92	97	101	99	100
16	114	104	108	---	---	---	102	90	97	100	98	100
17	115	104	108	---	---	---	115	85	96	99	97	98
18	115	104	108	100	92	96	108	77	94	100	97	99
19	117	106	110	111	93	101	100	81	91	102	100	101
20	118	106	111	99	94	98	95	82	89	102	101	101
21	119	104	111	100	93	97	98	72	83	102	100	101
22	123	105	113	97	93	95	102	84	88	101	97	100
23	124	106	113	99	93	96	102	85	93	103	97	100
24	126	105	114	104	92	97	109	85	97	104	96	100
25	126	107	114	99	93	96	97	89	94	105	96	100
26	124	105	113	95	91	93	102	89	95	103	95	97
27	119	104	110	98	91	95	104	87	97	110	93	99
28	118	103	109	100	92	97	98	92	95	103	87	94
29	---	---	---	105	86	96	99	97	98	104	89	95
30	---	---	---	---	---	---	100	98	99	110	87	96
31	---	---	---	---	---	---	---	---	---	114	84	96
MONTH	126	99	107	120	85	98	117	72	96	114	81	98

PASSAIC RIVER BASIN

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

OXYGEN DIS. PERCENT DOWNSTREAM OF DAM, in % OF SATURATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	106	79	95	98	88	92	96	71	83	99	93	96
2	103	67	85	98	83	90	105	73	85	100	92	95
3	105	75	87	97	82	88	92	82	87	103	90	96
4	99	67	85	97	80	87	95	80	86	102	84	93
5	100	88	94	98	80	88	91	75	82	100	83	90
6	95	84	91	99	79	88	93	75	83	101	81	89
7	100	89	97	101	81	90	93	73	82	100	80	89
8	98	96	98	102	81	91	91	71	81	100	86	91
9	97	93	96	99	81	89	93	74	82	98	85	90
10	100	89	95	101	83	91	92	74	82	94	82	88
11	98	88	92	---	---	---	94	75	84	91	79	85
12	95	88	91	---	---	---	95	80	87	95	78	86
13	93	90	92	---	---	---	94	81	86	96	83	89
14	95	90	92	---	---	---	96	81	87	99	84	91
15	96	94	95	---	---	---	96	79	86	94	87	90
16	97	95	96	---	---	---	99	80	89	97	86	93
17	99	96	98	---	---	---	99	80	88	100	86	93
18	101	98	99	---	---	---	100	82	89	102	87	93
19	103	99	100	---	---	---	100	80	89	105	88	95
20	106	98	102	---	---	---	102	80	90	107	92	98
21	106	98	102	95	86	90	95	79	87	104	92	96
22	103	97	100	96	81	88	95	75	84	99	85	92
23	101	94	98	94	79	85	93	79	86	99	85	91
24	95	86	92	89	77	84	88	81	84	104	80	90
25	94	85	89	92	77	85	98	84	91	103	80	90
26	94	87	89	92	80	85	99	80	89	91	81	86
27	93	87	90	90	77	83	100	80	89	94	86	91
28	94	89	92	88	78	82	94	80	86	97	88	92
29	98	88	92	97	76	85	98	82	92	95	87	90
30	99	87	93	94	77	84	101	95	98	94	86	89
31	---	---	---	98	73	85	104	94	98	---	---	---
MONTH	106	67	94	102	73	87	105	71	87	107	78	91
YEAR	126	67	95									

SPECIFIC CONDUCTANCE DOWNSTREAM OF DAM, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	519	506	514	559	556	557	602	592	599	651	646	650
2	521	519	520	560	557	558	601	597	598	654	651	653
3	525	520	522	563	551	557	598	594	597	655	653	654
4	528	523	526	565	563	565	596	594	595	657	655	656
5	530	522	525	---	---	---	596	589	593	660	657	658
6	532	525	526	---	---	---	603	590	599	662	660	661
7	527	526	527	569	567	568	603	593	599	663	662	663
8	528	527	527	572	569	570	605	602	604	667	663	665
9	529	528	528	575	571	573	603	600	601	665	659	662
10	530	529	529	578	575	576	603	596	598	662	659	661
11	531	530	530	578	576	578	603	593	596	661	658	660
12	531	530	531	579	578	579	601	597	600	661	659	660
13	531	529	531	583	579	581	605	593	599	660	658	659
14	531	529	531	584	582	584	607	580	594	660	658	659
15	531	525	528	585	580	582	608	584	604	658	654	656
16	529	528	529	583	576	580	608	605	607	654	651	652
17	533	528	530	583	578	580	605	597	603	653	652	653
18	533	531	532	585	583	584	607	596	601	653	650	652
19	533	531	532	585	582	584	610	607	609	653	651	652
20	534	533	533	588	582	584	609	605	607	654	653	654
21	535	533	534	588	584	585	615	609	612	661	654	656
22	538	533	535	589	587	588	620	615	618	667	661	664
23	541	538	540	589	588	589	623	617	620	669	660	666
24	543	540	541	588	579	582	624	612	619	673	669	671
25	544	541	542	587	564	582	623	620	622	675	669	672
26	546	544	545	588	564	576	624	617	622	674	667	671
27	546	546	546	590	586	588	629	621	627	680	672	676
28	548	546	547	591	581	587	634	629	632	681	675	678
29	554	548	550	592	582	589	638	633	635	687	674	678
30	556	553	555	592	578	584	642	637	639	685	663	673
31	560	556	557	---	---	---	646	642	644	695	662	679
MONTH	560	506	534	592	551	578	646	580	609	695	646	662

PASSAIC RIVER BASIN

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

WATER TEMPERATURE DOWNSTREAM OF DAM, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.0	16.0	16.5	11.0	11.0	11.0	10.0	10.0	10.5	1.5	1.5	1.5
2	15.5	15.5	16.5	11.0	11.0	11.5	10.0	10.0	10.5	1.5	1.5	2.0
3	16.0	16.0	16.5	12.0	12.0	12.5	9.5	9.5	10.0	2.0	2.0	2.0
4	16.5	16.5	16.5	12.5	12.5	12.5	9.0	9.0	9.5	2.5	2.5	2.5
5	16.5	16.5	17.0	---	---	---	9.0	9.0	9.5	2.5	2.5	3.0
6	17.0	17.0	17.0	---	---	---	9.5	9.5	9.5	3.0	3.0	3.0
7	16.0	16.0	16.5	10.5	10.5	10.5	10.0	10.0	10.0	3.0	3.0	3.0
8	15.0	15.0	15.5	10.0	10.0	10.5	9.0	9.0	9.5	3.0	3.0	3.0
9	14.5	14.5	15.0	9.5	9.5	10.0	8.5	8.5	9.0	3.5	3.5	3.5
10	14.0	14.0	14.0	9.5	9.5	9.5	7.5	7.5	8.0	3.5	3.5	3.5
11	14.0	14.0	14.5	8.5	8.5	9.0	7.5	7.5	8.0	3.5	3.5	3.5
12	14.5	14.5	15.0	8.0	8.0	8.5	7.5	7.5	7.5	3.5	3.5	4.0
13	15.5	15.5	16.0	7.5	7.5	8.0	7.5	7.5	7.5	4.0	4.0	4.0
14	16.0	16.0	16.5	7.0	7.0	7.5	7.5	7.5	7.5	4.0	4.0	4.0
15	16.0	16.0	16.5	7.5	7.5	8.0	7.0	7.0	7.0	4.0	4.0	4.0
16	16.0	16.0	16.5	8.0	8.0	8.5	6.5	6.5	6.5	4.0	4.0	4.0
17	15.0	15.0	15.5	8.5	8.5	8.5	6.5	6.5	6.5	4.0	4.0	4.5
18	14.0	14.0	14.5	8.5	8.5	8.5	6.0	6.0	6.5	4.0	4.0	4.0
19	13.5	13.5	14.0	8.0	8.0	8.5	6.0	6.0	6.0	4.0	4.0	4.0
20	13.5	13.5	13.5	8.0	8.0	8.5	5.5	5.5	6.0	4.0	4.0	4.0
21	13.5	13.5	13.5	7.5	7.5	8.0	5.0	5.0	5.5	3.5	3.5	3.5
22	13.5	13.5	14.5	7.0	7.0	7.5	4.0	4.0	4.5	3.5	3.5	3.5
23	15.0	15.0	15.0	7.0	7.0	7.5	3.5	3.5	4.0	3.5	3.5	3.5
24	15.0	15.0	15.5	7.5	7.5	7.5	4.5	4.5	4.5	3.5	3.5	3.5
25	14.5	14.5	15.0	8.0	8.0	8.5	4.0	4.0	4.0	3.5	3.5	4.0
26	13.5	13.5	14.0	9.0	9.0	9.5	3.5	3.5	4.0	3.5	3.5	3.5
27	13.0	13.0	13.5	9.0	9.0	9.5	3.5	3.5	3.5	3.5	3.5	4.0
28	12.0	12.0	12.5	9.5	9.5	10.0	3.5	3.5	3.5	4.0	4.0	4.0
29	11.5	11.5	12.0	10.0	10.0	10.0	3.0	3.0	3.0	4.0	4.0	4.5
30	11.0	11.0	11.5	10.0	10.0	10.5	2.0	2.0	2.5	4.5	4.5	5.0
31	11.0	11.0	11.0	---	---	---	1.5	1.5	2.0	4.5	4.5	4.5
MONTH	17.0	11.0	14.9	12.5	7.0	9.3	10.0	1.5	6.6	4.5	1.5	3.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.5	4.5	4.5	5.5	5.5	6.0	---	---	---	11.5	11.5	12.0
2	3.0	3.0	4.0	5.5	5.5	6.0	10.5	10.5	11.0	12.5	12.5	12.5
3	3.0	3.0	3.5	6.0	6.0	6.5	11.0	11.0	11.5	12.0	12.0	12.5
4	3.5	3.5	3.5	6.0	6.0	6.5	11.0	11.0	11.5	12.0	12.0	12.5
5	2.5	2.5	3.0	5.0	5.0	5.5	10.0	10.0	10.5	13.5	13.5	14.0
6	2.0	2.0	2.5	5.0	5.0	5.0	9.5	9.5	10.0	15.0	15.0	15.0
7	2.5	2.5	2.5	5.0	5.0	5.5	9.0	9.0	9.5	16.0	16.0	16.5
8	2.5	2.5	3.0	6.0	6.0	6.5	9.0	9.0	9.5	17.5	17.5	18.0
9	3.0	3.0	3.5	6.5	6.5	8.0	9.5	9.5	10.5	17.0	17.0	17.5
10	3.5	3.5	4.0	7.5	7.5	7.5	11.0	11.0	12.0	17.0	17.0	17.5
11	3.5	3.5	4.0	6.5	6.5	7.0	12.0	12.0	13.0	17.0	17.0	17.5
12	3.5	3.5	3.5	6.0	6.0	6.5	12.5	12.5	13.0	15.0	15.0	16.0
13	2.5	2.5	3.0	6.0	6.0	6.5	13.0	13.0	13.5	15.0	15.0	16.0
14	2.5	2.5	3.0	6.0	6.0	7.5	13.5	13.5	14.5	13.0	13.0	13.5
15	3.0	3.0	3.5	---	---	---	14.5	14.5	16.0	12.5	12.5	13.0
16	3.5	3.5	3.5	---	---	---	18.0	18.0	19.5	13.5	13.5	14.0
17	3.5	3.5	4.0	---	---	---	20.5	20.5	21.5	15.0	15.0	15.5
18	3.5	3.5	4.0	7.0	7.0	7.5	21.5	21.5	22.5	14.5	14.5	15.0
19	3.5	3.5	4.0	7.0	7.0	7.0	21.5	21.5	22.0	13.0	13.0	13.5
20	4.5	4.5	5.0	6.5	6.5	7.0	20.5	20.5	21.5	12.5	12.5	13.0
21	5.0	5.0	5.5	6.0	6.0	6.5	18.0	18.0	19.0	12.5	12.5	12.5
22	6.0	6.0	6.0	5.5	5.5	6.0	16.0	16.0	17.0	12.5	12.5	13.5
23	6.0	6.0	6.5	5.5	5.5	5.5	14.5	14.5	15.5	13.5	13.5	14.0
24	6.0	6.0	6.5	5.5	5.5	6.0	14.0	14.0	15.0	15.0	15.0	16.0
25	6.0	6.0	6.5	6.0	6.0	6.0	13.5	13.5	14.0	17.0	17.0	17.5
26	6.0	6.0	7.0	6.0	6.0	6.0	13.0	13.0	13.0	17.0	17.0	17.5
27	6.0	6.0	6.5	5.5	5.5	6.0	12.5	12.5	13.5	17.5	17.5	18.5
28	5.5	5.5	6.0	6.5	6.5	7.0	13.0	13.0	13.5	19.0	19.0	19.5
29	---	---	---	7.5	7.5	8.5	12.0	12.0	12.5	19.5	19.5	20.0
30	---	---	---	---	---	---	11.0	11.0	11.5	19.5	19.5	20.5
31	---	---	---	---	---	---	---	---	---	20.5	20.5	21.5
MONTH	6.0	2.0	4.4	7.5	5.0	6.5	21.5	9.0	14.4	20.5	11.5	15.7

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

WATER TEMPERATURE DOWNSTREAM OF DAM, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.5	21.5	22.5	26.0	26.0	26.5	27.5	27.5	29.0	20.5	20.5	20.5
2	22.5	22.5	23.5	26.5	26.5	28.0	27.5	27.5	28.5	20.0	20.0	20.5
3	22.0	22.0	22.5	28.5	28.5	30.0	27.0	27.0	28.0	20.5	20.5	21.0
4	21.5	21.5	22.5	29.5	29.5	30.0	27.5	27.5	28.5	20.5	20.5	22.5
5	21.5	21.5	21.5	28.5	28.5	29.5	27.5	27.5	28.0	23.0	23.0	23.5
6	22.5	22.5	23.0	27.0	27.0	27.5	26.5	26.5	27.5	22.5	22.5	23.5
7	20.0	20.0	21.0	26.0	26.0	26.5	25.5	25.5	26.0	22.5	22.5	23.0
8	18.5	18.5	19.0	26.0	26.0	26.5	25.0	25.0	25.5	21.5	21.5	22.5
9	19.0	19.0	19.5	25.5	25.5	26.0	25.0	25.0	26.0	22.0	22.0	23.0
10	21.0	21.0	22.0	26.5	26.5	27.0	25.0	25.0	25.5	23.5	23.5	23.5
11	21.5	21.5	21.5	26.0	26.0	26.5	24.5	24.5	25.0	23.0	23.0	23.5
12	22.5	22.5	23.5	25.0	25.0	26.0	25.0	25.0	26.0	22.0	22.0	22.0
13	22.0	22.0	23.0	24.0	24.0	24.5	26.0	26.0	27.0	21.0	21.0	21.5
14	20.5	20.5	21.0	24.5	24.5	24.5	26.5	26.5	27.5	21.0	21.0	21.0
15	18.5	18.5	19.5	24.5	24.5	25.5	26.5	26.5	27.0	21.0	21.0	21.5
16	18.0	18.0	18.5	26.0	26.0	26.5	27.0	27.0	27.5	21.0	21.0	22.0
17	18.5	18.5	19.0	26.0	26.0	26.5	27.5	27.5	28.5	22.0	22.0	23.0
18	19.0	19.0	20.0	26.5	26.5	27.5	27.5	27.5	28.0	22.0	22.0	22.5
19	20.0	20.0	20.5	26.0	26.0	27.0	27.5	27.5	28.0	21.0	21.0	21.5
20	20.5	20.5	21.5	26.0	26.0	27.5	27.0	27.0	28.0	21.0	21.0	21.5
21	21.0	21.0	21.5	26.0	26.0	27.0	27.0	27.0	27.5	21.5	21.5	22.0
22	22.5	22.5	23.5	26.0	26.0	26.0	26.0	26.0	26.5	22.5	22.5	22.5
23	23.5	23.5	24.0	26.0	26.0	26.5	26.0	26.0	26.0	22.5	22.5	22.5
24	24.5	24.5	26.0	26.5	26.5	27.5	25.0	25.0	25.5	22.0	22.0	22.5
25	26.0	26.0	26.5	26.0	26.0	27.0	24.5	24.5	25.5	21.5	21.5	22.0
26	26.0	26.0	26.5	25.5	25.5	25.5	25.0	25.0	25.5	20.5	20.5	21.0
27	25.0	25.0	26.0	24.5	24.5	25.0	25.0	25.0	25.5	20.0	20.0	20.0
28	25.5	25.5	26.5	24.5	24.5	24.5	24.0	24.0	24.5	19.5	19.5	20.0
29	26.0	26.0	27.0	24.5	24.5	26.0	22.0	22.0	23.0	19.0	19.0	20.0
30	26.0	26.0	26.5	27.0	27.0	27.5	21.5	21.5	22.0	18.5	18.5	19.0
31	---	---	---	27.0	27.0	28.0	21.0	21.0	21.5	---	---	---
MONTH	26.0	18.0	22.6	29.5	24.0	26.8	27.5	21.0	26.4	23.5	18.5	21.8
YEAR	29.5	1.5	14.6									

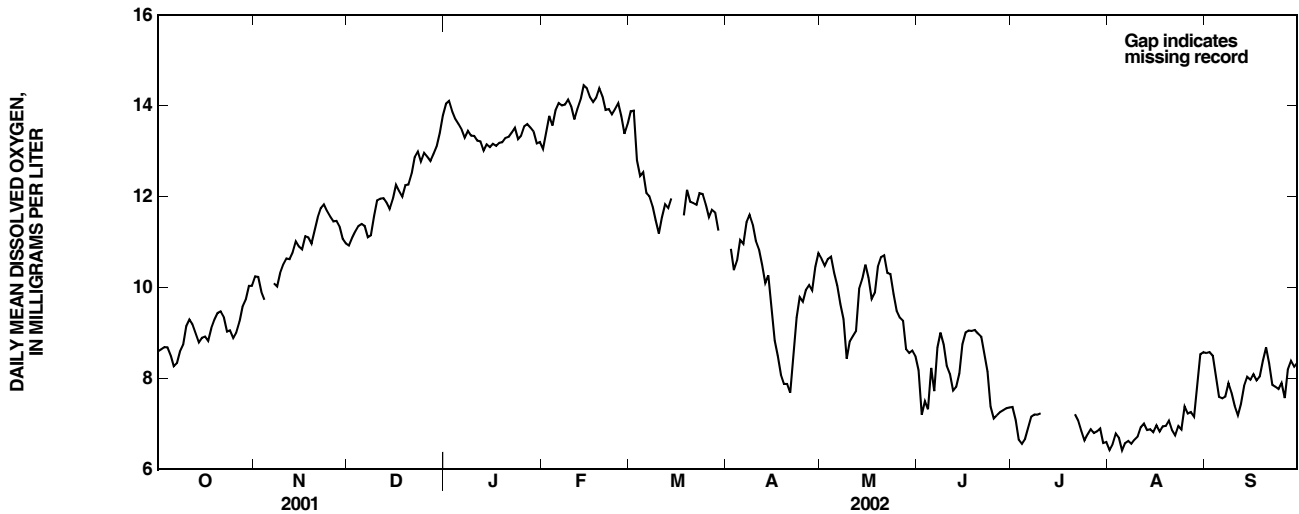


Figure 17. Physical characteristics and concentrations of constituents measured at 01388000 Ramapo River at Pompton Lakes, water year 2002.

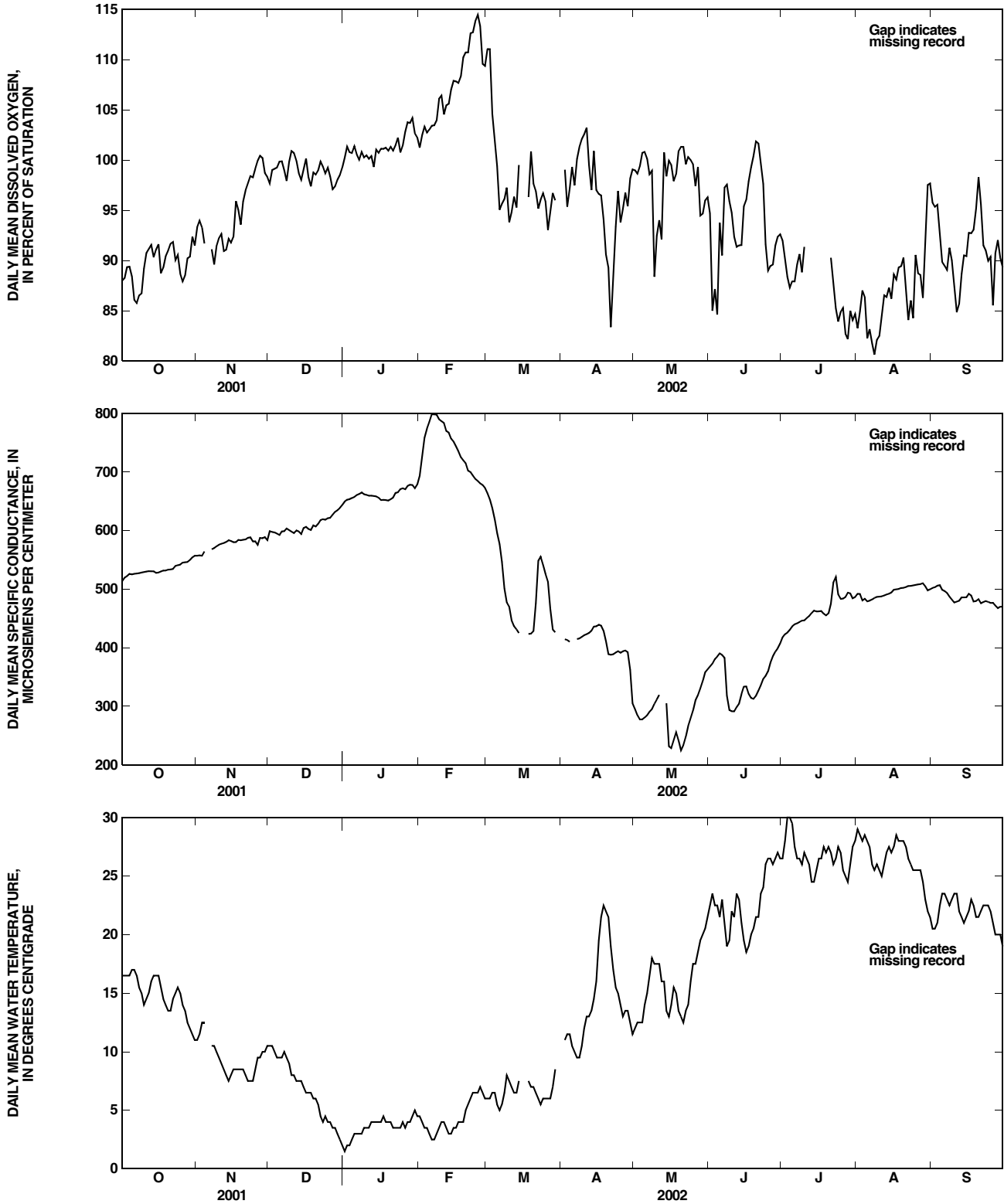


Figure 17. Physical characteristics and concentrations of constituents measured at 01388000 Ramapo River at Pompton Lakes, water year 2002--continued.

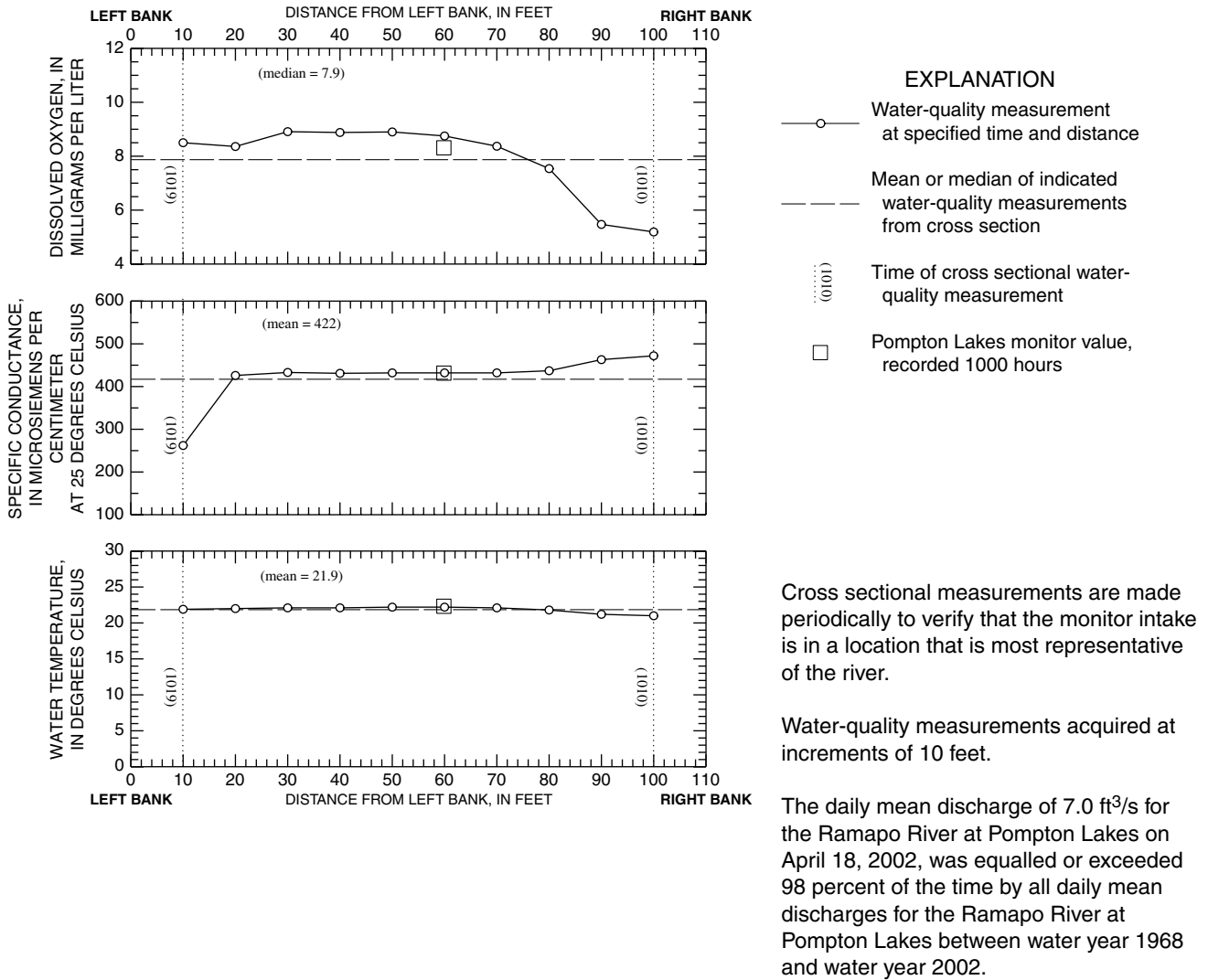


Figure 18. Cross sectional water-quality measurements with recorded monitor values, at Ramapo River at Pompton Lakes, April 18, 2002.

PASSAIC RIVER BASIN

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ

LOCATION.--Lat 40°58'09", long 74°16'56", Passaic County, Hydrologic Unit 02030103, at Passaic Valley Water Commission pumping station, 100 ft upstream from bridge on Jackson Avenue (Pompton Plains Cross Road), 800 ft below confluence of Pequannock and Ramapo Rivers, and 0.7 mi east of Pompton Plains.

DRAINAGE AREA.--355 mi².

PERIOD OF RECORD.--Water years 1962-69, 1971-75, 1979-80, 1992, 1994, 1998 to current year.

REMARKS.--Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-DITY FIELD UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)		
NOV	15...	1000	48	3.4	.066	.050	762	90	10.8	7.5	458	14.0	7.5	120
FEB	07...	1000	38	2.8	.055	.042	757	94	12.6	7.6	637	10.0	3.0	140
JUN	19...	1000	294	4.4	.110	.083	767	92	8.6	7.6	346	24.0	19.0	81
AUG	29...	1000	251	14	.081	.061	763	82	7.5	7.4	404	18.0	20.0	99
DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV	15...	33.8	9.41	2.39	39.1	81	76.8	E.1	4.5	24.3	252	245	.120	.40
FEB	07...	37.8	10.4	2.54	59.3	76	117	E.1	7.0	31.4	336	321	.210	.56
JUN	19...	22.1	6.24	1.60	32.0	51	58.9	E.1	6.3	16.6	197	178	.080	.35
AUG	29...	26.3	8.10	2.32	37.4	56	71.5	E.1	6.5	20.1	246	210	<.030	.37
DATE	TIME	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR-TICULATE WAT SUSP (MG/L AS N) (49570)	PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV	15...	.130	1.27	.022	1.7	.10	.007	--	.032	.7	<.1	3.0	.7	E2.0
FEB	07...	.190	2.29	.031	2.8	.09	.034	<.020	.079	.7	<.1	2.6	.7	<1.0
JUN	19...	.080	.84	.025	1.2	.17	.040	.027	.079	1.0	<.1	3.6	1.0	E1.2
AUG	29...	<.030	.81	.009	1.2	.15	.035	.027	.096	.9	<.1	3.9	.9	E1.3

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG AS N) (00626)	NITRO-GEN, NH4 + ORG. (MG/KG AS P) (00668)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC (GM/KG AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)			
NOV	15...		--	--	70	3									
FEB	07...		--	--	80	5									
JUN	19...		14.4	40	8										
AUG	29...		28.0	60	20										
AUG	29...	1000 ENVIRONMENTAL	--	--	--	--	--	<2	22.3	<.06	73				
AUG	29...	1000 BED MATERIAL	7.00	190	4700	2.4	<.2	--	--	--	--	--			
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)
AUG	29...	E.03	E.7	3.0	580	6	154	.03	1	<.4	<.05	19	--	--	--
AUG	29...	--	--	--	--	--	--	--	--	--	--	--	<1	.060	--
DATE	TIME	SAMPLE TYPE	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) (01043)	IRON, RECOV. BED MA-TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	4HCYPEN PHENAN THRENE WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU-ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU-ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)
AUG	29...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	29...	6.9	1.8	9	9900	18	110	.05	3.9	<1	53	E6	E4	E3	
DATE	TIME	SAMPLE TYPE	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA-CENE, 2-METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZOZ FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY-SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR-ANTHENE BED MAT WS <2MM DW, REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)
AUG	29...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	29...	E2	E8	E15	E20	57	68	73	E30	65	74	E16	140	57	
DATE	TIME	SAMPLE TYPE	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPTHAL ENE, 2-ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948)	NAPHTH-ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	P-CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN-THRI-DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1-METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)
AUG	29...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	29...	<50	<50	<50	<50	E6	<50	E6	E8	<50	E13	59	<50	E11	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
AUG			
29...	--	--	--
29...	100	1	1

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
AUG					SEP				
05...	1050	270	400	30	03...	1040	300	300	60
12...	1045	220	100	650					
19...	1037	70	100	10					

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

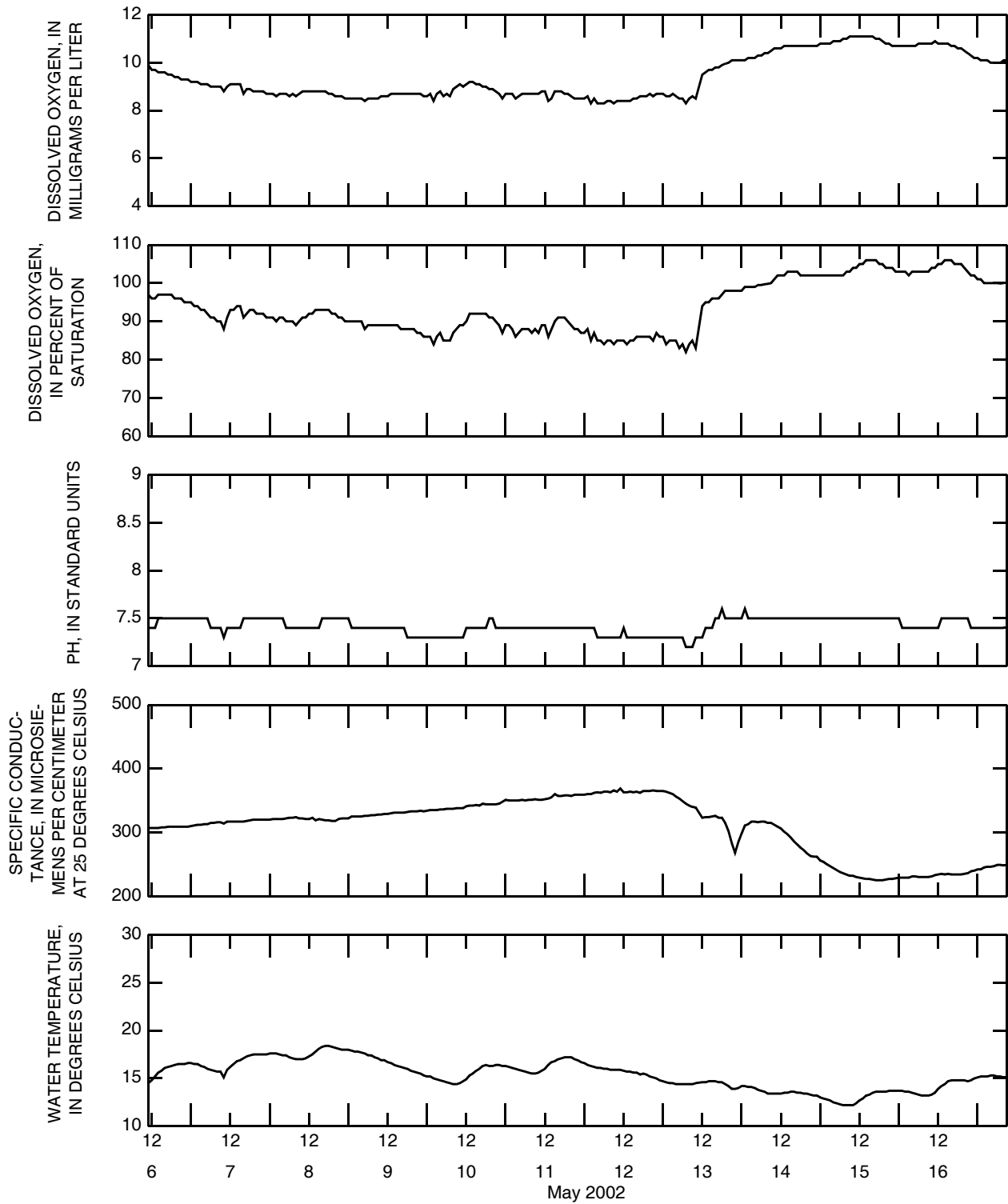


Figure 19. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, May 6 to 17, 2002.

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

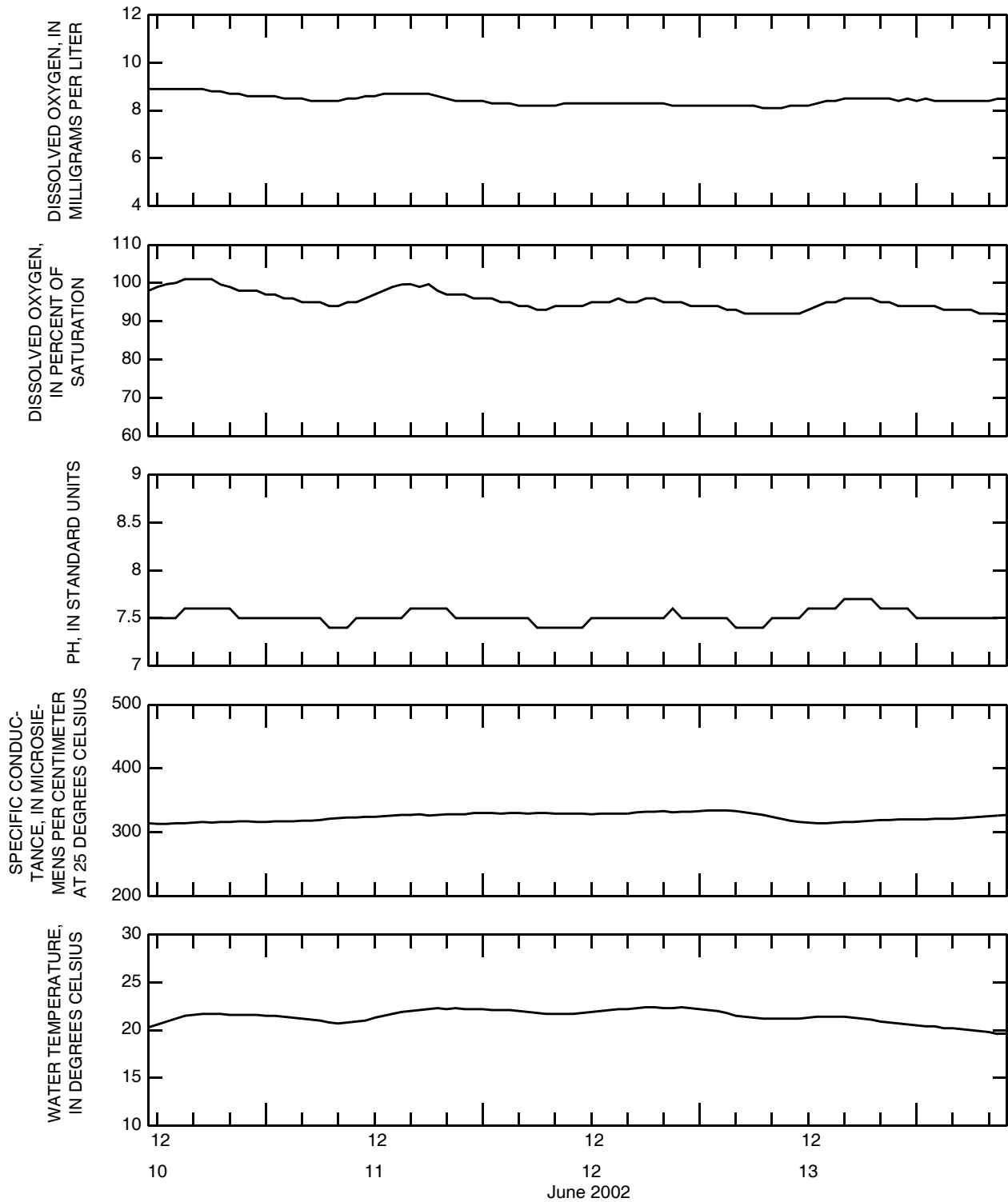


Figure 21. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, June 10 to 14, 2002.

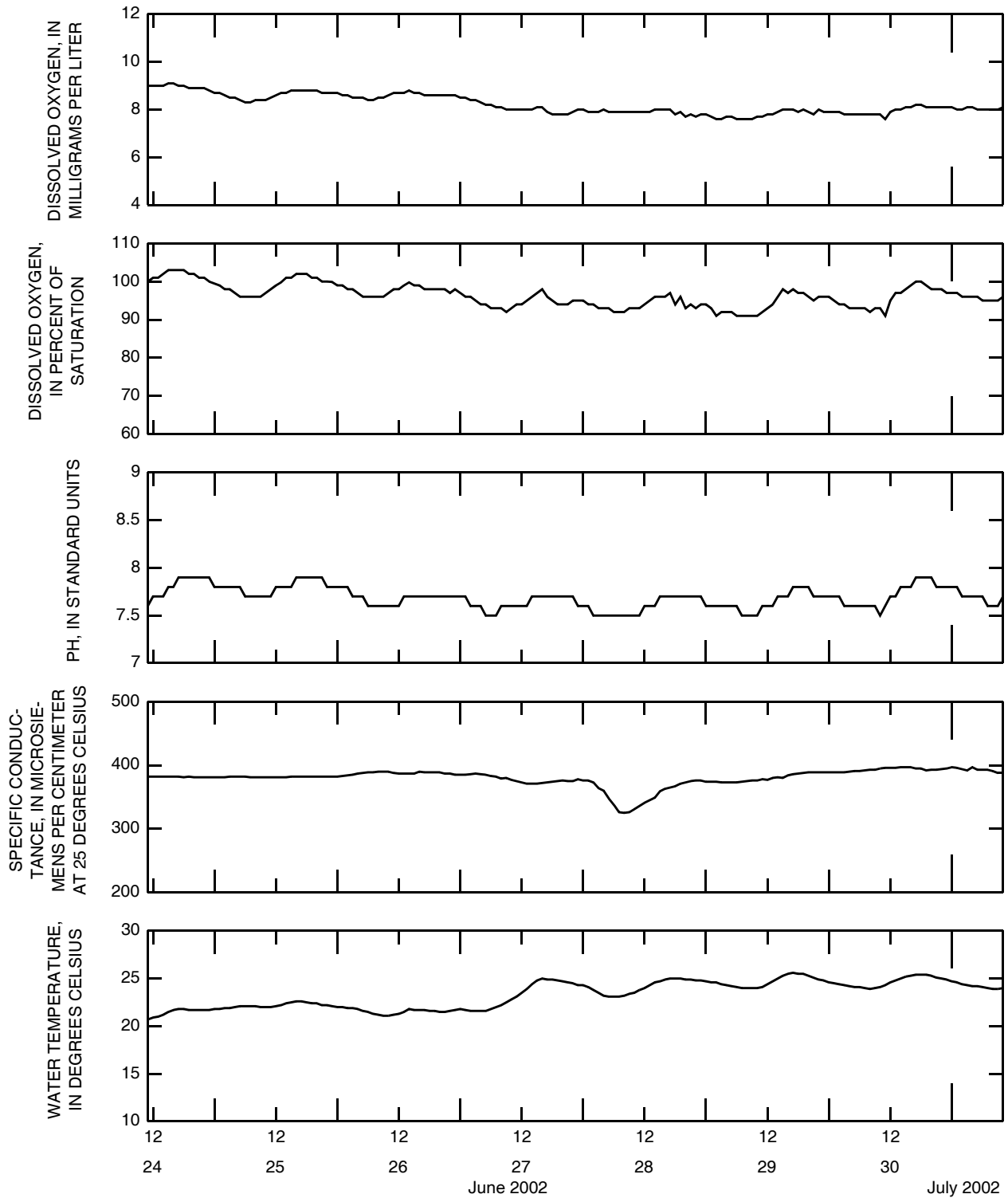


Figure 22. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, June 24 to July 1, 2002.

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

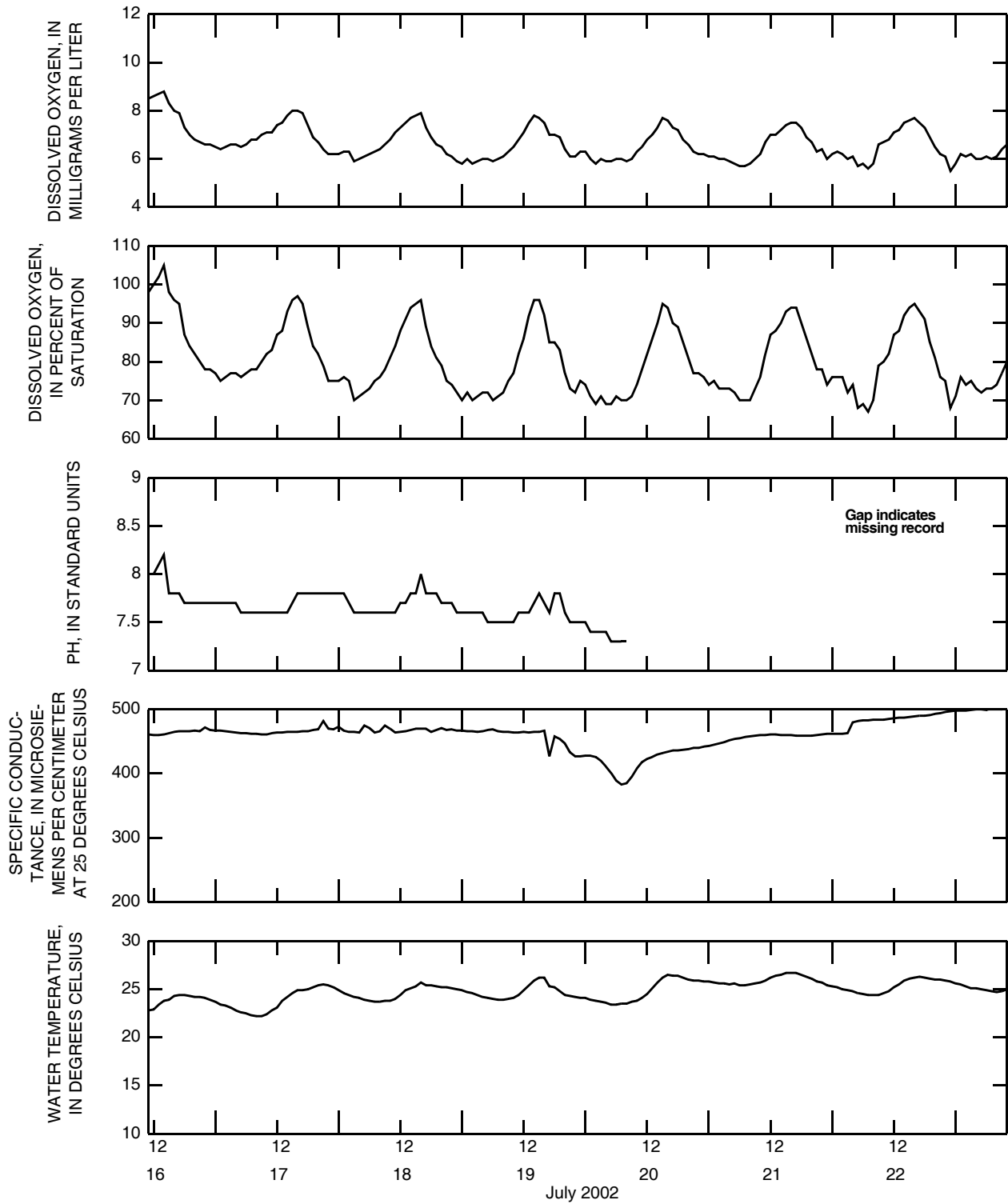


Figure 23. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01388500 Pompton River at Pompton Plains, July 16 to 23, 2002.

PASSAIC RIVER BASIN

01388720 BEAVER DAM BROOK AT RYERSON ROAD, AT LINCOLN PARK, NJ

LOCATION.--Lat 40°55'35", long 74°17'35", Morris County, Hydrologic Unit 02030103, at bridge on Ryerson Road in Lincoln Park, 700 ft north of intersection of Ryerson Road and Park Avenue, and 0.3 mi upstream of mouth.

DRAINAGE AREA.-- 13.1 mi².

PERIOD OF RECORD.--Water year 2001 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 14...	1310	.76	11	.243	.184	763	77	9.5	7.0	533	17.5	6.5	140	
FEB 19...	1030	2.2	12	.260	.203	764	87	11.7	8.3	441	12.0	3.0	130	
MAY 29...	1230	7.9	7.7	.257	.198	761	--	--	7.3	396	26.0	17.5	120	
AUG 14...	1250	.47	16	.308	.238	748	48	4.0	7.0	572	33.0	23.5	140	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 14...	38.4	10.3	2.21	48.4	109	90.7	.1	12.4	28.7	308	296	<.030	.32	
FEB 19...	35.4	9.62	1.44	31.1	77	62.3	E.1	11.5	38.4	246	238	.090	.42	
MAY 29...	33.0	8.50	1.71	27.3	70	54.3	E.1	12.7	29.2	237	210	.130	.48	
AUG 14...	40.1	10.2	3.42	51.2	100	92.8	.1	12.2	26.7	333	300	.150	.48	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 14...	.030	<.04	<.003	--	.42	.005	--	.109	2.5	<.1	7.2	2.5	5.1	
FEB 19...	.110	.36	.009	.78	.05	.013	<.020	.035	.7	E.1	5.9	E.6	<1.0	
MAY 29...	.120	.33	.021	.81	.16	<.05	<.020	E.05	.7	<.1	5.7	.7	<1.0	
AUG 14...	.170	.59	.014	1.1	.09	.015	.020	.065	.7	<.1	7.4	.7	E1.2	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01388720 BEAVER DAM BROOK AT RYERSON ROAD, AT LINCOLN PARK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

			CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)			RESIDUE TOTAL AT 105 DEG. C, SUS-PENDEDED (MG/L) (00530)							
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)		
NOV	14...		--	--	60	19							
FEB	19...		--	--	40	17							
MAY	29...		2.00	40	8								
AUG	14...		2.50	60	4								
AUG	14...	1250 ENVIRONMENTAL	--	--	--	--	--	E2	51.5	<.06	60		
AUG	14...	1250 BED MATERIAL	6.40	140	8500	2.5	<.2	--	--	--	--		
AUG	14...	14...	<.04	E.4	1.6	2220	<1	238	<.01	3	E.3	<.05	5
AUG	14...	14...	--	--	--	--	--	--	--	--	--	--	--
AUG	14...	14...	1.9	3.1	6	11000	5.0	100	<.01	6.6	<1	16	<50
AUG	14...	14...	<50	<50	<50	<50	58	56	69	<50	<50	65	<50
AUG	14...	14...	<50	<50	<50	<50	<50	<50	<50	<50	56	<50	<50

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01388720 BEAVER DAM BROOK AT RYERSON ROAD, AT LINCOLN PARK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN .004 MM (80157)	% FINER THAN .062 MM (80164)
AUG			
14...	--	--	--
14...	110	2	4

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	0930	230	<100	330	15...	1000	700	400	620
07...	0945	800	400	830	22...	0945	230	200	260
					29...	0950	2400	600	480

Remark codes used in this report:
< -- Less than

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

LOCATION.--Lat 40°53'47", long 74°16'10", Passaic County, Hydrologic Unit 02030103, 400 ft downstream from the Pompton River in Two Bridges, and 1.4 mi northwest of Little Falls.

DRAINAGE AREA.--734 mi².

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

NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1987-96.

PERIOD OF DAILY RECORD.--

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.

DISSOLVED OXYGEN PERCENT SATURATION: October 2001 to September 2002.

SPECIFIC CONDUCTANCE: August 1989 to current year.

WATER TEMPERATURE: August 1989 to current year.

INSTRUMENTATION.--Water-quality monitor(s) since March 1989, pumping system, data recorded hourly. Multiple-point monitoring is necessary at this site because of poor mixing below the confluence with the Pompton River. Three intakes, left, middle, and right, are positioned at 70, 160, and 220 ft, respectively, from the edge of the monitor house on the left bank (looking downstream).

Three monitors, water pumped continuously.--Water years 1989-99.

One monitor, water pumped sequentially.--Water years 2000 to current year.

REMARKS.--The station is 400 ft downstream from the confluence of the Pompton River with the left bank of the Passaic River. One water-quality sensor (monitor) measures the characteristics of water pumped sequentially from three separate intakes. The station is impacted by occasional diversion of water from the Pompton River 750 ft upstream from its junction with the left bank of the Passaic River, which is 400 ft upstream from the station. Interruptions in the daily record were due to instrument or pumping-system malfunction. The calibration of water quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following period were adjusted:

DISSOLVED OXYGEN: Nov. 5 to Nov. 20, Dec. 10 to Dec. 28, Jan. 15 to Jan. 29, Feb. 21 to Apr. 18, May 2 to May 22, Jun. 24 to Jul. 11.

SPECIFIC CONDUCTANCE: Apr. 18 to May 2.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: Maximum, 20.0 mg/L (measuring limit of instrument) from left and right intakes, on many days during July-September, 1999, from right and middle on July 25, 2001; minimum, 1.1 mg/L from left and middle intakes, Apr. 20, 2002.

DISSOLVED OXYGEN PERCENT SATURATION: Maximum, 253 from right intake, Aug. 19, 2002; minimum, 12 from left and middle intakes, Apr. 20, 2002.

SPECIFIC CONDUCTANCE: Maximum, 2,910 uS/cm from middle intake, Jan. 16, 1999; minimum, 101 uS/cm from right intake, Sept. 19, 20, 1999.

WATER TEMPERATURE: Maximum, 31.5°C from left intake, July 7, 1999; minimum, 0.0°C from left, middle, and right intakes, on many days during winters.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 19.4 mg/L from right intake, Aug. 19; minimum, 1.1 mg/L from left and middle intakes, Apr. 20.

DISSOLVED OXYGEN PERCENT SATURATION: Maximum, 253 from right intake, Aug. 19; minimum, 12 from left and middle intakes, Apr. 20.

SPECIFIC CONDUCTANCE: Maximum, 1,410 microsiemens/cm from right and middle intakes, Jan. 25, 26; minimum, 228 microsiemens/cm from right intake, May 14.

WATER TEMPERATURE: Maximum, 30.5°C from left intake, July 4; minimum, 0.5°C from left, middle, and right intakes, on several days during Jan.

PASSAIC RIVER BASIN

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

OXYGEN DISSOLVED FROM LEFT INTAKE, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.4	7.6	8.4	9.5	7.7	8.3	9.0	5.7	7.0	---	---	---
2	10.3	7.9	9.2	9.4	7.7	8.3	8.9	6.7	7.6	---	---	---
3	10.5	9.1	9.7	9.1	7.6	8.1	9.9	7.2	8.4	13.3	12.2	12.7
4	10.5	8.9	9.6	8.6	7.3	7.7	10.9	8.0	9.2	13.3	12.3	12.7
5	10.3	8.6	9.2	8.4	7.1	7.7	11.5	8.9	9.9	13.8	12.2	13.0
6	9.5	7.8	8.6	9.3	7.4	8.2	12.1	9.6	10.4	13.0	11.9	12.5
7	9.0	7.6	8.1	9.1	7.5	8.2	12.0	9.2	10.4	12.7	11.7	12.1
8	9.2	7.5	8.2	10.2	7.6	8.6	9.8	8.1	9.0	12.7	11.2	11.9
9	9.4	7.9	8.5	11.2	8.0	9.3	9.1	8.1	8.6	12.9	11.1	11.7
10	10.1	8.2	8.9	11.7	8.2	9.6	10.3	8.9	9.7	13.2	11.3	11.9
11	10.4	8.6	9.3	12.9	8.9	10.5	11.4	9.4	10.3	12.5	11.2	11.6
12	10.6	8.8	9.5	13.3	9.5	11.2	10.8	9.2	10	12.9	10.8	11.5
13	10.2	8.7	9.3	13.2	9.7	11.2	11.4	9.1	10	12.4	10.6	11.3
14	9.8	8.2	8.9	13.1	10.0	11.4	10.7	9.1	9.7	12.4	10.8	11.4
15	9.2	7.9	8.4	13.4	10.1	11.2	10.8	8.5	9.4	12.8	10.8	11.6
16	8.0	7.1	7.6	13.7	9.9	11.5	10.3	8.4	9.0	13.5	11.4	12.1
17	8.5	7.4	7.8	13.3	9.4	11.0	10.0	8.4	9.2	13.2	11.3	11.9
18	9.0	7.6	8.1	12.4	8.9	10.4	11.7	9.1	9.8	13.6	11.3	12.2
19	9.7	7.6	8.5	12.2	8.3	9.8	10.6	9.3	9.8	13.2	11.6	12.2
20	10.3	8.1	8.9	12.8	7.9	10.0	10.3	9.4	9.6	13.9	11.5	12.5
21	10.2	8.3	9.0	13.0	9.2	10.6	11.5	9.5	10.0	13.8	11.7	12.5
22	9.8	8.3	8.8	12.9	9.0	10.5	11.7	9.7	10.4	14.4	11.9	13.0
23	9.3	7.8	8.5	12.9	9.0	10.7	12.4	10.1	11.0	14.3	11.9	12.9
24	9.2	7.5	8.1	13.0	9.7	11.0	12.5	10.6	11.1	13.2	11.8	12.2
25	9.0	6.9	7.7	13.4	9.7	11.1	11.5	10.1	10.8	12.3	9.9	11.4
26	8.5	6.8	7.5	10.4	7.7	9.7	11.6	10.1	10.6	11.6	9.8	10.5
27	8.2	6.8	7.4	8.2	5.4	7.1	11.8	10.5	10.9	12.4	10.6	11.2
28	8.8	6.8	7.7	6.9	5.2	6.0	---	---	---	13.7	10.8	11.8
29	8.9	7.0	7.8	7.2	5.7	6.5	---	---	---	---	---	---
30	8.8	7.4	7.9	7.6	5.8	6.4	---	---	---	---	---	---
31	8.4	7.5	7.9	---	---	---	---	---	---	11.3	9.6	10.5
MONTH	10.6	6.8	8.5	13.7	5.2	9.4	12.5	5.7	9.7	14.4	9.6	12.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	10.3	9.2	9.6	15.8	12.7	14.4	9.4	7.7	8.5	9.5	9.0	9.3
2	12.4	9.4	10.5	17.5	14.3	16.3	9.5	7.7	8.4	9.0	7.9	8.5
3	12.2	10.5	11.1	16.3	12.5	14.5	9.6	7.8	8.3	9.6	8.8	9.2
4	13.2	10.8	11.9	13.5	9.8	10.7	9.6	7.8	8.6	9.3	7.6	8.7
5	14.2	12.0	13.0	10.7	9.9	10.3	9.2	7.8	8.4	8.0	6.5	6.8
6	14.3	12.3	13.1	11.6	10.6	11.0	10.4	8.1	9.3	6.7	6.5	6.6
7	14.3	12.4	12.9	---	---	---	11.9	9.6	10.7	6.7	6.3	6.5
8	14.5	12.5	13.4	12.8	11.1	11.8	13.1	10.2	11.4	6.9	5.5	6.3
9	15.1	12.5	13.5	12.4	10.5	11.5	13.0	9.6	11.2	5.5	4.8	5.1
10	14.9	12.6	13.5	12.4	9.8	11.0	12.1	8.5	10.3	6.0	4.7	5.3
11	14.9	12.2	13.1	11.2	9.4	10.1	10.8	7.6	9.1	6.2	5.2	5.6
12	14.2	10.8	12.6	12.2	9.6	10.9	9.5	7.5	8.2	5.6	4.9	5.3
13	14.1	10.9	12.5	11.9	10.3	11.1	9.6	7.5	8.2	8.7	4.9	5.8
14	15.4	12.2	13.5	13.0	11.1	11.9	9.2	7.6	8.3	9.7	8.7	9.4
15	15.6	12.8	14.0	12.8	10.7	11.7	8.3	7.1	7.6	10.2	9.7	10
16	16.1	13.5	14.5	12.2	9.2	11.0	7.4	6.5	6.9	9.9	8.7	9.5
17	16.3	13.4	14.6	12.1	9.0	10.3	7.8	5.8	6.7	8.9	5.9	7.1
18	16.3	12.7	14.3	10.6	8.8	9.6	7.9	5.2	6.7	9.8	5.7	8.0
19	16.3	12.8	14.5	11.6	10.1	11.0	7.7	4.7	5.9	10.7	9.8	10.2
20	16.2	13.1	14.7	11.9	10.6	11.2	6.0	1.1	3.9	10.5	10.0	10.2
21	15.6	12.7	14.2	11.1	10.2	10.5	3.6	1.6	2.8	10.6	8.5	9.5
22	14.9	10.1	12.5	10.3	10.0	10.2	4.3	3.0	3.5	8.5	7.3	7.7
23	13.3	10.0	11.3	10.8	10.1	10.5	5.8	4.3	5.3	8.9	7.1	7.4
24	15.1	10.6	12.7	11.0	10.7	10.8	7.0	5.7	6.4	7.2	6.9	7.1
25	15.8	12.0	13.7	10.7	10.2	10.5	6.6	6.3	6.5	7.1	6.6	6.9
26	16.5	12.8	14.4	10.3	10.0	10.1	7.2	6.4	6.8	6.7	6.2	6.5
27	15.9	13.1	14.3	10.3	9.8	10.1	7.7	6.9	7.3	6.4	5.9	6.1
28	---	---	---	10.1	9.7	9.9	8.6	7.1	7.5	6.4	5.8	6.0
29	---	---	---	10.2	9.4	9.8	9.3	8.5	8.9	6.2	5.2	5.7
30	---	---	---	9.9	9.2	9.6	9.7	9.1	9.4	6.1	5.2	5.6
31	---	---	---	9.3	8.2	8.8	---	---	---	6.0	5.1	5.5
MONTH	16.5	9.2	13.1	17.5	8.2	11.0	13.1	1.1	7.7	10.7	4.7	7.3

PASSAIC RIVER BASIN

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

OXYGEN DISSOLVED FROM LEFT INTAKE, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	5.6	5.1	5.3	7.2	5.1	6.2	16.7	10.2	13.1	6.3	5.6	5.9
2	5.3	4.4	4.8	7.2	5.1	6.0	15.6	8.3	12.4	6.6	5.7	6.1
3	6.0	4.6	5.3	7.3	5.0	6.0	8.3	5.0	5.9	6.8	6.0	6.4
4	6.3	5.0	5.5	8.0	4.8	6.2	8.5	4.8	6.4	7.0	5.6	6.3
5	9.5	5.3	7.8	7.9	4.7	6.3	10.1	5.7	7.7	7.5	5.2	6.2
6	7.2	6.3	6.7	8.6	5.5	6.8	10.7	6.3	8.3	7.5	5.1	6.0
7	8.7	6.7	7.9	9.0	5.4	7.1	11.8	6.4	8.7	7.8	5.0	6.1
8	9.4	8.0	8.7	9.9	5.7	7.5	11.9	7.6	9.4	8.2	5.2	6.3
9	8.8	8.1	8.5	9.2	6.2	7.5	13.8	8.8	10.7	---	---	---
10	8.5	7.5	7.8	7.8	5.1	6.3	13.5	9.2	11.0	---	---	---
11	7.9	7.0	7.4	8.2	5.7	6.7	13.8	9.2	11.1	---	---	---
12	7.5	5.9	6.8	7.5	5.2	6.3	14.9	9.0	11.7	---	---	---
13	6.4	5.9	6.2	7.0	5.2	5.9	15.4	9.5	12.0	---	---	---
14	6.8	5.9	6.3	6.9	5.0	5.7	14.9	9.8	12.2	9.7	6.0	7.6
15	8.1	6.8	7.7	7.7	5.0	6.3	14.8	9.7	11.8	8.3	6.5	7.2
16	8.4	8.0	8.2	8.8	5.3	6.9	13.5	9.2	11.0	7.0	4.8	5.9
17	8.9	8.1	8.4	9.0	5.9	7.1	13.8	8.7	11.0	5.5	4.8	5.1
18	9.3	8.1	8.6	8.8	5.6	6.7	13.4	7.9	10.3	5.9	4.6	5.1
19	9.1	8.0	8.6	7.8	5.2	6.4	13.2	7.9	10.3	6.6	4.9	5.5
20	9.4	7.8	8.6	5.6	4.1	4.9	12.6	7.7	10	7.1	4.9	5.8
21	9.9	7.8	8.8	9.4	5.6	7.3	12.6	7.7	9.9	7.1	5.3	6.0
22	8.5	5.5	6.6	9.3	5.4	7.1	10.9	7.8	9.2	7.3	5.2	6.0
23	7.1	5.4	6.1	10.0	4.2	6.7	9.3	7.2	8.1	7.6	5.2	6.0
24	8.7	5.2	6.6	7.3	4.8	5.5	7.5	5.3	6.4	9.5	5.1	6.2
25	8.7	5.2	6.6	6.8	4.5	5.7	7.3	5.3	6.1	7.6	5.1	6.1
26	7.9	5.2	6.2	10.0	6.0	7.8	7.7	5.8	6.7	7.3	5.4	6.2
27	8.6	4.5	6.5	9.1	6.1	7.5	9.5	7.0	8.1	7.3	6.2	6.7
28	6.2	4.2	5.6	9.3	6.7	7.9	10.2	7.5	8.6	7.2	6.6	7.0
29	5.9	4.2	5.1	12.6	7.5	9.6	8.0	7.0	7.5	6.7	6.2	6.5
30	6.3	5.1	5.6	14.0	8.4	10.6	7.9	6.5	7.2	7.1	6.2	6.5
31	---	---	---	15.1	9.2	11.7	6.8	5.9	6.3	---	---	---
MONTH	9.9	4.2	7.0	15.1	4.1	7.0	16.7	4.8	9.3	9.7	4.6	6.2
YEAR	17.5	1.1	9.0									

OXYGEN DISSOLVED FROM MIDDLE INTAKE, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.2	7.5	8.2	9.7	7.6	8.4	8.7	6.1	7.0	---	---	---
2	9.8	7.7	8.8	9.4	7.6	8.1	8.5	6.6	7.4	---	---	---
3	10.0	8.6	9.2	9.0	7.6	8.1	9.4	7.2	8.2	13.0	12.2	12.7
4	10.0	8.4	9.1	8.1	6.7	7.4	10.6	7.9	9.2	13.1	12.2	12.7
5	9.7	8.1	8.8	7.1	6.0	6.6	11.3	9.0	10	13.2	12.2	12.6
6	9.1	7.5	8.1	7.8	6.0	6.9	11.6	9.7	10.4	12.6	12.0	12.3
7	8.7	7.3	7.9	8.9	7.4	7.9	11.6	9.1	10.4	12.7	11.8	12.1
8	9.5	7.5	8.3	9.8	7.7	8.6	9.6	8.1	8.9	12.7	11.2	11.9
9	9.9	8.1	8.9	10.6	8.3	9.3	9.1	8.1	8.7	12.6	11.2	11.7
10	10.6	8.8	9.6	11.1	8.3	9.5	10.3	9.0	9.7	13.0	11.3	11.8
11	11.2	9.2	9.9	12.0	9.1	10.4	11.3	9.5	10.2	12.3	11.3	11.6
12	11.0	9.5	10.1	12.8	9.6	11.0	10.7	9.4	10.0	12.4	10.9	11.5
13	10.8	9.2	9.8	12.4	9.8	11.1	11.6	9.3	10.1	12.1	10.7	11.3
14	9.8	8.0	9.1	12.6	10.1	11.3	10.7	9.2	9.7	12.1	10.9	11.3
15	9.4	7.2	8.2	12.7	10.3	11.2	10.4	8.5	9.3	12.5	11.0	11.6
16	7.6	6.1	6.9	12.9	10.2	11.4	9.9	8.4	8.9	13.0	11.5	12.0
17	6.9	5.5	6.2	12.7	9.4	10.8	10.0	8.4	9.2	13.0	11.4	12.0
18	8.0	6.2	7.1	12.3	8.9	10.3	11.4	9.2	9.9	13.4	11.4	12.2
19	8.8	7.3	7.9	12.0	8.4	9.7	10.4	9.4	9.8	13.0	11.7	12.2
20	9.7	7.7	8.5	12.1	8.5	10.0	10.1	9.5	9.6	13.7	11.7	12.5
21	10.1	8.3	9.0	12.2	9.3	10.4	11.0	9.6	10.0	13.7	11.8	12.6
22	9.9	8.2	8.9	12.1	9.0	10.4	11.1	9.8	10.3	14.3	12.1	13.0
23	8.7	7.4	8.2	12.7	9.2	10.6	11.9	10.2	11.0	14.2	12.0	12.9
24	8.4	6.4	7.5	12.7	10.2	11.2	12.3	10.7	11.2	13.3	11.9	12.5
25	7.6	6.1	6.6	13.6	10.0	11.4	11.3	10.2	10.7	12.4	9.9	11.4
26	7.4	5.9	6.4	10.7	7.8	9.8	11.2	10.2	10.6	10.9	9.9	10.4
27	7.4	5.8	6.4	8.3	5.6	7.0	11.5	10.6	10.9	11.7	10.7	11.1
28	7.8	6.1	6.7	6.9	5.6	6.1	---	---	---	12.8	11.1	11.7
29	8.5	6.4	7.4	7.4	6.0	6.7	---	---	---	---	---	---
30	9.1	7.3	8.0	7.8	6.0	6.6	---	---	---	---	---	---
31	8.8	7.6	8.1	---	---	---	---	---	---	11.1	9.6	10.6
MONTH	11.2	5.5	8.2	13.6	5.6	9.3	12.3	6.1	9.7	14.3	9.6	11.9

PASSAIC RIVER BASIN

135

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

OXYGEN DISSOLVED FROM RIGHT INTAKE, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.8	7.5	8.1	9.7	7.2	8.3	8.5	5.9	6.9	---	---	---
2	9.2	7.8	8.6	8.9	7.2	7.8	9.4	6.8	7.8	---	---	---
3	9.4	8.2	8.9	8.9	7.3	8.0	9.8	7.2	8.4	13.0	12.3	12.8
4	9.1	7.9	8.7	8.0	6.1	7.1	10.7	8.0	9.2	13.1	12.3	12.7
5	9.0	7.7	8.4	6.7	5.9	6.3	11.3	9.1	10.0	12.7	12.2	12.4
6	8.5	7.2	7.8	7.3	5.9	6.5	11.8	9.7	10.5	12.6	12.0	12.3
7	8.0	7.1	7.6	8.3	7.2	7.7	11.9	9.2	10.5	12.8	11.8	12.3
8	8.9	7.4	8.1	9.9	7.7	8.6	10.0	8.2	9.2	12.9	11.3	12.1
9	9.9	8.4	9.1	10.4	8.4	9.2	9.5	8.2	8.8	12.9	11.2	11.8
10	11.0	9.4	10.1	11.3	8.3	9.5	10.3	9.0	9.8	13.3	11.4	12.0
11	11.8	9.9	10.7	11.8	9.0	10.3	11.4	9.5	10.2	12.3	11.3	11.7
12	11.8	10.2	10.9	12.7	9.6	11.0	11.3	9.4	10.2	12.6	10.9	11.5
13	10.9	9.5	10.4	12.3	9.8	11.1	11.4	9.3	10.2	12.2	10.7	11.4
14	10.3	7.8	9.3	12.8	10.1	11.3	10.7	9.3	9.8	12.2	10.9	11.4
15	9.1	6.8	8.1	12.6	10.3	11.2	10.4	8.6	9.4	12.7	11.0	11.7
16	7.7	5.9	6.8	13.4	10.2	11.4	10.0	8.5	9.0	13.2	11.5	12.1
17	6.7	5.2	5.9	13.0	9.6	11.0	10.1	8.5	9.3	13.2	11.4	12.1
18	7.0	5.7	6.4	12.7	8.8	10.5	11.5	9.2	10.0	13.5	11.4	12.3
19	7.9	6.7	7.2	12.5	8.3	10	10.5	9.4	9.9	13.1	11.8	12.3
20	8.8	7.4	8.1	12.4	8.3	10.1	10.5	9.5	9.7	13.8	11.7	12.6
21	9.6	8.2	8.8	12.3	9.3	10.4	11.1	9.6	10.1	13.8	11.8	12.6
22	9.8	7.9	8.8	12.4	8.9	10.5	11.2	9.9	10.4	14.3	12.1	13.0
23	8.6	6.8	8.0	13.0	9.0	10.7	11.9	10.3	11.0	14.3	12.1	13.0
24	7.9	5.4	6.9	13.2	10.0	11.0	12.3	10.7	11.2	13.4	11.9	12.6
25	6.5	4.9	5.7	13.5	9.9	11.4	11.3	10.2	10.8	12.4	10.0	11.5
26	6.5	5.0	5.6	10.8	7.8	9.9	11.3	10.2	10.7	11.2	10.0	10.5
27	6.4	5.0	5.5	8.2	5.5	7.2	11.7	10.7	11.0	11.9	10.7	11.2
28	6.7	5.0	5.8	7.2	5.5	6.1	---	---	---	13.1	11.1	11.7
29	7.7	5.5	6.7	7.6	5.9	6.7	---	---	---	---	---	---
30	9.0	6.7	7.9	8.2	5.8	6.6	---	---	---	---	---	---
31	9.4	7.6	8.4	---	---	---	---	---	---	11.3	9.8	10.6
MONTH	11.8	4.9	8.0	13.5	5.5	9.2	12.3	5.9	9.8	14.3	9.8	12.0
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	9.4	9.7	15.4	12.9	14.3	9.2	8.0	8.5	6.7	6.5	6.7
2	13.0	9.6	10.8	16.4	14.4	15.7	9.4	7.9	8.4	6.8	6.3	6.5
3	11.9	10.7	11.2	16.2	12.6	14.8	9.5	7.9	8.4	6.9	6.3	6.6
4	13.0	11.1	12.0	13.6	9.9	10.8	9.4	8.0	8.6	6.9	6.6	6.8
5	14.1	12.2	13.1	10.8	10.1	10.4	8.9	8.0	8.4	6.8	6.5	6.7
6	14.1	12.5	13.2	11.6	10.8	11.2	10.4	8.3	9.4	6.8	6.6	6.7
7	15.1	12.6	13.1	---	---	---	11.8	9.8	10.7	6.7	6.4	6.6
8	14.4	12.7	13.5	12.1	11.5	11.8	12.9	10.5	11.4	7.0	5.8	6.4
9	14.8	12.7	13.6	12.2	10.6	11.5	13.0	9.8	11.3	5.8	5.1	5.3
10	14.9	12.8	13.7	12.2	10.1	11.0	11.8	8.7	10.3	6.0	4.9	5.4
11	14.6	12.4	13.2	11.0	9.5	10.2	10.3	7.9	9.2	6.4	5.3	5.8
12	14.1	11.1	12.7	12.1	9.8	11.0	9.3	7.7	8.2	5.8	5.0	5.4
13	13.8	11.1	12.5	11.9	10.5	11.2	9.1	7.7	8.2	6.4	5.0	5.7
14	15.2	12.4	13.6	12.9	11.4	12.0	9.2	7.8	8.4	8.0	6.3	7.3
15	15.6	13.0	14.2	12.7	10.9	11.9	8.2	7.3	7.7	7.9	7.3	7.7
16	16.0	13.7	14.7	12.2	9.3	11.1	7.4	6.7	7.0	7.3	6.7	7.1
17	16.1	13.6	14.6	12.8	9.2	10.5	7.8	6.1	6.8	6.7	5.9	6.3
18	15.6	13.0	14.2	10.7	9.1	9.7	7.7	5.4	6.8	6.5	5.9	6.2
19	15.9	13.0	14.5	11.8	10.2	11.1	7.0	4.8	5.7	7.1	6.5	6.7
20	16.2	13.5	14.9	11.8	10.8	11.3	5.0	1.2	3.8	7.3	7.1	7.2
21	15.5	12.9	14.3	11.2	10.3	10.6	3.6	1.6	2.8	7.6	7.2	7.3
22	15.1	10.2	12.7	10.4	10.2	10.3	4.6	3.2	3.7	7.5	7.1	7.4
23	13.0	10.2	11.4	10.9	10.2	10.6	5.9	4.6	5.4	7.5	7.2	7.4
24	14.9	10.8	12.8	11.1	10.9	11.0	6.9	5.9	6.5	7.4	7.1	7.2
25	15.8	12.2	13.8	10.9	10.4	10.6	6.7	6.5	6.6	7.2	6.7	7.0
26	16.3	13.0	14.5	10.4	10.2	10.3	7.2	6.5	6.9	6.8	6.3	6.6
27	15.8	13.3	14.4	10.4	9.9	10.2	7.7	7.0	7.4	6.6	6.0	6.2
28	---	---	---	10.2	9.9	10.1	7.4	7.1	7.2	6.2	5.9	6.0
29	---	---	---	10.3	9.5	9.9	7.4	7.0	7.3	6.5	5.3	6.0
30	---	---	---	10.0	9.3	9.7	7.0	6.7	6.9	6.5	5.4	5.8
31	---	---	---	9.4	8.4	8.9	---	---	---	6.2	5.2	5.7
MONTH	16.3	9.4	13.2	16.4	8.4	11.1	13.0	1.2	7.6	8.0	4.9	6.5

PASSAIC RIVER BASIN

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

OXYGEN DISSOLVED FROM RIGHT INTAKE, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.6	5.2	5.4	6.1	5.2	5.5	7.9	5.2	6.3	6.2	5.8	5.9
2	5.4	4.5	4.9	7.0	5.1	5.9	9.8	5.0	6.6	6.5	5.8	6.1
3	6.2	4.7	5.4	8.2	4.9	6.3	8.3	5.0	6.0	6.7	6.1	6.4
4	6.6	5.0	5.7	10.2	5.0	7.2	5.5	3.6	4.5	6.7	5.8	6.2
5	6.3	5.4	5.7	9.5	5.3	7.1	7.4	3.5	5.4	7.1	5.4	6.1
6	5.9	5.5	5.6	8.6	5.6	7.0	7.8	4.5	5.8	7.0	5.2	5.9
7	6.7	5.6	6.0	9.4	5.4	7.2	8.4	5.1	6.6	7.4	5.1	6.0
8	7.1	6.7	6.9	10.0	5.9	7.7	8.1	5.1	6.3	7.9	5.4	6.3
9	6.8	6.3	6.7	9.4	6.7	7.8	8.1	4.9	6.0	---	---	---
10	6.3	5.8	6.2	8.5	6.8	7.5	8.9	5.3	6.6	---	---	---
11	6.3	5.7	6.0	8.2	6.0	6.9	8.6	5.6	7.0	---	---	---
12	6.2	5.6	5.9	7.6	5.3	6.4	10.3	5.7	7.4	---	---	---
13	5.7	5.1	5.4	7.1	5.3	6.2	10.5	5.8	7.8	---	---	---
14	5.7	5.1	5.3	6.9	5.4	6.0	12.0	6.2	8.5	9.5	6.2	7.5
15	6.6	5.7	6.1	7.7	5.8	6.7	13.7	7.4	9.9	8.5	6.7	7.5
16	7.1	6.5	6.8	8.9	6.0	7.2	9.6	6.9	8.2	7.0	4.8	6.0
17	7.0	6.6	6.7	9.2	6.3	7.6	10.0	5.6	7.8	5.5	4.9	5.2
18	6.7	6.3	6.5	9.3	6.1	7.3	18.9	7.1	12.2	5.9	4.7	5.2
19	6.6	6.0	6.3	8.5	5.9	6.9	19.4	10.9	14.2	6.4	5.0	5.5
20	6.4	5.9	6.2	6.6	3.0	5.5	16.6	9.8	12.7	6.8	5.2	5.8
21	6.4	5.7	6.0	4.5	2.3	3.3	13.0	8.0	10.5	6.6	5.4	5.9
22	6.8	5.6	6.1	7.1	3.8	5.3	8.0	5.8	7.1	6.7	5.4	5.9
23	7.0	5.4	6.1	8.5	4.4	6.0	6.5	5.2	5.8	6.8	5.3	5.9
24	7.7	5.1	6.2	7.2	5.3	6.1	5.3	4.4	5.0	6.9	5.3	5.9
25	8.5	5.1	6.5	8.3	4.8	6.3	5.3	4.2	4.7	7.2	5.3	6.1
26	7.9	5.2	6.3	6.4	4.8	5.6	6.0	4.6	5.2	7.0	5.6	6.3
27	8.6	4.3	6.4	6.6	5.4	6.0	6.8	4.7	5.6	7.5	6.3	6.9
28	6.1	4.3	5.6	6.7	5.3	5.8	6.3	4.9	5.5	7.2	6.7	7.1
29	5.9	4.2	5.2	7.4	5.2	6.1	7.9	4.9	6.0	6.7	6.3	6.5
30	6.2	5.2	5.6	8.9	5.4	6.8	6.8	6.4	6.7	6.9	6.3	6.5
31	---	---	---	8.2	5.5	6.6	6.7	6.0	6.4	---	---	---
MONTH	8.6	4.2	6.0	10.2	2.3	6.4	19.4	3.5	7.2	9.5	4.7	6.2
YEAR	19.4	1.2	8.5									

DISSOLVED OXYGEN FROM LEFT INTAKE, in % OF SATURATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	89	69	76	88	53	66	---	---	---
2	105	77	91	89	71	77	84	62	71	---	---	---
3	109	90	98	88	73	78	93	65	76	94	85	89
4	112	91	100	83	69	74	99	71	82	95	85	89
5	112	90	98	86	70	77	104	78	88	102	86	94
6	102	82	91	93	74	81	110	85	93	96	85	90
7	94	77	83	90	73	79	110	82	94	93	85	88
8	93	74	81	99	71	82	89	71	80	93	80	86
9	93	75	82	108	74	88	80	71	75	94	80	85
10	98	77	85	112	76	90	86	76	81	99	82	87
11	103	82	90	120	82	97	96	77	85	94	82	86
12	106	85	94	121	84	99	89	76	82	102	80	87
13	104	88	94	117	84	97	96	75	83	96	81	86
14	101	85	92	115	85	98	91	76	81	96	81	86
15	96	81	86	120	86	97	94	72	81	100	81	88
16	82	72	77	126	85	103	88	71	76	105	85	92
17	86	74	79	122	82	98	83	70	76	103	85	91
18	89	73	79	112	78	92	97	76	81	105	85	92
19	95	73	82	109	72	87	90	77	81	99	85	91
20	101	77	86	114	68	87	86	76	79	103	84	91
21	100	79	86	115	78	91	96	76	81	99	84	90
22	97	80	86	112	74	89	95	77	82	108	85	94
23	92	77	83	110	74	89	98	78	85	108	87	96
24	94	75	82	111	80	92	99	82	87	101	89	93
25	93	70	78	119	85	97	91	79	84	101	78	91
26	86	67	75	93	71	87	91	78	82	97	77	83
27	80	66	71	75	50	65	89	78	82	102	83	88
28	84	63	72	65	48	56	---	---	---	113	83	93
29	83	64	72	66	52	60	---	---	---	---	---	---
30	82	68	72	72	53	60	---	---	---	106	86	93
31	76	68	71	---	---	---	---	---	---	94	81	87
MONTH	112	63	84	126	48	85	110	53	81	113	77	90

PASSAIC RIVER BASIN

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

DISSOLVED OXYGEN FROM MIDDLE INTAKE, in % OF SATURATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	89	70	76	83	57	67	---	---	---
2	99	75	88	88	70	75	80	61	69	---	---	---
3	102	85	93	87	72	77	87	65	75	91	85	89
4	105	85	95	79	64	71	96	70	82	93	85	89
5	104	84	93	73	61	67	101	79	88	95	86	90
6	98	80	86	79	59	68	105	86	93	91	86	89
7	91	75	82	87	71	77	106	82	94	93	86	88
8	97	75	83	94	72	82	87	71	80	93	81	87
9	97	78	86	101	77	87	80	72	76	92	81	85
10	102	84	91	105	77	89	85	77	81	97	82	87
11	109	87	95	111	84	95	95	78	84	92	83	86
12	109	91	98	114	86	98	89	77	82	96	82	87
13	110	93	98	110	85	96	98	77	84	93	82	86
14	101	82	93	111	86	97	91	78	82	93	81	86
15	99	75	85	112	88	97	90	73	80	97	82	88
16	79	62	71	116	89	101	84	71	75	100	86	91
17	70	55	63	115	82	95	83	71	77	101	86	91
18	79	61	70	112	78	91	94	77	82	102	86	93
19	85	69	75	109	73	86	87	78	82	97	86	91
20	93	72	81	106	74	87	84	77	79	101	85	91
21	97	79	86	106	79	88	90	78	81	99	85	90
22	97	80	86	104	75	88	89	78	81	105	86	94
23	85	73	80	108	76	89	93	79	85	107	88	96
24	85	65	76	108	84	94	96	83	87	102	90	95
25	78	62	68	120	88	99	88	80	84	96	79	91
26	75	58	65	94	72	88	88	80	83	88	79	82
27	73	57	62	77	52	65	87	79	82	93	84	87
28	75	58	63	65	51	56	---	---	---	103	85	91
29	79	59	68	68	55	61	---	---	---	---	---	---
30	84	66	73	74	55	62	---	---	---	101	88	94
31	79	69	73	---	---	---	---	---	---	92	81	88
MONTH	110	55	81	120	51	83	106	57	81	107	79	89
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	83	77	79	125	103	117	87	75	81	64	61	62
2	100	76	84	132	114	125	89	74	79	64	59	62
3	92	83	86	134	107	121	92	74	80	66	59	63
4	99	84	91	114	83	91	89	74	81	67	63	66
5	106	91	97	87	81	84	81	73	77	69	63	66
6	107	92	97	90	84	87	94	74	84	71	65	68
7	108	92	96	---	---	---	107	84	94	72	65	68
8	110	95	101	100	93	97	116	91	100	75	63	67
9	116	95	104	106	93	99	122	92	103	63	53	57
10	116	98	106	108	87	97	117	84	99	66	50	57
11	116	97	104	96	81	88	106	78	90	67	55	60
12	113	86	99	101	82	92	91	74	80	60	50	55
13	110	86	97	98	85	92	89	74	79	80	51	58
14	120	94	104	111	92	100	90	75	82	91	80	87
15	121	98	108	110	97	103	83	76	79	89	71	82
16	129	105	114	110	81	99	81	69	74	72	66	70
17	134	108	118	108	76	89	87	67	76	66	60	63
18	134	105	118	91	75	81	92	63	78	63	60	62
19	135	106	121	96	85	91	86	56	70	69	63	66
20	136	112	125	97	89	93	71	12	45	70	66	68
21	132	107	118	92	85	88	38	18	30	72	66	69
22	129	88	107	87	82	85	44	32	36	72	66	70
23	115	86	98	88	81	85	57	44	51	75	69	72
24	129	91	109	90	85	88	68	57	62	75	71	73
25	135	100	116	89	86	87	64	61	63	76	70	73
26	140	108	123	86	83	84	67	61	64	71	66	69
27	136	112	122	89	80	84	73	66	70	69	62	66
28	---	---	---	89	82	86	72	68	70	67	63	65
29	---	---	---	91	82	87	76	70	74	71	58	65
30	---	---	---	90	84	87	70	62	65	72	60	65
31	---	---	---	88	78	83	---	---	---	70	60	64
MONTH	140	76	105	134	75	93	122	12	74	91	50	66

PASSAIC RIVER BASIN

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

DISSOLVED OXYGEN FROM MIDDLE INTAKE, in % OF SATURATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	66	60	62	74	62	67	208	104	143	67	62	64
2	61	51	56	88	62	73	176	103	136	70	62	66
3	69	55	62	98	59	77	103	62	74	74	66	70
4	72	58	63	121	65	87	102	58	77	81	66	71
5	72	62	65	118	68	88	123	67	92	87	63	72
6	78	62	72	103	71	85	118	75	95	86	59	69
7	94	74	86	121	69	88	124	73	95	89	58	70
8	89	74	83	128	73	94	121	83	101	92	62	73
9	74	69	73	119	81	94	153	90	116	---	---	---
10	72	65	69	101	73	87	149	95	118	---	---	---
11	73	63	68	103	73	85	163	97	123	---	---	---
12	73	64	68	94	66	78	176	99	129	---	---	---
13	67	60	62	85	64	74	177	101	134	---	---	---
14	64	57	60	84	65	71	175	105	140	110	69	86
15	69	61	65	98	67	80	173	112	140	97	76	84
16	76	68	72	112	70	88	165	107	131	79	56	69
17	95	71	84	119	74	93	167	98	127	63	56	59
18	98	85	91	119	75	90	185	95	131	66	55	58
19	93	81	88	103	66	84	176	103	137	72	56	62
20	94	80	87	75	47	66	170	104	131	79	58	66
21	99	67	89	62	31	45	158	101	125	79	61	68
22	79	64	71	93	48	65	121	87	102	82	62	69
23	86	65	73	114	56	82	110	80	92	81	62	69
24	94	63	76	94	58	70	81	63	73	97	61	71
25	103	62	78	87	57	72	79	63	69	84	60	70
26	101	63	78	121	71	94	84	60	73	79	63	70
27	111	58	81	105	71	87	104	73	87	79	68	73
28	76	51	68	113	78	93	118	79	95	77	70	74
29	73	51	63	132	82	107	89	76	82	71	67	69
30	75	62	68	155	92	121	76	71	73	74	65	69
31	---	---	---	179	100	133	72	65	69	---	---	---
MONTH	111	51	73	179	31	84	208	58	107	110	55	70
YEAR	208	12	84									

DISSOLVED OXYGEN FROM RIGHT INTAKE, in % OF SATURATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	87	65	75	81	55	66	---	---	---
2	92	76	85	83	65	72	88	63	72	---	---	---
3	95	81	89	85	69	76	90	65	76	91	86	89
4	94	80	89	76	59	69	96	71	82	92	86	89
5	96	80	88	64	56	60	101	80	89	90	86	88
6	90	76	83	66	56	60	106	86	93	91	86	88
7	84	73	79	76	65	70	109	82	95	94	86	89
8	90	75	81	89	68	76	90	72	82	95	81	88
9	96	81	88	92	74	82	84	72	77	94	81	86
10	105	89	95	101	73	85	85	77	81	99	83	88
11	113	92	101	103	79	89	96	78	84	92	83	87
12	116	99	106	107	81	93	94	76	84	97	81	87
13	110	95	103	104	82	93	96	77	85	94	82	87
14	104	80	95	107	83	94	91	78	82	94	82	86
15	95	71	84	108	86	94	89	73	80	98	82	88
16	80	61	71	119	87	99	85	72	76	101	86	92
17	68	52	60	115	82	96	84	71	77	103	86	92
18	69	55	62	114	77	92	94	77	83	104	86	93
19	76	63	68	111	72	87	89	78	82	98	87	92
20	84	69	76	109	72	87	87	77	80	102	85	92
21	91	76	83	106	78	89	90	78	82	100	85	91
22	95	76	85	106	74	88	89	78	82	105	87	94
23	84	67	78	110	74	89	93	80	85	107	88	96
24	80	54	69	112	82	92	96	83	87	103	90	96
25	67	50	58	120	86	99	89	80	85	97	79	91
26	66	49	56	95	72	88	88	80	83	90	79	83
27	63	48	54	76	51	67	88	80	83	95	84	88
28	64	48	54	67	50	57	---	---	---	105	86	92
29	71	51	61	70	54	61	---	---	---	---	---	---
30	82	60	71	77	53	62	---	---	---	103	89	94
31	84	68	75	---	---	---	---	---	---	94	82	89
MONTH	116	48	78	120	50	81	109	55	82	107	79	90

PASSAIC RIVER BASIN

141

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

SPECIFIC CONDUCTANCE FROM LEFT INTAKE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	637	575	601	529	473	494	718	666	694	---	---	---
2	646	468	527	545	469	495	727	709	720	---	---	---
3	487	468	479	546	460	489	738	721	730	736	690	720
4	514	470	492	484	457	472	769	727	754	744	721	736
5	500	477	492	481	462	475	774	737	759	734	553	622
6	504	475	491	488	466	479	771	750	766	763	562	692
7	505	475	491	721	475	598	790	760	779	774	749	764
8	496	468	485	751	714	734	802	778	790	776	739	759
9	523	467	485	755	727	745	792	748	775	894	736	784
10	589	469	517	754	656	695	748	528	617	1320	894	1120
11	609	472	539	683	640	656	589	524	561	1320	1100	1240
12	609	486	561	683	643	662	589	579	582	1300	1220	1260
13	591	490	552	687	647	666	642	567	603	1280	1200	1230
14	571	477	519	689	645	669	676	636	655	1240	1170	1200
15	551	464	480	693	671	681	695	659	678	1180	1020	1130
16	471	450	459	717	693	710	712	677	696	1020	976	993
17	471	453	464	742	706	732	709	658	684	976	947	960
18	477	448	465	771	716	738	739	689	705	947	899	911
19	500	468	486	843	768	805	739	605	691	908	878	889
20	535	474	496	849	816	835	605	561	582	894	863	879
21	561	469	499	846	808	828	600	586	593	889	847	868
22	537	459	498	839	811	829	662	580	624	893	855	877
23	546	463	492	831	813	823	682	645	665	1100	888	964
24	506	459	481	836	815	825	680	647	668	1200	1100	1180
25	519	469	491	853	822	833	694	547	629	1400	1200	1260
26	505	479	497	827	699	776	560	503	525	1400	1180	1250
27	513	480	498	783	563	678	567	530	556	1180	1090	1140
28	548	482	500	656	566	610	---	---	---	1090	983	1020
29	630	488	541	681	656	672	---	---	---	---	---	---
30	552	467	491	678	648	662	---	---	---	---	---	---
31	570	471	505	---	---	---	---	---	---	891	869	880
MONTH	646	448	502	853	457	679	802	503	670	1400	553	975
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	885	846	867	813	762	800	582	545	569	335	317	325
2	884	861	866	800	735	773	633	568	614	335	293	319
3	916	866	893	778	509	678	650	621	639	307	289	296
4	882	860	872	763	470	541	665	626	647	330	303	317
5	890	856	873	529	444	474	678	625	658	350	330	340
6	883	844	856	500	480	488	671	625	654	373	348	360
7	850	822	839	---	---	---	706	661	684	396	365	381
8	822	793	807	588	548	574	709	662	689	443	392	409
9	828	801	815	658	583	632	718	677	701	485	443	455
10	844	818	831	678	637	663	714	676	690	556	485	518
11	858	824	843	709	655	688	715	682	700	591	556	577
12	848	764	827	708	675	695	708	675	691	596	569	589
13	793	753	773	691	657	675	707	675	694	627	300	574
14	824	790	805	709	672	693	731	669	702	307	265	294
15	823	803	814	704	678	695	728	596	671	282	255	263
16	812	769	791	728	674	702	611	551	585	280	255	270
17	822	798	809	748	704	725	596	530	556	277	257	265
18	829	794	815	765	726	743	655	596	620	287	250	264
19	844	764	816	755	724	740	682	423	640	266	255	262
20	809	759	790	906	731	809	663	374	583	263	255	259
21	845	784	832	765	518	627	561	417	495	277	259	266
22	845	761	815	566	437	479	554	433	498	274	264	269
23	761	714	727	443	437	440	689	460	550	312	274	286
24	815	737	776	453	430	441	710	539	684	314	293	305
25	814	793	802	482	453	465	751	698	734	337	314	327
26	815	775	797	494	469	479	741	676	725	363	335	348
27	823	786	805	546	494	511	676	555	598	405	363	379
28	---	---	---	559	505	532	628	353	551	444	405	425
29	---	---	---	547	517	528	353	306	335	488	440	465
30	---	---	---	547	515	526	340	324	332	517	483	496
31	---	---	---	545	532	538	---	---	---	540	504	516
MONTH	916	714	821	906	430	612	751	306	616	627	250	368

PASSAIC RIVER BASIN

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

SPECIFIC CONDUCTANCE FROM LEFT INTAKE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	574	525	542	440	411	429	537	507	524	456	339	401
2	565	504	521	453	438	445	534	455	517	527	456	501
3	505	484	496	469	451	459	455	278	350	563	421	506
4	512	487	503	528	468	496	397	353	371	530	445	507
5	512	424	447	641	480	531	452	396	422	527	472	500
6	448	313	385	681	562	642	472	448	460	597	515	538
7	329	246	295	721	654	694	612	469	520	661	597	640
8	332	315	326	751	693	726	569	490	514	730	658	705
9	326	308	317	746	505	711	548	492	513	---	---	---
10	345	318	330	618	471	526	553	497	518	---	---	---
11	364	341	351	762	563	678	556	496	522	---	---	---
12	389	356	369	777	726	754	558	502	528	---	---	---
13	397	369	385	777	742	765	554	509	532	---	---	---
14	403	349	379	757	742	752	560	513	533	844	569	793
15	349	321	336	760	740	751	546	516	534	864	569	766
16	353	337	345	780	751	766	551	515	533	856	408	731
17	340	320	333	802	763	783	540	507	528	444	351	409
18	348	332	342	806	786	796	559	511	529	439	365	401
19	358	344	351	813	393	727	550	518	532	489	383	436
20	369	352	361	438	310	381	544	524	530	584	489	535
21	404	364	375	466	421	442	602	511	535	604	578	591
22	541	404	508	591	464	532	553	526	543	635	604	625
23	579	535	569	593	485	543	546	513	529	703	635	682
24	577	524	554	485	453	472	524	486	512	745	588	702
25	652	573	603	475	460	468	488	454	473	794	731	762
26	678	623	650	498	468	483	479	445	463	802	762	783
27	680	649	667	507	479	493	513	479	492	788	621	752
28	694	528	638	511	489	500	516	493	505	621	378	419
29	528	387	436	536	499	510	512	305	426	410	316	366
30	427	406	417	568	506	522	407	321	367	414	393	404
31	---	---	---	544	505	518	407	324	344	---	---	---
MONTH	694	246	438	813	310	590	612	278	490	864	316	578
YEAR	1400	246	605									

SPECIFIC CONDUCTANCE FROM MIDDLE INTAKE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	723	645	691	654	603	633	719	669	698	---	---	---
2	744	605	671	704	612	668	728	709	720	---	---	---
3	649	619	636	714	626	679	740	722	730	727	690	719
4	643	616	630	812	666	725	769	728	754	745	721	735
5	660	628	642	797	648	727	775	737	761	741	672	712
6	703	609	654	761	645	706	772	753	767	764	680	735
7	747	609	687	756	647	701	790	760	780	782	749	766
8	771	627	680	753	712	735	802	777	790	776	738	759
9	674	624	653	756	731	745	793	743	776	902	734	789
10	666	624	644	754	653	694	743	521	612	1320	902	1130
11	686	625	648	684	639	656	589	522	560	1320	1230	1270
12	666	634	652	684	642	661	589	575	581	1310	1230	1260
13	684	634	658	689	647	666	644	566	605	1280	1200	1230
14	702	641	675	691	644	669	679	637	656	1240	1170	1200
15	754	497	642	700	671	682	695	659	678	1180	1010	1130
16	811	738	778	719	700	712	711	676	696	1010	973	990
17	739	648	680	742	706	733	709	658	684	973	943	958
18	664	573	606	774	716	743	740	685	705	943	897	910
19	658	621	640	844	773	810	740	606	691	903	878	889
20	641	585	620	852	813	835	606	562	582	897	868	882
21	641	581	613	846	810	830	601	587	594	892	849	870
22	649	600	625	839	812	829	661	580	625	896	858	880
23	701	607	648	830	815	824	683	645	666	1100	892	971
24	697	615	651	837	814	826	683	647	668	1210	1100	1180
25	706	644	669	853	819	833	696	546	628	1410	1190	1270
26	807	664	700	832	774	800	561	504	525	1400	1180	1250
27	702	648	679	782	562	671	568	529	557	1180	1080	1130
28	716	645	681	662	563	613	---	---	---	1080	976	1020
29	719	606	679	682	662	673	---	---	---	---	---	---
30	648	590	627	675	648	661	---	---	---	---	---	---
31	656	614	637	---	---	---	---	---	---	891	869	880
MONTH	811	497	658	853	562	725	802	504	670	1410	672	982

PASSAIC RIVER BASIN

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

SPECIFIC CONDUCTANCE FROM RIGHT INTAKE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	724	673	694	858	817	840	719	667	693	---	---	---
2	758	710	732	856	829	844	728	709	721	---	---	---
3	755	724	743	852	830	842	739	723	731	729	692	722
4	752	725	742	863	803	839	770	726	755	750	726	739
5	759	736	749	824	752	798	774	738	760	755	732	747
6	773	744	762	780	721	756	772	751	767	769	740	758
7	778	745	766	769	718	746	789	761	779	787	754	772
8	805	754	783	754	715	737	803	775	791	781	748	765
9	806	750	783	757	728	746	791	748	775	896	740	788
10	789	745	774	757	658	697	748	524	618	1320	896	1130
11	817	761	793	684	641	658	589	522	558	1320	1230	1280
12	799	768	787	685	644	663	592	578	583	1310	1220	1260
13	811	770	797	689	648	667	639	568	605	1280	1210	1240
14	826	788	811	692	647	671	679	632	656	1240	1160	1200
15	835	785	814	695	672	683	696	660	680	1180	1020	1130
16	820	766	797	720	695	712	713	677	697	1020	973	991
17	793	690	719	743	707	734	711	659	685	973	948	960
18	759	676	700	772	716	740	739	681	703	948	899	912
19	783	719	764	845	772	807	739	606	693	921	879	892
20	751	717	739	852	811	835	606	561	582	927	870	893
21	760	718	741	847	810	830	600	587	594	889	849	869
22	799	752	782	839	813	830	662	581	625	895	860	882
23	817	771	796	832	814	824	683	646	666	1090	889	964
24	826	775	804	837	815	826	682	647	667	1200	1090	1180
25	828	792	812	854	818	835	695	546	630	1410	1190	1260
26	839	808	826	833	781	804	560	504	526	1410	1180	1260
27	833	801	818	783	565	680	568	530	557	1180	1080	1130
28	860	802	828	656	565	609	---	---	---	1080	976	1020
29	861	839	853	682	656	671	---	---	---	993	930	964
30	856	825	842	675	648	661	---	---	---	930	891	899
31	848	805	829	---	---	---	---	---	---	892	870	881
MONTH	861	673	780	863	565	753	803	504	670	1410	692	982
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	888	848	867	813	782	800	584	548	571	318	271	292
2	886	850	868	804	784	796	632	570	615	332	315	325
3	917	868	894	801	696	763	652	622	640	350	318	331
4	884	860	873	785	467	541	665	624	646	336	316	327
5	891	855	873	531	444	474	678	624	658	353	333	343
6	884	844	856	500	479	488	672	624	654	376	350	363
7	849	823	839	---	---	---	708	661	684	399	368	384
8	823	793	807	587	548	574	709	662	690	445	395	412
9	829	801	815	658	583	632	718	676	702	486	445	457
10	844	817	831	679	638	663	715	675	690	556	486	519
11	857	828	845	710	655	688	715	681	700	593	556	580
12	849	764	827	708	675	695	707	675	691	599	571	590
13	792	751	773	691	656	674	707	674	694	627	546	598
14	828	790	806	708	671	693	732	668	702	576	228	396
15	826	803	816	705	678	695	728	596	672	275	251	261
16	811	769	790	728	673	702	613	551	586	266	258	264
17	823	797	810	747	704	725	599	530	556	260	258	260
18	839	793	816	765	726	744	639	599	621	261	250	255
19	846	804	827	754	725	740	685	622	663	255	249	252
20	828	798	817	897	731	798	715	508	628	254	252	253
21	846	819	834	765	518	627	561	443	501	261	252	256
22	848	758	815	566	437	480	551	434	511	276	261	268
23	758	714	727	443	437	441	696	461	578	296	276	288
24	815	737	776	456	431	443	710	540	686	318	296	309
25	815	792	802	485	455	467	736	699	720	341	317	331
26	816	773	796	494	472	481	739	682	719	366	338	351
27	823	785	805	547	494	512	682	557	598	407	366	382
28	---	---	---	560	505	533	624	521	592	446	407	428
29	---	---	---	548	517	529	546	286	374	491	442	467
30	---	---	---	548	517	529	289	265	271	519	486	498
31	---	---	---	548	535	541	---	---	---	538	506	517
MONTH	917	714	822	897	431	616	739	265	620	627	228	373

PASSAIC RIVER BASIN

145

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

SPECIFIC CONDUCTANCE FROM RIGHT INTAKE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	575	526	543	466	413	443	809	750	788	457	339	402
2	568	506	523	509	466	496	804	463	752	527	457	502
3	506	485	497	570	509	542	820	409	711	563	421	506
4	518	488	504	654	570	594	830	673	784	530	448	508
5	558	518	550	703	654	677	710	611	652	527	472	501
6	589	532	563	713	683	703	712	641	691	601	516	541
7	587	253	428	734	683	718	672	606	648	664	601	641
8	294	251	280	766	712	742	733	604	662	730	664	707
9	288	267	275	754	727	741	782	700	742	---	---	---
10	326	288	309	765	723	743	811	738	778	---	---	---
11	350	326	339	774	730	754	815	717	792	---	---	---
12	396	347	371	778	733	761	830	749	801	---	---	---
13	437	396	415	779	744	767	838	730	818	---	---	---
14	493	436	466	758	741	753	847	766	825	876	834	846
15	497	403	467	763	740	753	847	791	830	880	717	836
16	403	373	384	786	753	771	842	808	828	857	410	735
17	398	355	376	804	760	783	894	786	859	444	350	409
18	415	392	404	807	782	797	914	893	904	440	365	402
19	443	408	424	816	478	755	920	896	909	491	385	437
20	483	440	457	813	601	765	933	807	908	586	491	541
21	515	479	494	616	437	526	916	871	896	614	580	595
22	545	515	534	631	578	606	915	886	900	641	614	628
23	580	536	569	600	548	569	936	875	899	704	641	685
24	622	572	599	677	577	649	933	810	897	749	691	726
25	656	601	625	771	671	727	898	817	852	795	731	764
26	678	625	651	756	584	641	817	784	802	804	762	785
27	681	641	667	685	620	665	816	685	748	789	631	752
28	698	530	659	771	679	737	718	674	701	631	381	421
29	530	388	437	802	754	778	743	471	651	411	317	366
30	429	407	418	794	771	784	737	320	452	416	394	405
31	---	---	---	802	770	788	407	324	345	---	---	---
MONTH	698	251	474	816	413	694	936	320	769	880	317	586
YEAR	1410	228	677									

WATER TEMPERATURE FROM LEFT INTAKE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.5	14.5	15.0	12.0	10.5	11.5	14.5	12.0	13.0	---	---	---
2	16.5	14.0	15.0	13.0	11.5	12.0	12.5	11.5	12.0	---	---	---
3	17.0	15.0	16.0	14.0	13.0	13.5	12.5	10.5	11.0	1.0	0.5	0.5
4	18.5	16.5	17.5	14.0	12.5	13.0	11.0	9.5	10.0	1.5	0.5	0.5
5	19.0	17.5	18.0	13.0	11.5	12.5	10.5	9.5	10.0	3.0	0.5	2.0
6	19.0	17.5	18.0	12.0	10.5	11.0	11.5	9.5	10.0	2.5	1.0	2.0
7	17.5	15.5	16.5	11.5	10.0	11.0	11.5	10.0	10.5	2.5	1.5	2.0
8	16.0	14.0	15.0	11.0	9.5	10.0	11.0	9.5	10.0	2.5	1.5	2.0
9	14.5	13.0	13.5	11.0	9.5	10.0	10.0	8.5	9.5	2.5	1.5	2.0
10	14.0	12.5	13.0	11.0	9.5	10.0	8.5	6.5	7.0	3.0	1.5	2.5
11	15.0	13.0	13.5	10.5	8.5	9.5	8.0	6.5	7.0	3.5	2.5	3.0
12	15.5	13.5	14.5	9.5	7.5	8.5	7.0	6.0	6.5	5.5	2.5	3.5
13	16.5	15.0	15.5	9.0	7.0	7.5	8.0	6.5	7.5	5.0	3.0	4.0
14	17.0	16.0	16.5	8.5	6.5	7.0	8.5	7.5	8.0	4.5	3.0	3.5
15	17.5	16.0	17.0	9.0	7.0	7.5	9.0	8.0	8.5	5.0	3.0	3.5
16	17.0	15.5	16.0	10.5	8.0	9.0	8.5	7.5	8.0	5.0	3.0	3.5
17	16.0	14.5	15.5	10.5	8.5	9.5	7.5	7.0	7.0	5.0	3.5	4.0
18	15.0	13.5	14.0	10.5	8.5	9.5	7.5	6.5	7.0	4.5	3.0	3.5
19	14.0	12.5	13.0	10.5	8.5	9.0	8.0	7.0	7.5	3.0	2.0	3.0
20	14.5	12.5	13.0	10.0	8.0	9.0	7.5	6.0	7.0	3.0	2.0	2.5
21	14.5	12.5	13.5	10.0	7.5	8.5	7.0	5.5	6.0	2.0	1.5	1.5
22	15.0	13.5	14.0	9.0	7.0	8.0	6.0	4.5	5.5	3.0	1.5	2.0
23	15.0	14.0	14.5	9.0	6.5	7.5	5.5	3.5	4.5	3.5	2.0	3.0
24	16.5	14.5	15.5	8.5	7.0	7.5	5.0	4.5	4.5	4.0	3.5	4.0
25	17.0	15.5	16.0	10.0	7.5	9.0	6.0	4.5	5.0	6.5	4.0	5.5
26	16.0	14.5	15.0	11.5	9.5	10.5	5.0	3.5	4.5	7.0	5.0	5.5
27	14.5	13.0	13.5	12.5	11.5	12.0	4.0	2.5	3.5	7.0	4.0	5.0
28	13.0	11.5	12.5	12.5	11.5	12.0	---	---	---	7.0	4.0	5.0
29	12.0	10.5	11.5	11.5	11.0	11.5	---	---	---	---	---	---
30	12.5	11.0	11.5	13.0	11.5	12.0	---	---	---	---	---	---
31	11.0	10.5	11.0	---	---	---	---	---	---	8.0	7.0	7.5
MONTH	19.0	10.5	14.7	14.0	6.5	10.0	14.5	2.5	7.8	8.0	0.5	3.2

PASSAIC RIVER BASIN

147

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

WATER TEMPERATURE FROM MIDDLE INTAKE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.5	14.5	15.0	12.0	10.0	11.0	13.5	12.5	12.5	---	---	---
2	16.0	14.0	15.0	12.5	11.0	12.0	12.5	11.5	12.0	---	---	---
3	16.5	14.5	15.5	13.5	12.5	13.0	12.0	10.5	11.0	1.0	0.5	0.5
4	18.0	16.0	17.0	14.0	13.0	13.5	11.0	9.5	10.0	1.0	0.5	0.5
5	18.5	17.0	18.0	13.5	12.5	13.0	10.5	9.5	10.0	2.0	0.5	1.5
6	19.0	17.5	18.0	12.5	11.0	12.0	10.5	9.5	10.0	2.0	1.0	1.5
7	17.5	16.0	17.0	11.5	10.5	11.0	11.5	10.0	11.0	2.5	1.5	2.0
8	16.0	14.0	15.5	11.0	10.0	10.0	11.0	9.5	10.0	2.5	2.0	2.0
9	14.5	13.0	13.5	10.5	9.5	10.0	10.0	8.5	9.5	2.5	2.0	2.0
10	14.0	12.5	13.0	10.5	9.5	10.0	8.5	6.5	7.5	3.0	1.5	2.5
11	14.5	12.5	13.5	10.0	9.0	9.5	7.5	6.5	7.0	3.5	2.5	3.0
12	15.0	13.5	14.0	9.0	8.0	8.5	7.0	6.0	6.5	4.5	2.5	3.5
13	16.0	14.5	15.5	8.5	7.0	7.5	8.0	7.0	7.5	4.5	3.5	4.0
14	17.0	16.0	16.5	8.0	7.0	7.0	8.5	7.5	8.0	4.0	3.0	3.5
15	18.0	16.5	17.0	8.5	7.0	7.5	8.5	8.0	8.5	4.5	3.0	3.5
16	17.0	16.5	17.0	10.0	8.0	9.0	8.5	8.0	8.0	4.5	3.0	4.0
17	16.5	14.5	15.5	10.0	8.5	9.5	8.0	7.0	7.5	4.5	3.5	4.0
18	15.0	13.5	14.0	10.5	8.5	9.5	7.0	7.0	7.0	4.5	3.5	4.0
19	13.5	12.5	13.0	10.5	8.5	9.5	8.0	7.0	7.5	3.5	2.0	3.0
20	13.5	12.5	13.0	9.5	8.0	9.0	7.5	6.5	7.0	2.5	2.0	2.5
21	13.5	12.0	13.0	9.0	7.5	8.5	6.5	5.5	6.0	2.0	1.5	1.5
22	14.5	13.0	14.0	9.0	7.0	8.0	6.0	4.5	5.5	2.5	1.5	2.0
23	15.0	14.0	14.5	8.5	7.0	7.5	5.0	4.0	4.5	3.5	2.0	3.0
24	16.5	14.5	15.5	8.5	7.0	7.5	5.0	4.5	4.5	4.0	3.5	4.0
25	17.0	15.5	16.0	10.0	8.0	9.0	5.5	4.5	5.0	6.0	4.0	5.5
26	16.5	14.5	15.5	11.5	9.0	10.5	5.0	3.5	4.5	6.0	5.0	5.5
27	14.5	13.5	14.0	12.5	11.5	12.0	4.0	3.0	3.5	5.5	4.5	5.0
28	13.5	11.5	12.5	12.5	11.5	12.0	---	---	---	6.0	4.5	5.0
29	12.0	11.0	11.5	11.5	11.0	11.5	---	---	---	---	---	---
30	12.0	10.5	11.0	12.5	11.5	12.0	---	---	---	---	---	---
31	11.0	10.5	10.5	---	---	---	---	---	---	8.0	7.0	7.5
MONTH	19.0	10.5	14.7	14.0	7.0	10.0	13.5	3.0	7.8	8.0	0.5	3.2
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	6.5	7.5	7.5	6.0	6.5	14.0	13.0	13.5	13.5	11.5	12.5
2	6.5	4.5	5.5	6.0	5.5	6.0	13.5	12.5	13.0	13.5	13.0	13.5
3	5.0	4.0	4.5	8.5	6.0	7.0	14.5	12.0	13.0	14.0	13.0	13.5
4	4.5	3.5	4.0	8.5	7.5	8.0	14.0	12.0	13.0	14.5	13.0	13.5
5	3.5	2.5	3.0	7.5	6.0	6.5	13.0	10.5	12.0	16.0	14.0	15.0
6	3.5	2.0	3.0	6.0	4.5	5.0	11.5	9.5	10.5	17.0	15.5	16.5
7	3.5	2.5	3.0	---	---	---	11.0	9.0	9.5	18.5	16.5	17.5
8	4.0	2.5	3.5	8.0	6.5	7.0	11.5	9.0	10.0	19.5	18.0	19.0
9	5.0	3.5	4.0	10.0	7.5	9.0	13.0	10.0	11.5	19.5	17.5	18.5
10	5.5	4.0	5.0	11.0	9.5	10.0	15.5	12.0	14.0	19.0	17.0	18.0
11	6.0	5.0	5.5	10.0	8.0	9.5	16.5	14.0	15.0	19.0	17.0	18.0
12	6.0	5.0	5.5	8.5	7.0	8.0	15.5	14.5	15.0	18.0	16.5	17.5
13	5.5	4.0	5.0	7.5	7.0	7.0	15.5	14.0	14.5	16.5	14.0	16.0
14	4.5	3.0	4.0	9.0	6.5	8.0	16.5	14.0	15.5	14.0	13.5	13.5
15	4.0	3.0	3.5	10.5	8.5	9.5	19.0	16.0	17.5	14.5	13.0	13.5
16	5.0	3.0	4.0	12.0	10.0	10.5	20.5	18.5	19.5	15.5	14.0	15.0
17	6.0	4.5	5.0	11.0	9.0	10.0	22.5	20.5	21.5	17.0	15.5	16.5
18	6.5	5.0	5.5	9.5	7.5	8.5	24.0	22.0	23.0	17.0	14.5	16.0
19	6.5	5.0	6.0	7.5	7.0	7.5	25.0	22.5	23.5	14.5	13.0	13.5
20	6.5	5.5	6.0	7.0	6.5	7.0	23.0	20.5	22.0	13.5	12.5	13.0
21	8.0	6.5	7.5	8.0	6.5	7.5	20.5	17.5	19.0	13.5	12.0	12.5
22	9.0	8.0	8.5	7.5	6.5	7.0	17.5	14.5	16.0	14.0	12.5	13.5
23	10.0	8.5	9.0	6.5	5.5	6.0	14.5	13.5	14.0	15.5	13.5	14.5
24	9.0	7.5	8.5	7.0	5.5	6.0	15.5	13.0	14.0	17.5	15.0	16.0
25	8.5	7.0	8.0	7.5	6.5	7.0	14.0	12.5	13.5	19.0	16.5	17.5
26	8.5	7.0	8.0	7.0	7.0	7.0	13.0	12.0	12.5	18.5	17.5	18.0
27	8.5	8.0	8.0	8.5	7.0	7.5	13.5	11.5	13.0	19.5	17.5	18.5
28	---	---	---	9.5	7.5	8.5	14.0	13.0	13.5	20.0	19.0	19.5
29	---	---	---	10.5	9.0	9.5	13.0	12.0	12.5	21.5	20.0	20.5
30	---	---	---	12.5	10.5	11.0	12.5	12.0	12.0	23.0	20.5	21.5
31	---	---	---	13.0	12.0	12.5	---	---	---	23.0	22.0	22.5
MONTH	10.0	2.0	5.6	13.0	4.5	8.0	25.0	9.0	14.9	23.0	11.5	16.3

PASSAIC RIVER BASIN

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

WATER TEMPERATURE FROM MIDDLE INTAKE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.5	22.5	23.0	26.0	25.0	25.5	28.5	26.0	27.0	19.5	19.0	19.0
2	23.5	22.5	23.0	27.5	25.0	26.0	29.0	26.5	27.5	19.5	19.0	19.0
3	23.0	22.0	22.5	29.0	26.0	27.5	27.0	25.0	26.0	20.5	19.0	20.0
4	22.5	21.0	22.0	30.0	27.5	28.5	28.0	26.5	27.5	23.0	20.5	21.5
5	22.5	21.0	21.5	29.5	28.0	28.5	28.0	27.0	27.5	24.5	21.5	22.5
6	22.5	21.5	22.0	28.5	26.5	27.5	27.5	25.5	27.0	24.0	21.5	22.5
7	21.5	18.5	19.5	27.5	25.5	26.5	26.5	24.5	25.5	24.0	21.5	22.5
8	20.0	19.0	19.5	27.0	25.0	26.0	25.5	24.0	24.5	23.5	21.5	22.5
9	20.5	19.0	20.0	27.0	25.0	25.5	25.5	23.0	24.0	---	---	---
10	22.5	20.0	21.0	27.0	25.0	26.0	25.5	23.0	24.0	---	---	---
11	23.5	21.5	22.5	26.5	25.0	25.5	26.0	23.5	24.5	---	---	---
12	24.0	22.5	23.5	26.0	24.0	25.0	26.5	24.5	25.5	---	---	---
13	24.0	22.5	23.0	25.0	23.5	24.5	27.5	25.0	26.0	---	---	---
14	22.5	19.5	21.0	25.0	23.5	24.0	28.0	25.5	26.5	22.5	20.5	21.5
15	20.0	18.0	18.5	26.0	23.5	24.5	28.0	26.0	27.0	22.0	21.0	21.5
16	19.5	17.5	18.5	26.5	24.0	25.0	28.0	27.0	27.5	23.0	21.5	22.5
17	20.0	18.5	19.5	27.5	24.5	26.0	28.5	26.5	27.5	23.0	22.0	22.5
18	20.5	19.0	20.0	27.5	26.0	26.5	29.0	26.5	27.5	22.5	21.0	22.0
19	21.0	19.5	20.5	28.0	25.5	26.5	28.5	27.0	27.5	23.0	21.0	21.5
20	21.5	20.5	21.0	27.0	25.5	26.5	28.5	26.5	27.0	22.5	20.5	21.5
21	23.0	21.0	21.5	26.5	25.5	26.0	28.0	26.0	26.5	22.5	21.5	22.0
22	24.5	23.0	23.5	28.0	25.5	26.5	26.0	25.0	25.5	24.0	22.0	23.0
23	26.0	23.5	24.5	28.5	26.0	27.0	25.5	24.5	25.0	24.0	22.5	23.0
24	27.0	24.5	25.5	27.5	25.5	26.5	24.5	23.0	24.0	23.5	22.0	22.5
25	27.5	25.0	26.0	26.0	25.0	25.5	24.0	22.5	23.5	22.0	21.0	21.5
26	28.0	25.5	26.5	25.0	24.0	24.5	23.5	22.5	23.0	21.0	19.5	20.5
27	29.0	25.5	27.0	24.0	23.0	23.5	24.5	22.5	23.5	19.5	18.0	18.5
28	26.5	25.0	26.0	23.5	23.0	23.0	23.5	22.5	23.0	18.5	17.0	18.0
29	25.5	24.0	25.0	25.5	23.5	24.5	22.5	19.5	21.0	18.5	17.5	18.0
30	25.5	24.5	25.5	27.0	24.5	25.5	20.5	18.5	19.5	18.5	17.5	18.0
31	---	---	---	28.0	25.5	26.5	19.5	18.5	19.0	---	---	---
MONTH	29.0	17.5	22.4	30.0	23.0	25.8	29.0	18.5	25.2	24.5	17.0	21.1
YEAR	30.0	0.5	14.8									

WATER TEMPERATURE FROM RIGHT INTAKE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.5	14.5	15.0	11.0	10.0	10.5	13.5	12.5	12.5	---	---	---
2	15.5	14.0	14.5	12.0	10.5	11.5	12.5	11.5	12.0	---	---	---
3	16.0	14.5	15.5	13.5	12.0	12.5	11.5	10.5	11.0	1.0	0.5	0.5
4	17.0	16.0	16.5	14.0	13.0	13.5	10.5	9.5	10.0	1.0	0.5	0.5
5	18.0	17.0	17.5	13.5	12.5	13.0	10.5	9.5	10.0	1.5	1.0	1.0
6	18.5	17.5	18.0	12.5	11.0	12.0	10.5	9.5	10.0	2.0	1.0	1.5
7	17.5	16.0	17.0	11.0	10.5	10.5	11.5	10.0	10.5	2.5	1.5	2.0
8	16.0	14.0	15.5	11.0	9.5	10.0	11.0	9.5	10.0	2.5	1.5	2.0
9	14.0	13.0	13.5	10.0	9.5	10.0	10.0	8.5	9.5	2.5	2.0	2.0
10	13.0	12.0	12.5	10.0	9.5	9.5	8.5	6.5	7.5	3.0	2.0	2.5
11	13.5	12.0	12.5	9.5	8.5	9.0	7.5	6.5	7.0	3.5	2.5	3.0
12	14.5	13.0	13.5	8.5	8.0	8.0	7.0	6.0	6.5	4.5	3.0	3.5
13	15.5	14.0	15.0	8.0	7.0	7.5	8.0	7.0	7.5	4.5	3.0	4.0
14	17.0	15.5	16.0	7.5	6.5	7.0	8.5	7.5	8.0	4.0	3.0	3.5
15	17.5	16.5	17.0	8.5	7.0	7.5	8.5	8.0	8.5	4.5	3.0	3.5
16	17.0	16.5	17.0	10.0	8.0	9.0	8.5	8.0	8.0	4.5	3.0	3.5
17	16.5	15.0	16.0	10.0	8.5	9.0	8.0	7.0	7.5	4.5	3.5	4.0
18	15.0	13.5	14.0	10.5	8.5	9.5	7.0	6.5	7.0	4.0	3.5	3.5
19	13.5	12.5	13.0	10.0	8.5	9.0	8.0	7.0	7.5	3.5	2.5	3.0
20	13.0	12.0	12.5	9.5	8.0	9.0	7.5	6.5	7.0	2.5	2.0	2.5
21	13.0	12.0	12.5	9.0	7.5	8.0	6.5	5.5	6.0	2.0	1.5	2.0
22	14.0	12.5	13.5	8.5	7.0	7.5	5.5	4.5	5.5	2.5	1.5	2.0
23	15.0	13.5	14.0	8.0	6.5	7.5	4.5	4.0	4.5	3.5	2.0	3.0
24	16.5	14.5	15.5	8.0	7.0	7.5	5.0	4.5	4.5	4.0	3.5	4.0
25	16.5	15.5	16.0	10.0	7.5	9.0	5.5	4.5	5.0	6.0	4.0	5.5
26	16.0	15.0	15.5	11.5	9.0	10.5	5.0	3.5	4.5	6.0	5.0	5.5
27	15.0	13.5	14.0	12.5	11.5	12.0	4.0	3.0	3.5	5.5	4.5	5.0
28	13.5	11.5	12.5	12.5	11.5	12.0	---	---	---	6.0	4.5	5.0
29	11.5	10.5	11.0	11.5	11.0	11.5	---	---	---	---	---	---
30	11.0	10.0	10.5	12.5	11.5	12.0	---	---	---	---	---	---
31	10.5	10.0	10.0	---	---	---	---	---	---	7.5	7.0	7.5
MONTH	18.5	10.0	14.4	14.0	6.5	9.8	13.5	3.0	7.8	7.5	0.5	3.2

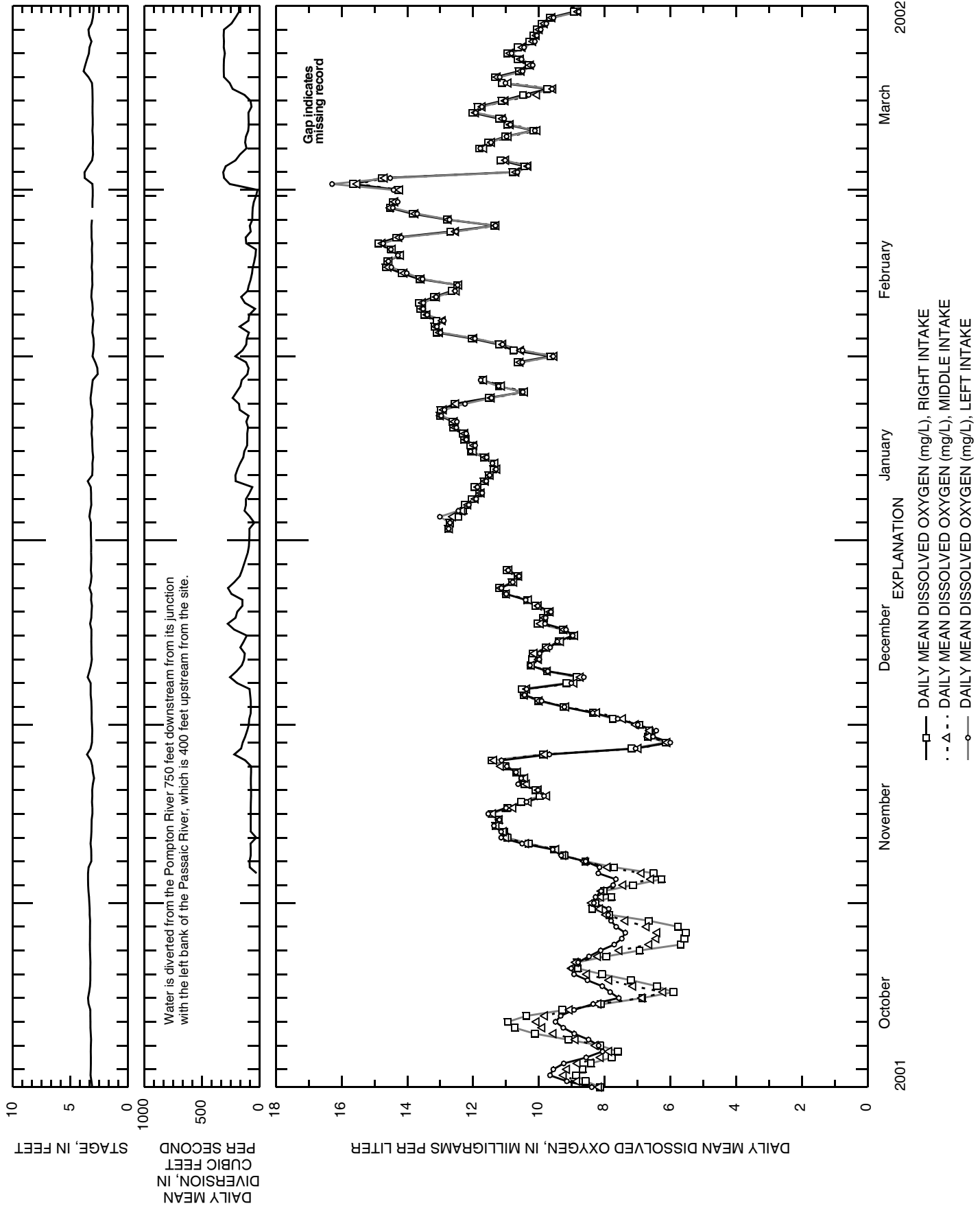


Figure 24. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2002.

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

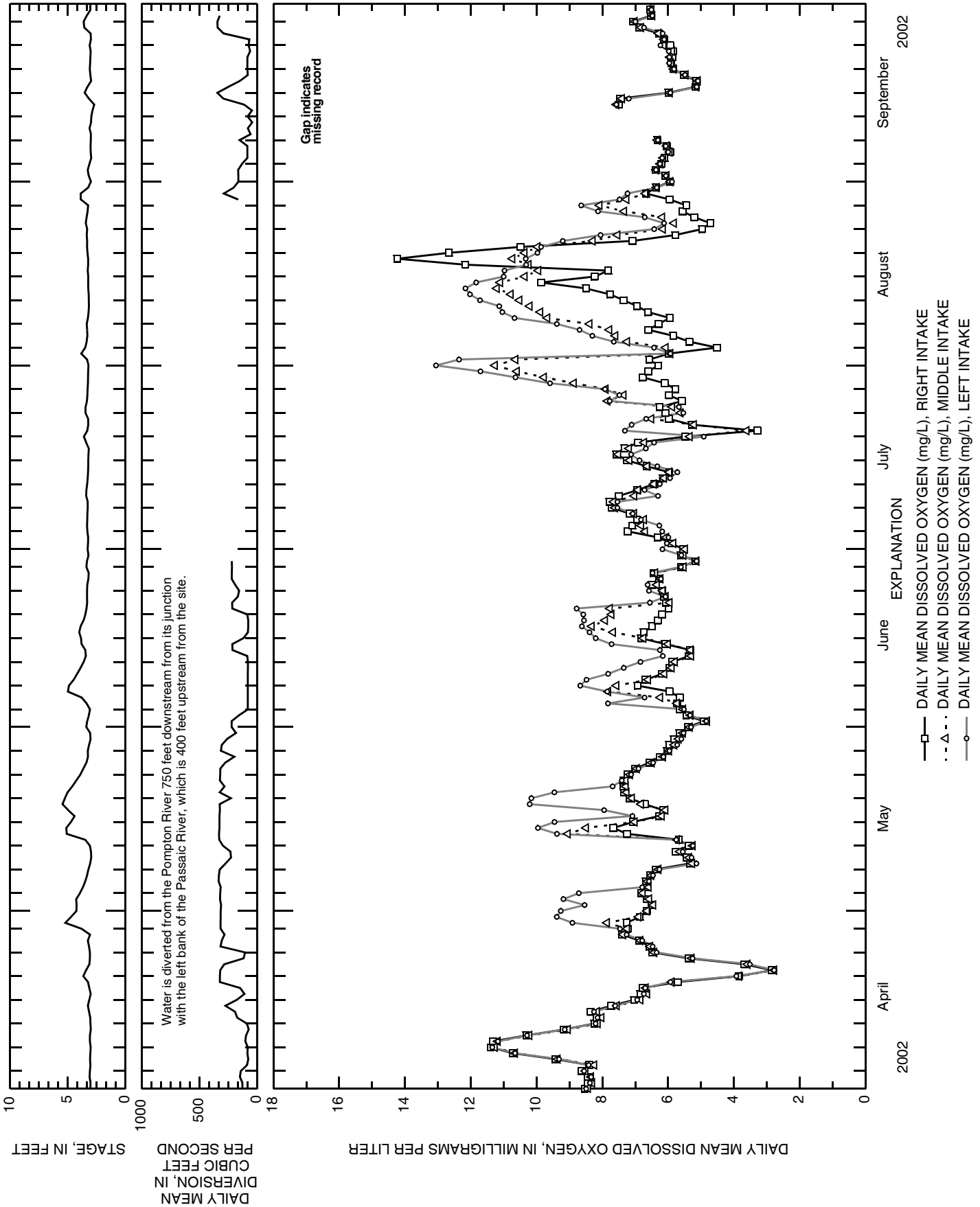


Figure 24. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2002--continued.

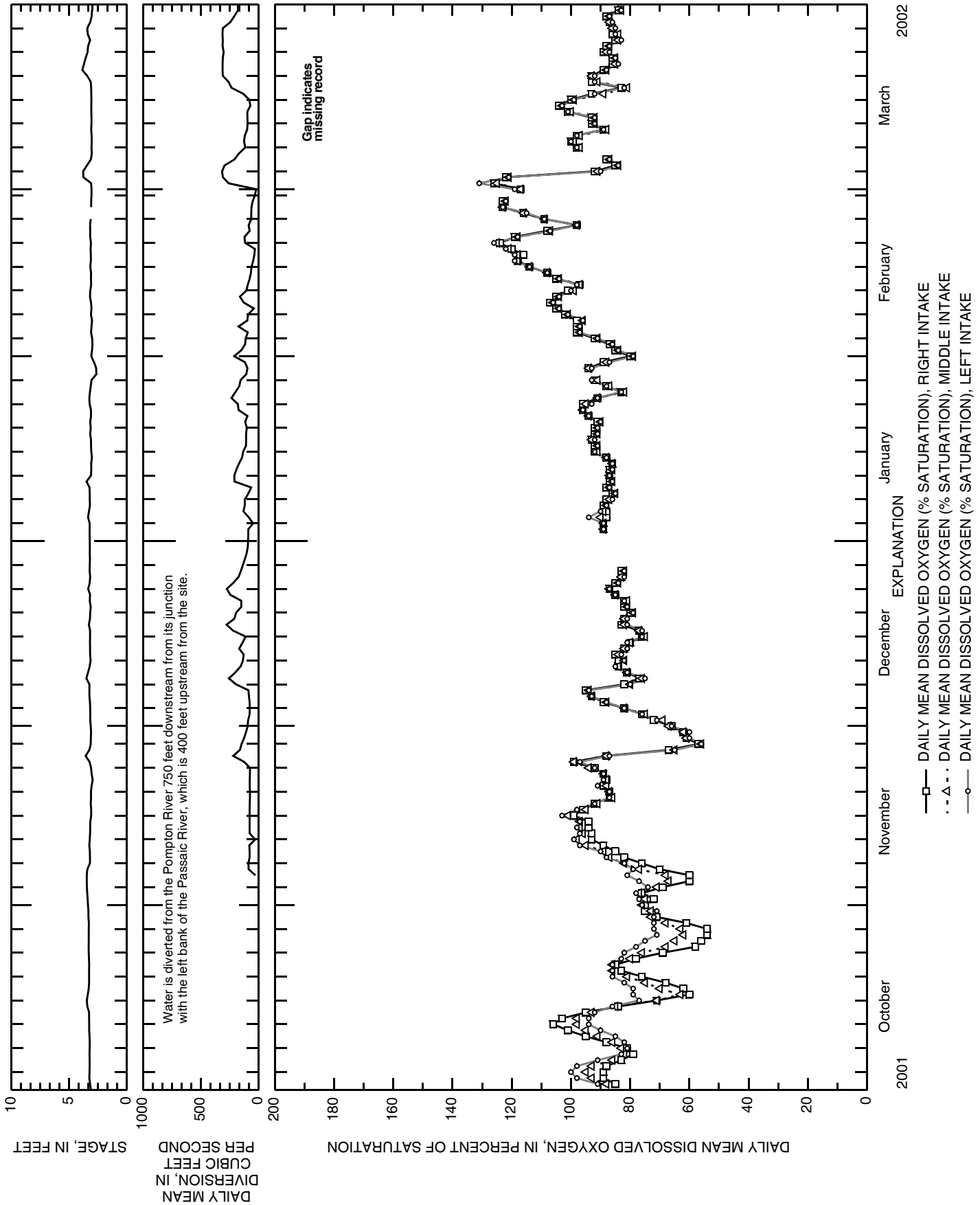


Figure 24. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2002--continued.

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

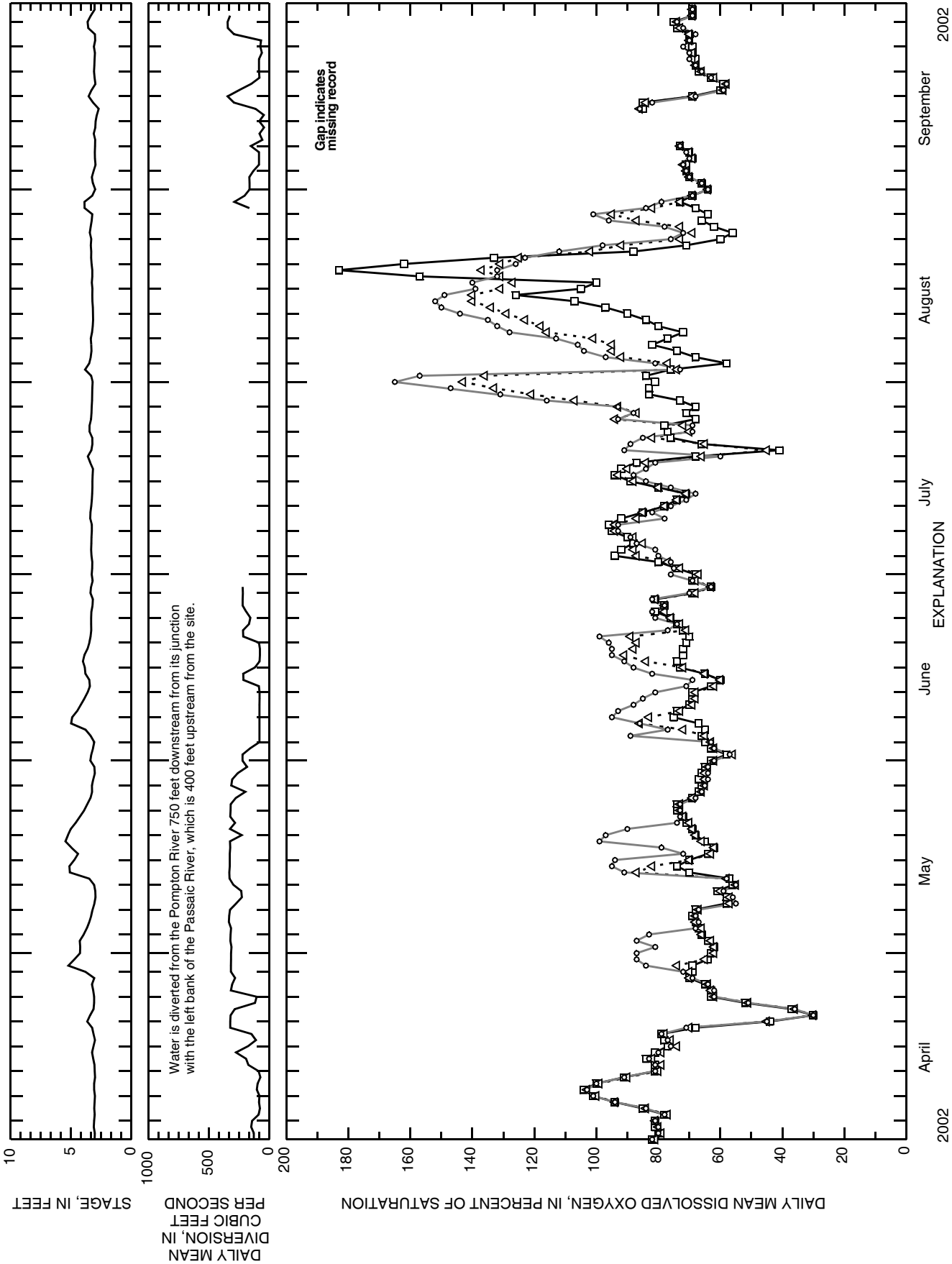


Figure 24. Physical characteristics of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2002--continued.

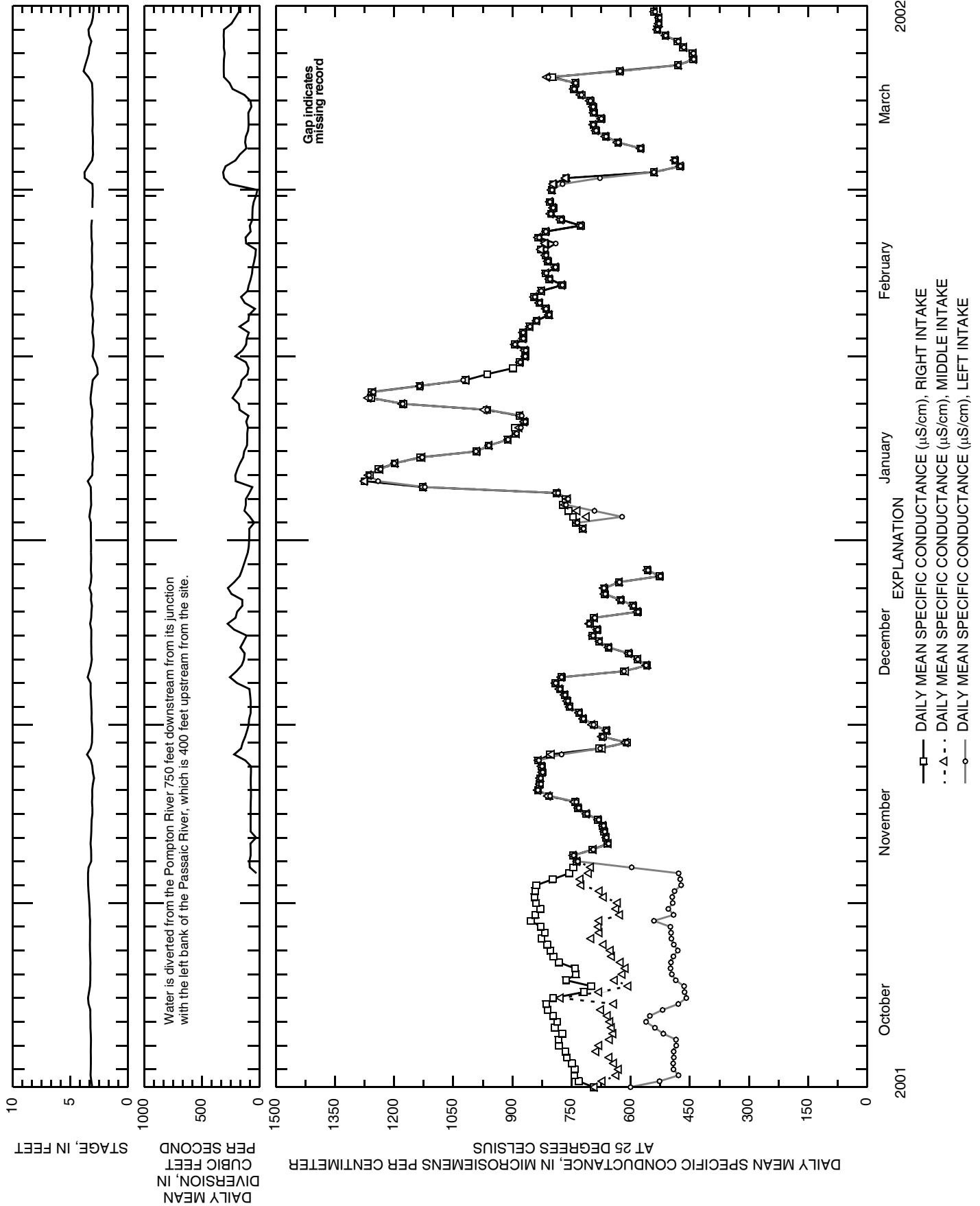


Figure 24. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2002--continued.

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

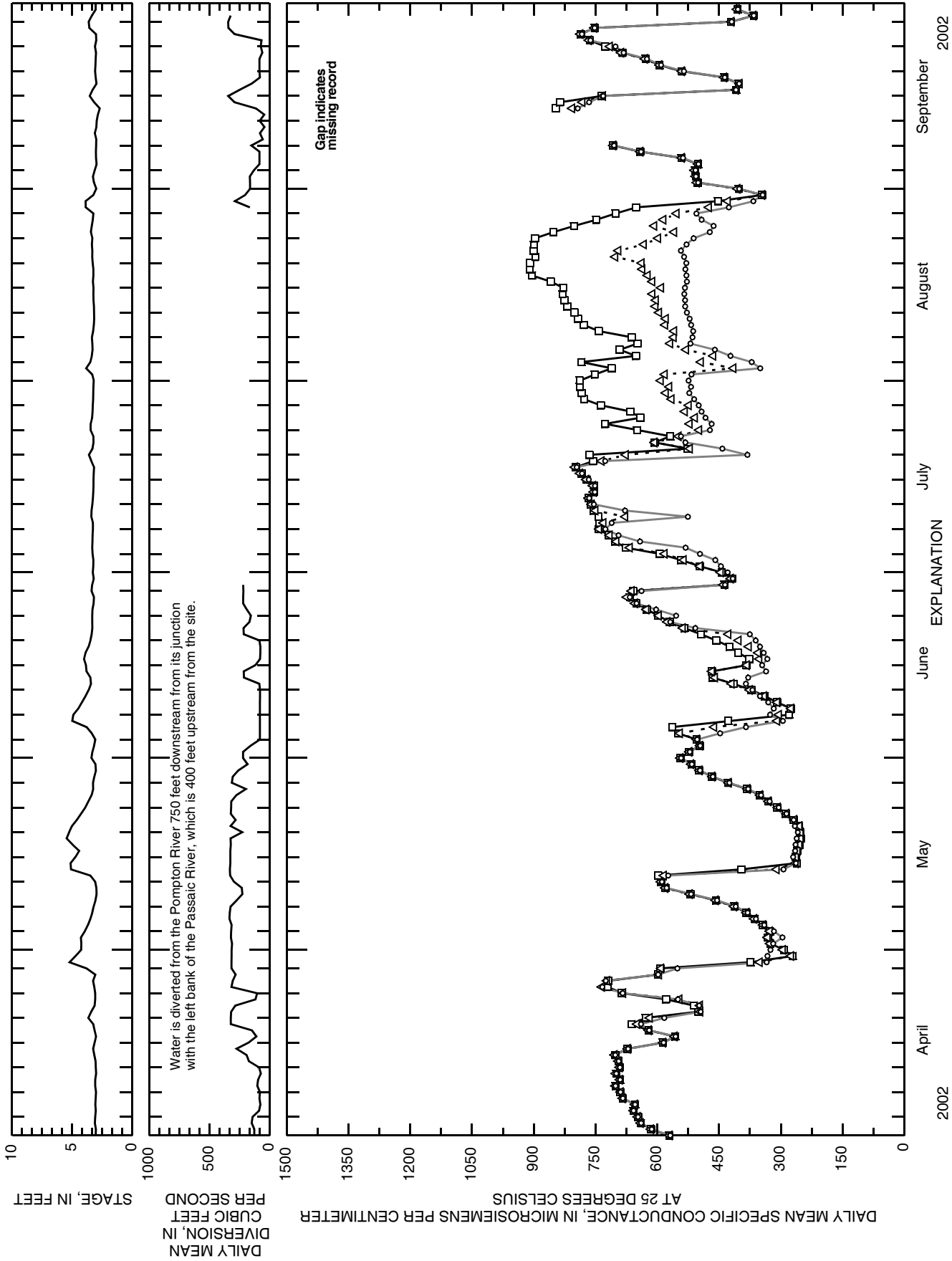


Figure 24. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2002--continued.

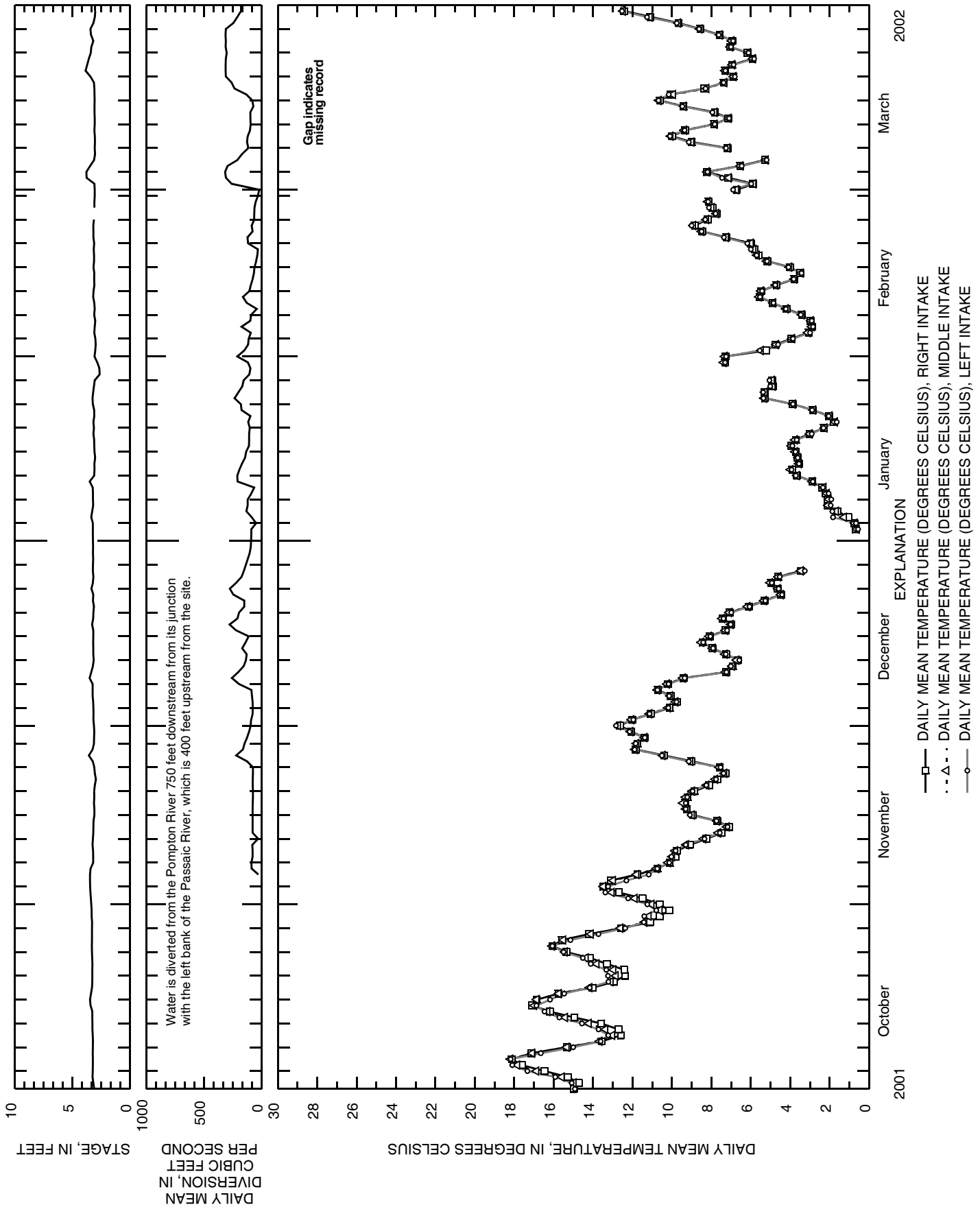


Figure 24. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2002--continued.

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

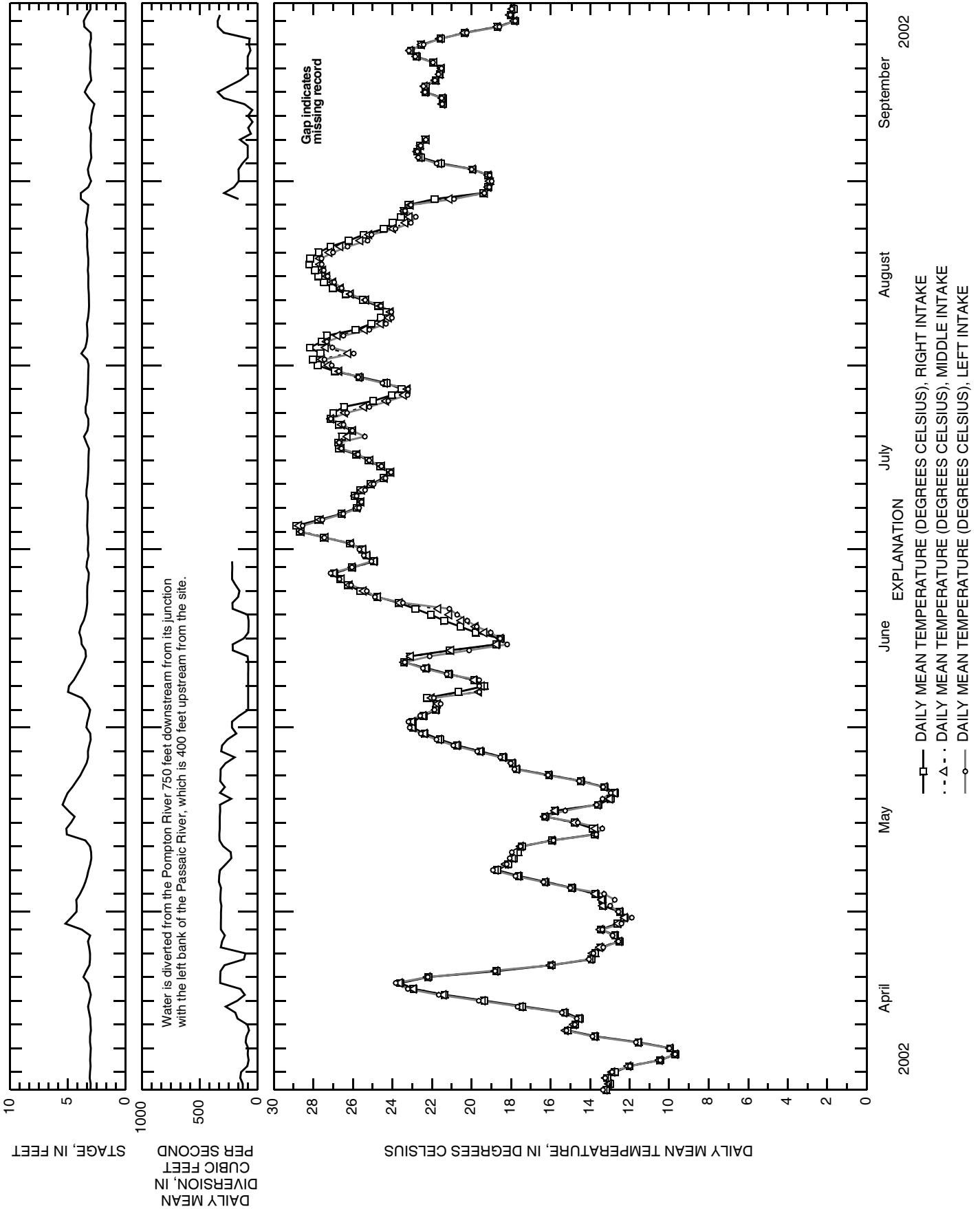


Figure 24. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2002--continued.

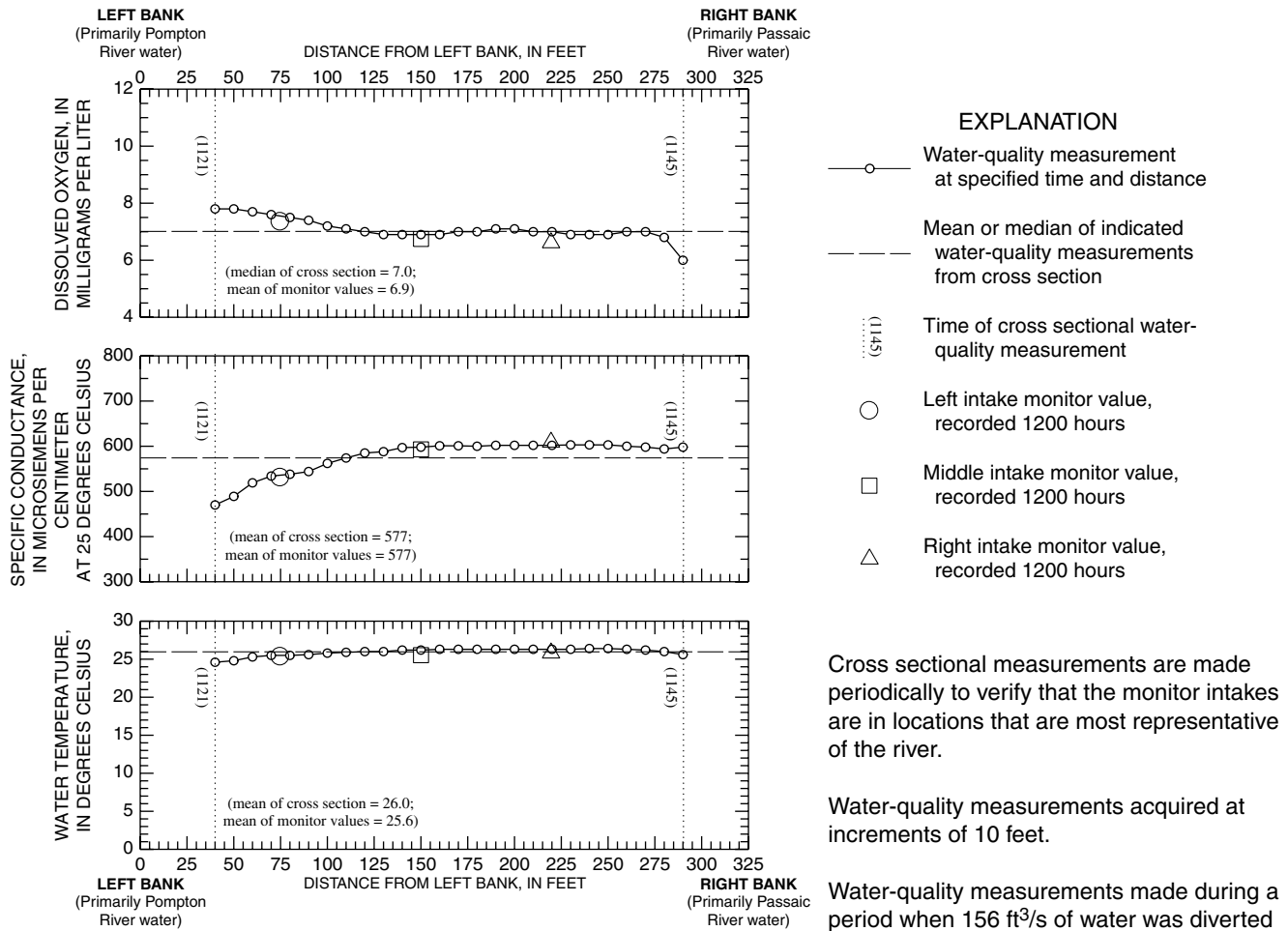


Figure 25. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River, at Two Bridges, June 24, 2002.

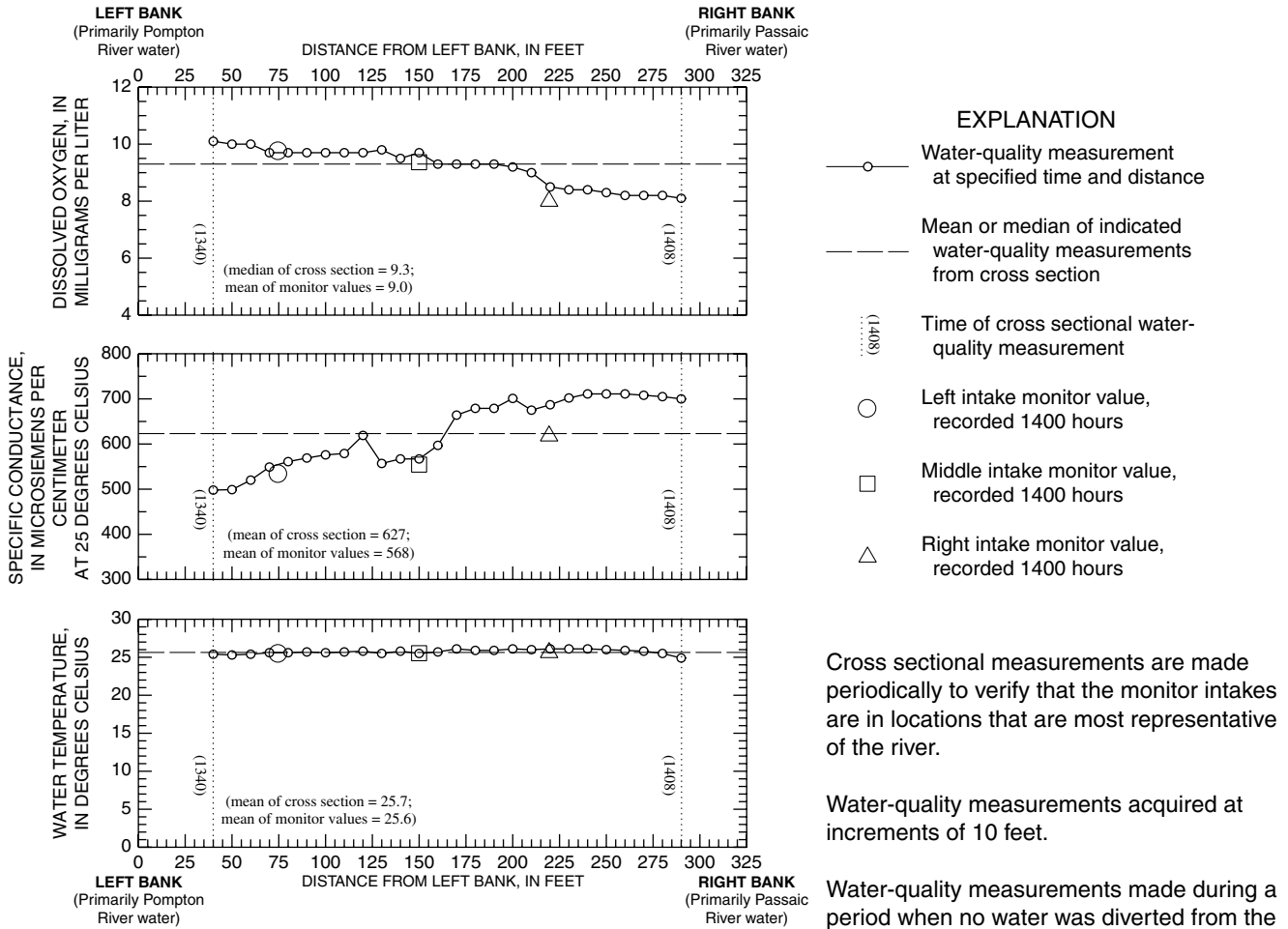


Figure 26. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River, at Two Bridges, August 8, 2002.

PASSAIC RIVER BASIN

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ

LOCATION.--Lat 40°53'05", long 74°13'35", Passaic County, Hydrologic Unit 02030103, 0.6 mi downstream from Beatties Dam in Little Falls, and 1.0 mi upstream from Peckman River.

DRAINAGE AREA.--762 mi².

PERIOD OF RECORD.--Water years 1963-96, 1998 to current year.

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.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). The calibration of water-quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following periods were adjusted:
DISSOLVED OXYGEN: May 6 to May 9, May 12 to May 13, May 28 to Jun. 3, Jun. 24 to Jul. 1, Jul. 16 to Jul. 23.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT /CM (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV														
15...	1000	55	9.0	.106	.081	765	99	11.6	7.9	667	13.0	8.5	160	
FEB														
05...	1000	E34	5.5	.104	.076	765	96	12.8	7.9	910	-7.0	3.5	180	
MAY														
01...	1015	1140	23	.353	.273	756	70	7.5	7.3	304	16.0	12.0	73	
SEP														
05...	0900	28	5.4	.132	.098	758	64	5.6	7.5	535	23.5	21.5	130	
DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV														
15...	40.9	14.0	6.54	61.3	103	110	.1	11.1	42.2	376	366	.080	.59	
FEB														
05...	47.7	15.5	5.87	98.8	89	173	E.1	12.1	52.2	494	479	.090	.56	
MAY														
01...	18.9	6.19	2.54	28.6	46	50.2	E.1	8.3	17.4	208	165	.105	.63	
SEP														
05...	32.7	10.9	4.66	51.0	72	85.2	E.1	12.0	37.2	309	293	.100	.52	
DATE	TIME	NITRO-GEN, AMMONIA (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV														
15...	.070	3.84	.013	4.4	.20	.96	--	1.04	1.1	<.1	4.4	1.1	4.4	4.4
FEB														
05...	.090	4.00	.024	4.6	.08	.69	.619	.76	.6	<.1	4.4	.6	E1.7	E1.7
MAY														
01...	.140	1.03	.011	1.7	.26	.17	.132	.29	2.1	<.1	8.2	2.1	E1.7	E1.7
SEP														
05...	.128	3.33	.025	3.9	.07	.55	.529	.56	.5	<.1	4.7	.5	<1.0	<1.0

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

PASSAIC RIVER BASIN

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A		RESIDUE	
		FLUORO-METRIC METHOD		BORON, DIS-SOLVED	
DATE		CORR. (UG/L) (32209)		(UG/L) AS B (01020)	
				TOTAL DEG. C, SUS-PENDE (MG/L) (00530)	
NOV 15...		--	170	5	
FEB 05...		--	170	3	
MAY 01...		7.90	60	21	
SEP 05...		3.20	150	11	

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)	
SEP	05...	0900	E2	21.2	<.06	143	.04	<.8	3.7	280	1	80.4	<.01	4

		SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)		SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)		ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	
DATE							
SEP 05...				.4		<.05	

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)		
AUG	05...	1150	1700	1400	530	SEP	03...	1140	1100	600	260
	12...	1149	40	200	10						
	19...	1135	40	200	40						

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

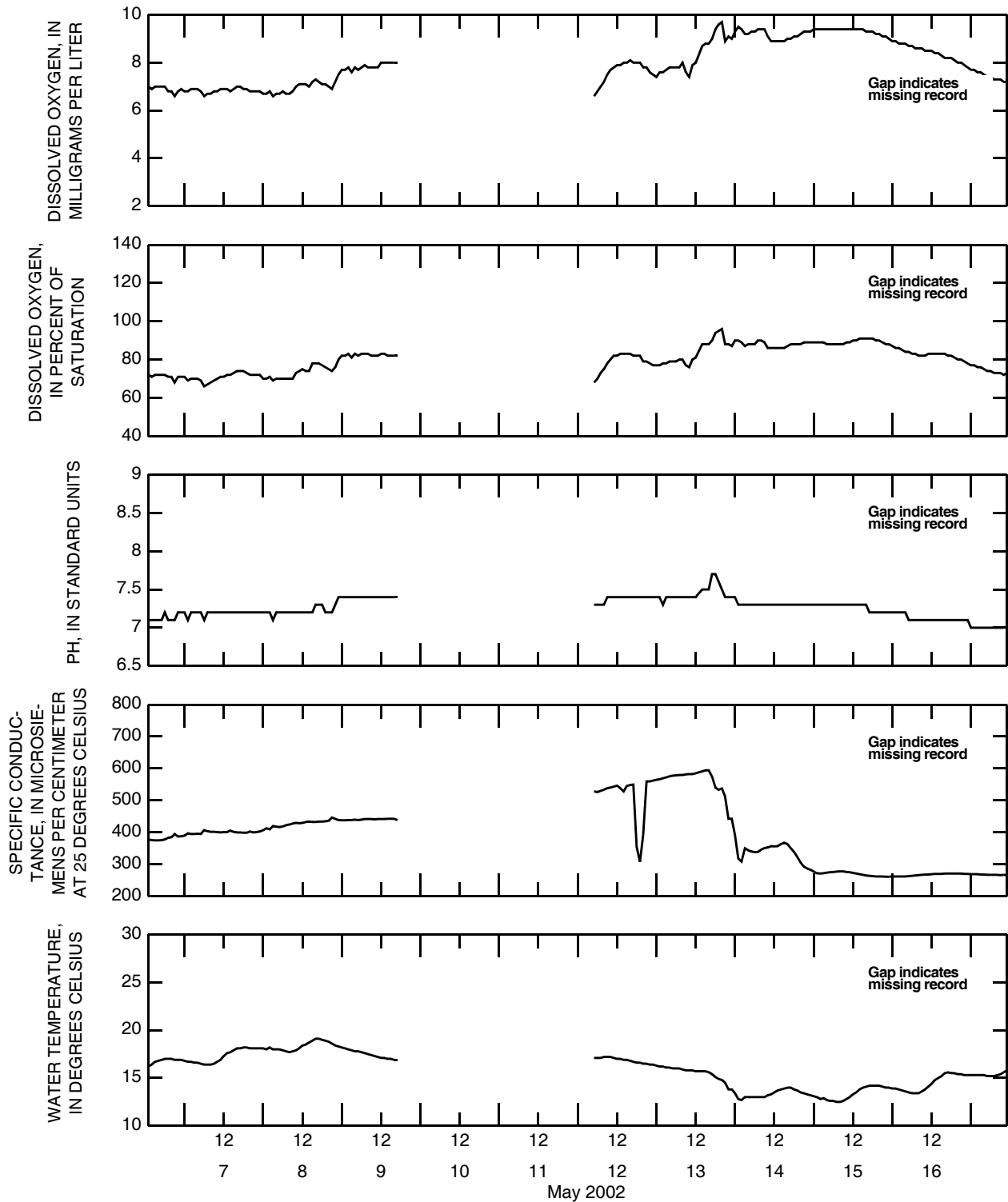


Figure 27. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, May 6 to 17, 2002.

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

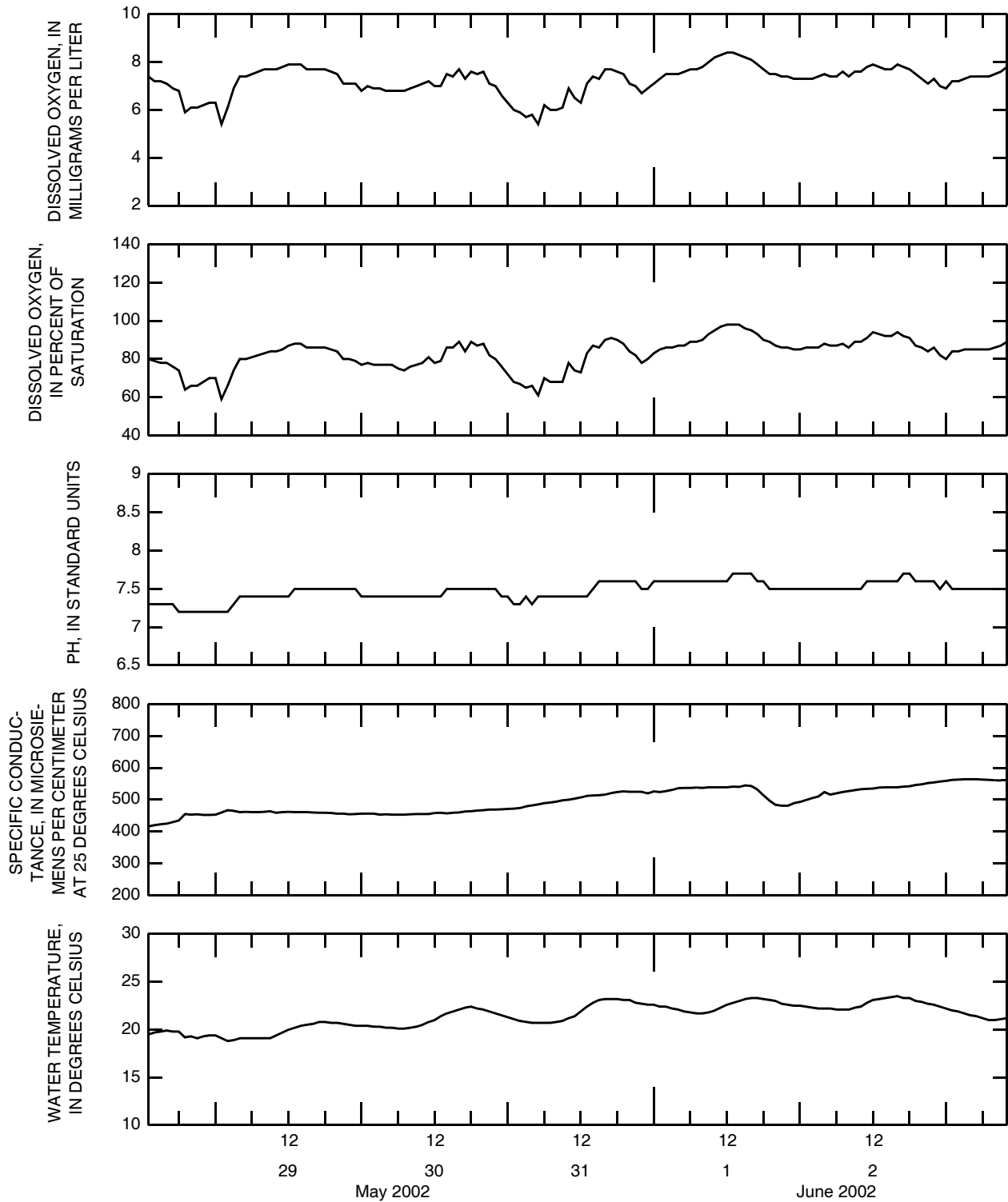


Figure 28. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, May 28 to June 3, 2002.

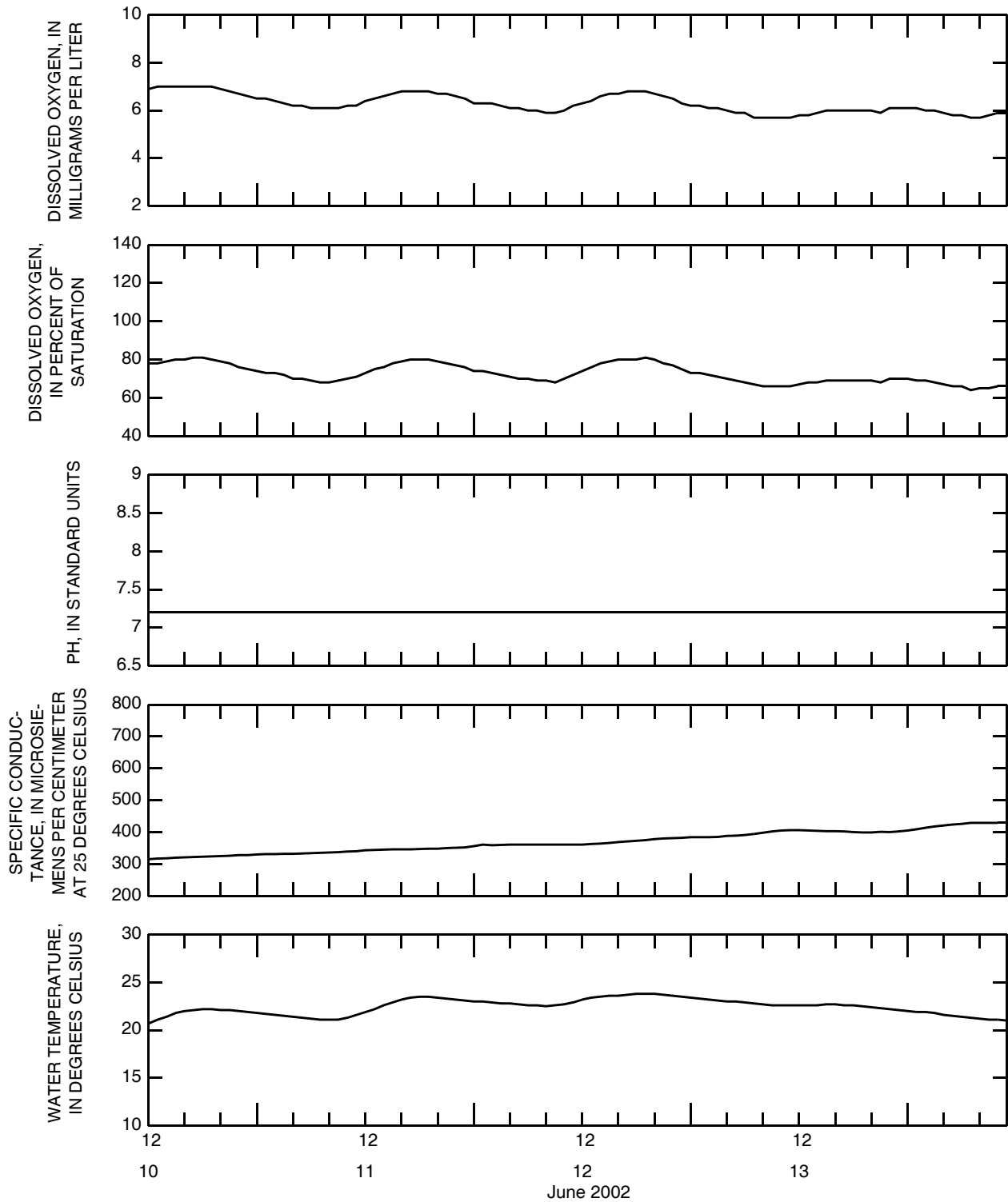


Figure 29. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, June 10 to 14, 2002.

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

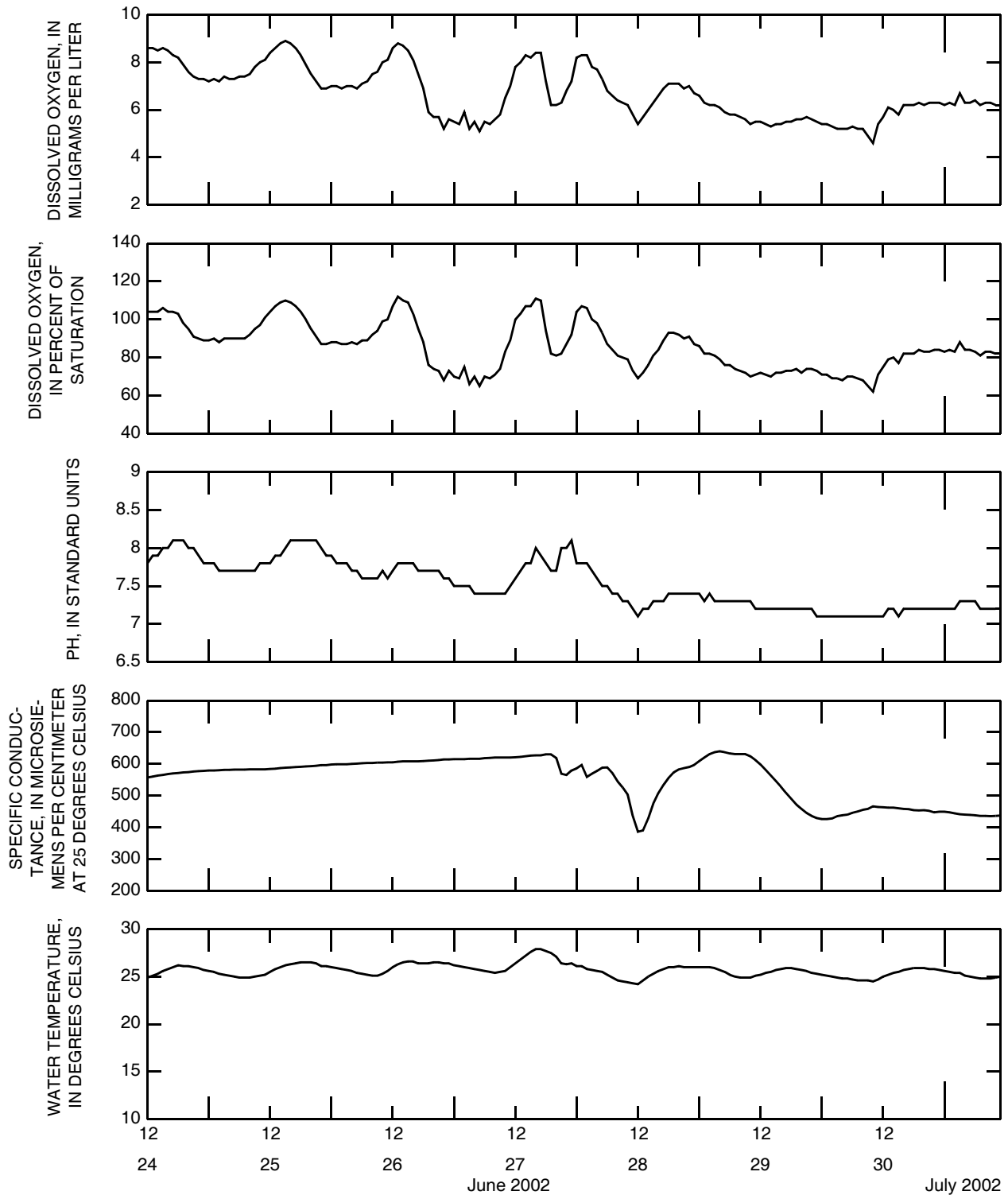


Figure 30. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, June 24 to July 1, 2002.

PASSAIC RIVER BASIN

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

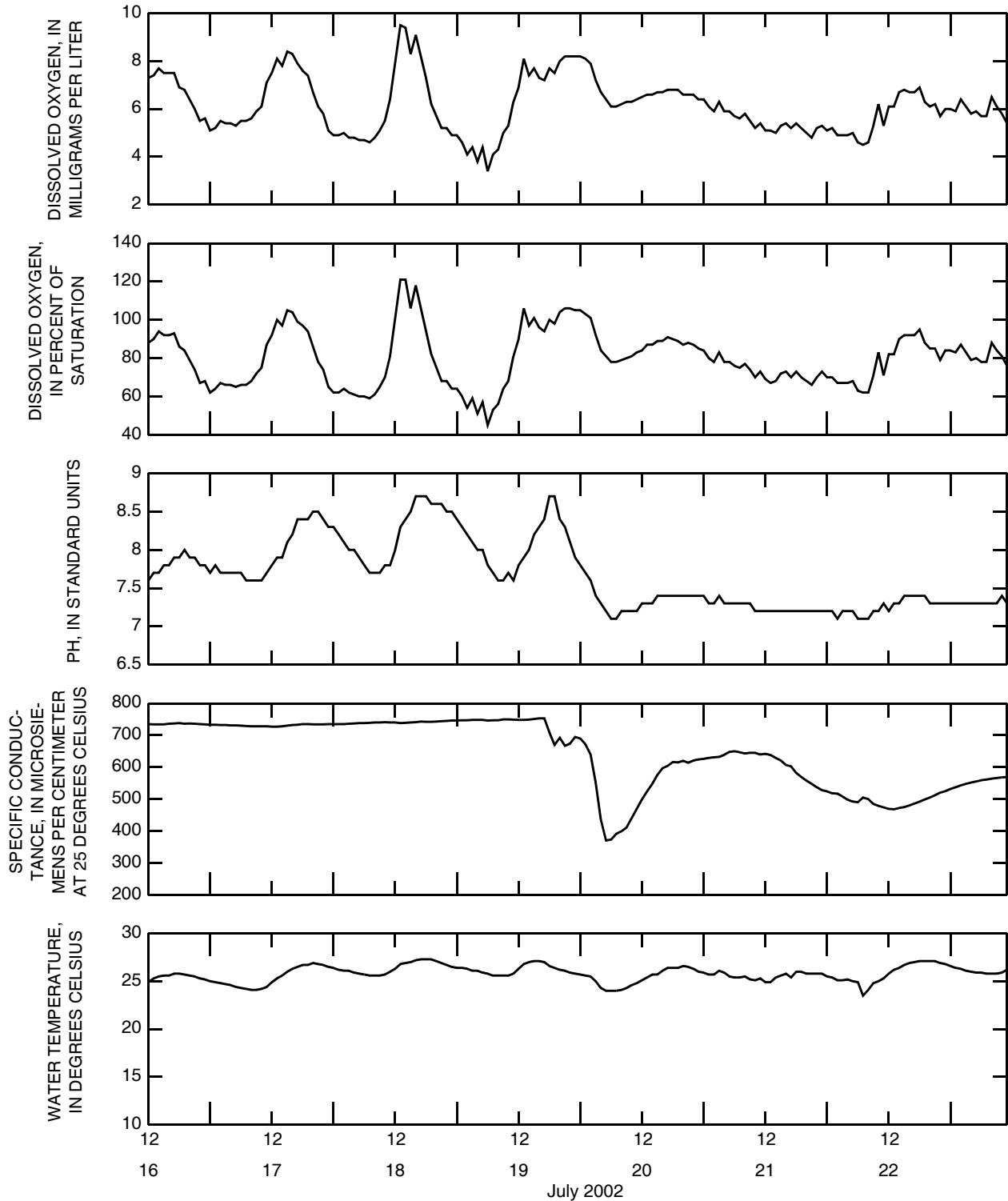


Figure 31. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01389500 Passaic River at Little Falls, July 16 to 23, 2002.

01389850 GOFFLE BROOK AT HAWTHORNE, NJ

LOCATION.--Lat 40°56'20", long 74°09'48", Passaic County, Hydrologic Unit 02030103, at bridge on Wagaraw Road in Hawthorne, 0.2 mi upstream from mouth and Passaic River, and 1.2 mi east of Haledon.

DRAINAGE AREA.--8.77 mi².

PERIOD OF RECORD.--Water years 1998, 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR-BID-ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
NOV 08...	1030	.8	.055	.043	766	72	8.3	7.6	579	12.5	9.5	190	54.5	
FEB 14...	1000	3.2	.030	.022	772	83	11.2	7.5	606	.0	3.5	210	61.9	
MAY 29...	1000	2.1	.131	.097	765	81	7.8	7.5	472	24.0	17.5	140	40.3	
SEP 04...	1000	2.2	.051	.039	760	70	6.5	7.2	503	27.5	18.5	190	55.2	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00610)
NOV 08...	12.1	2.12	30.2	151	64.9	E.1	12.5	20.7	304	294	.030	.16	.040	
FEB 14...	13.1	1.69	34.5	146	80.0	E.1	15.3	22.9	334	325	.030	.14	.030	
MAY 29...	9.20	2.60	35.9	91	75.9	E.1	8.2	15.3	293	249	<.030	.42	<.030	
SEP 04...	11.7	2.03	28.2	128	66.1	E.1	15.0	22.9	288	285	.038	.16	.047	
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)
NOV 08...	1.44	.014	1.6	<.02	.006	--	.015	.3	<.1	2.0	.3	E1.4	--	
FEB 14...	1.82	.008	2.0	.03	.007	<.020	.024	.3	<.1	1.2	.3	E1.7	--	
MAY 29...	1.51	.039	1.9	.12	.037	.024	.066	.5	<.1	4.1	.5	E1.4	4.60	
SEP 04...	1.69	.007	1.8	.04	.012	.020	.031	.1	<.1	2.0	.1	<1.0	4.50	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01389850 GOFFLE BROOK AT HAWTHORNE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105												
		DIS-SOLVED SUS-PENDE												
		AS B) (MG/L)												
		(01020) (00530)												
		NOV												
		08...												
		40 2												
		FEB												
		14...												
		40 7												
		MAY												
		29...												
		40 4												
		SEP												
		04...												
		40 <1												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)	
FEB	14...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	.5	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL-ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL-METHYL UNFLTRD RECOVER (UG/L) (50005)	BENZENE ETHYL-TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL-ETHER WATER UNF REC (UG/L) (78032)
FEB	14...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	.1	<.1	1.7
DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L) (34423)	METHYL-PARA-CHLOR-WATER UNFLTRD REC (UG/L) (85795)	METHYL-O-XYLENE WATER WHOLE (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)				
FEB	14...	<.2	.3	.1	<.1	<.1	.4	<.1	<.2	<.2				

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC, WATER, FLTRD, 0.7 U, GF, REC (UG/L) (82668)
MAY	29...	<.006	<.004	<.005	.051	<.010	E.434	<.007	<.018	<.003	E.021	.114	<.002

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

PASSAIC RIVER BASIN

01389850 GOFFLE BROOK AT HAWTHORNE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 29...	<.004	<.035	E.014	<.050	.048	<.006	<.007	E.021	.02	<.011	.016	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 29...	<.010

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
AUG					SEP				
05...	1120	1100	2700	1800	03...	1115	5000	2900	1800
12...	1121	40	100	130					
19...	1106	2400	1300	3200					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01391500 SADDLE RIVER AT LODI, NJ

LOCATION.--Lat 40°53'25", long 74°04'51", Bergen County, Hydrologic Unit 02030103, 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.

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

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). The calibration of water-quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following periods were adjusted:
SPECIFIC CONDUCTANCE: Jun. 24 to Jul. 1, Jul. 16 to Jul. 23.
DISSOLVED OXYGEN: May 13 to May 17, May 28 to Jun. 3, Jun. 10 to Jun. 14, Jun. 24 to Jul. 1, Jul. 16 to Jul. 23.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WTR UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE OF HG (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 08...	0800	29	3.3	.127	.101	761		6.1	7.5	--	5.0	9.5	240	
FEB 13...	0830	31	3.6	.105	.081	758	68	8.9	7.5	1100	3.0	3.5	240	
MAY 09...	0715	38	4.5	.126	.096	763	58	5.8	7.6	854	10.0	15.5	220	
AUG 13...	0715	28	2.0	.112	.087	753	54	4.5	7.4	922	23.0	23.5	230	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 08...		63.7	19.8	8.20	72.1	114	147	.1	14.5	33.2	506	469	.540	1.2
FEB 13...		65.8	18.9	6.57	96.0	137	185	.1	12.1	34.6	540	539	2.35	3.2
MAY 09...		62.0	16.4	5.33	66.2	136	144	.1	12.6	31.6	502	450	.290	.87
AUG 13...		60.7	19.3	7.69	74.6	136	142	E.1	8.5	28.9	541	463	.040	.55
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 08...		.510	9.28	.588	10	.15	1.80	--	1.78	1.1	<.1	5.1	1.1	3.3
FEB 13...		2.30	6.96	.131	10	.10	1.50	1.38	1.49	.9	<.1	4.7	.9	3.1
MAY 09...		.310	5.88	.202	6.7	.14	.95	.940	1.06	1.4	<.1	4.5	1.4	E2.0
AUG 13...		.070	8.00	.171	8.5	.11	1.57	1.55	1.64	.8	<.1	5.0	.8	E1.0

Remark codes used in this report:
< -- Less than
E -- Estimated value

PASSAIC RIVER BASIN

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)			
NOV	08...		--	--	180	3										
FEB	13...		--	--	170	7										
MAY	09...			4.30	110	11										
AUG	13...			7.50	170	4										
AUG	13...	0713	SPLITTER BLANK	--	--	--	--	--	--	--	--	--	--			
AUG	13...	0714	FIELD BLANK	--	--	--	--	--	--	--	--	--	--			
AUG	13...	0715	ENVIRONMENTAL	--	--	--	--	--	--	E2	120	<.06	177			
AUG	13...	0715	BED MATERIAL	7.40	160	5200	3.6	.3	--	--	--	--	--			
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, DIS- SOLVED ERABLE (UG/L AS CU) (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED ERABLE (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED ERABLE (UG/L AS HG) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, DIS- SOLVED ERABLE (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	
AUG	13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	13...	--	--	<.2	--	--	--	<.08	--	--	<.01	--	<.06	--	--	--
AUG	13...	.09	<.8	--	9.9	140	--	1	81.1	--	<.01	--	2	--	.4	--
AUG	13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED ERABLE (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01053)	MERCURY FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)
AUG	13...	--	6	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	13...	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	13...	.09	--	23	--	--	--	--	--	--	--	--	--	--	--	--
AUG	13...	--	--	--	<1	.110	<.4	1.8	9	4400	13	160	.01	3.9	--	--
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS AG) (01148)	ZINC, FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	4HCYPEN PHENAN- THRENE SED, EM WS,<2MM DW, REC (UG/KG AS ZN) (49411)	9H-FLU- ORENE, 1METHYL SED, EM WS,<2MM DW, REC (UG/KG AS AS) (49398)	9H-FLU- ORENE SED, EM WS,<2MM DW, REC (UG/KG AS AS) (49399)	ACENAPH THENE SED, BM WS,<2MM DW, REC (UG/KG AS CU) (49429)	ACENAPH THYLENE SED, BM WS,<2MM DW, REC (UG/KG AS CU) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS,<2MM DW, REC (UG/KG AS CU) (49435)	ANTHRA- CENE SED, BM WS,<2MM DW, REC (UG/KG AS CU) (49434)	BENZ(A) ANTHRA- CENE SED, BM WS,<2MM DW, REC (UG/KG AS CU) (49436)	BENZO (A) PYRENE SED, BM WS,<2MM DW, REC (UG/KG AS CU) (49389)	BENZOB FLUOR- ANTHENE SED, BM WS,<2MM DW, REC (UG/KG AS CU) (49458)	BENZO(G HI)PERY LENE SED, BM WS,<2MM DW, REC (UG/KG AS CU) (49408)
AUG	13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	13...	<1	41	<50	<50	<50	<50	<50	<50	<50	150	150	160	100	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG)	FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG)	NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG)	NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG)	NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG)	NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG)	NAPHTHAL ENE, 2- ETHYL- SED, BM WS <2MM DW, REC (UG/KG)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	150	190	<50	380	120	<50	<50	<50	<50	<50	<50	<50	8

DATE	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG)	BED MAT. FALL DIAM. % FINER THAN (0.004 MM)	BED MAT. SIEVE DIAM. % FINER THAN (0.062 MM)
AUG							
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	<50	<50	190	<50	<50	300	.3

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0835	>16000	120000	4300	07...	0940	416	400	420
17...	1027	800	500	330					
24...	1006	16000	800	1600					
31...	1016	270	1200	240					

Remark codes used in this report:
< -- Less than
> -- Greater than

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

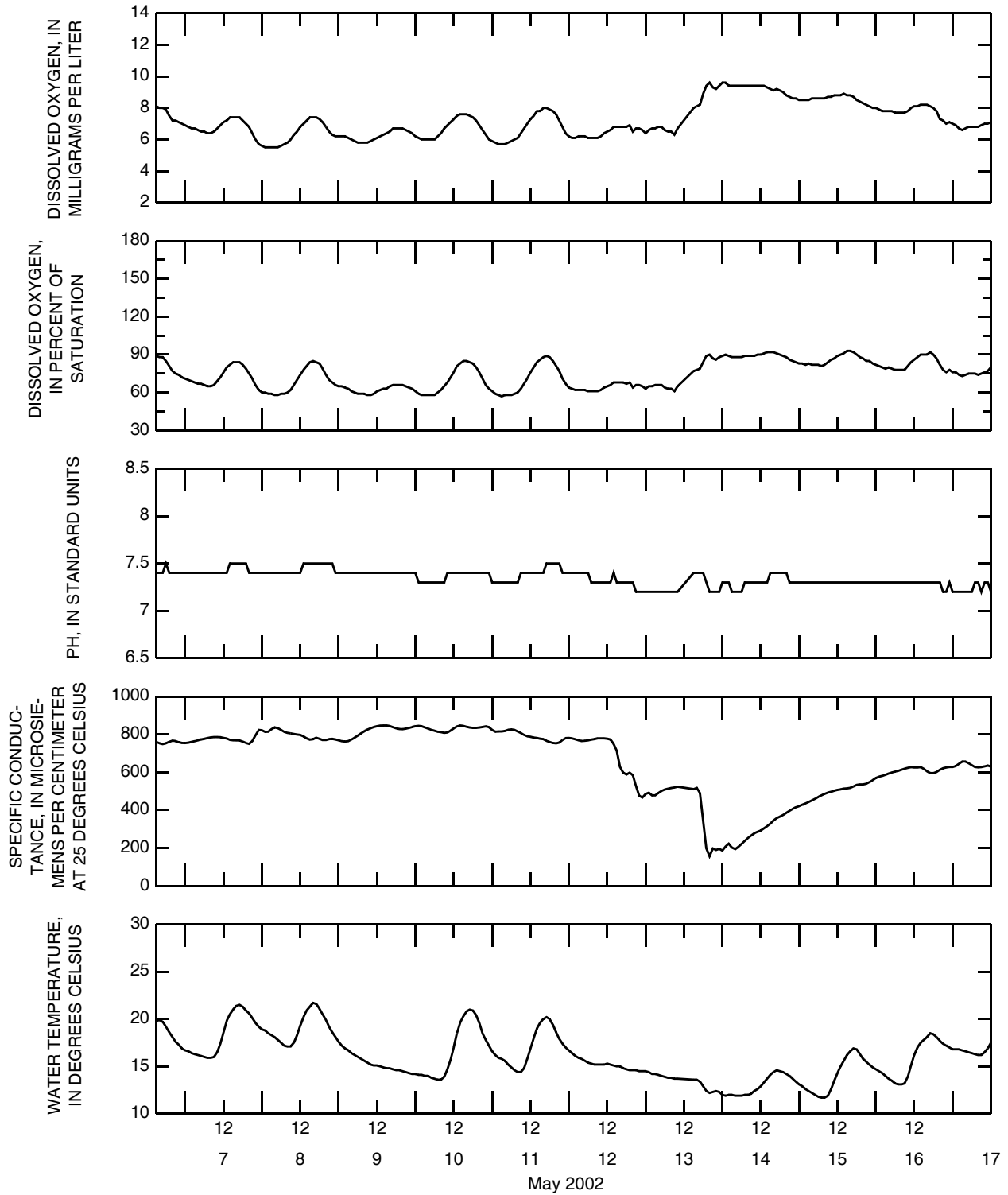


Figure 32. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, May 6 to 17, 2002.

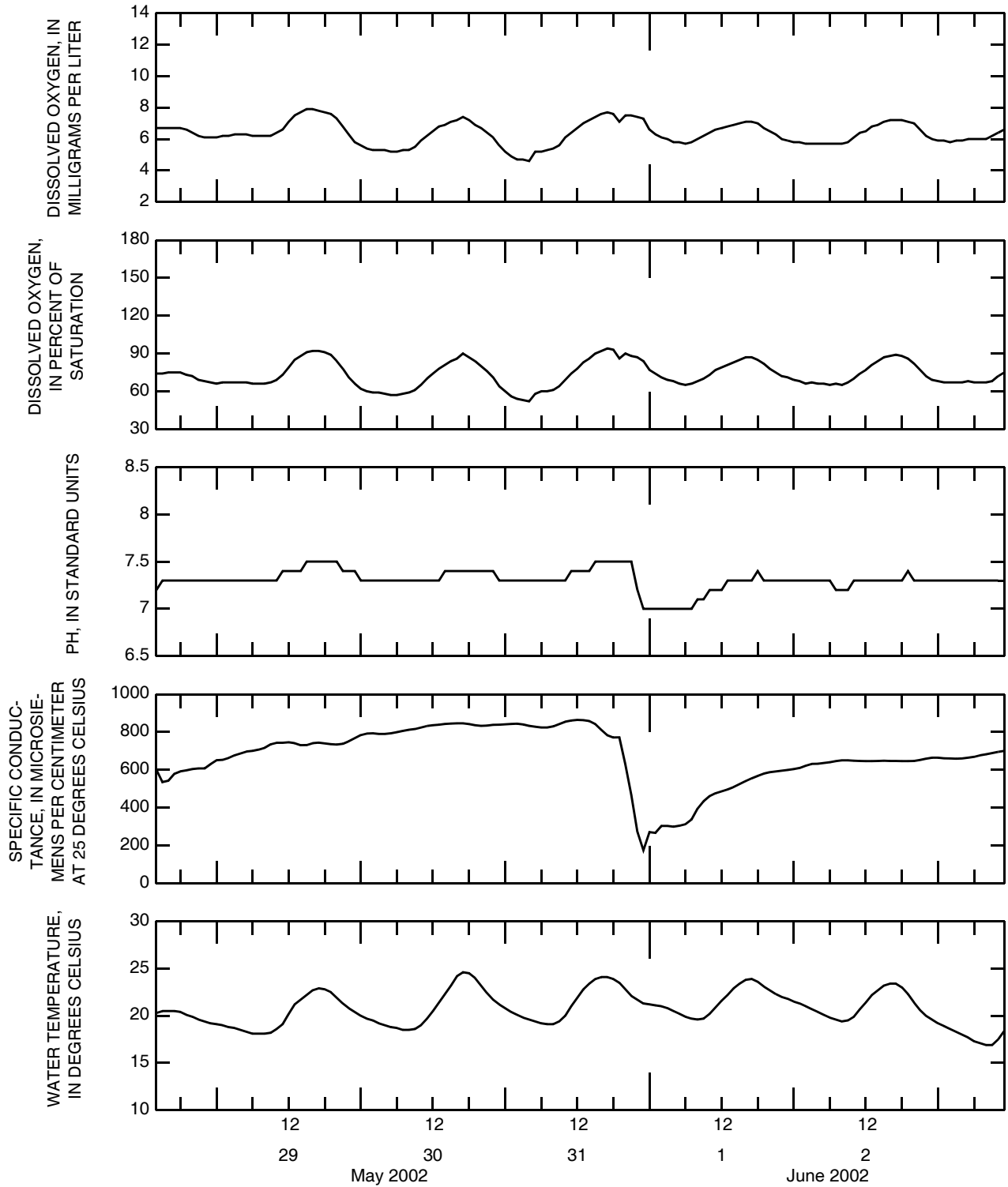


Figure 33. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, May 28 to June 3, 2002.

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

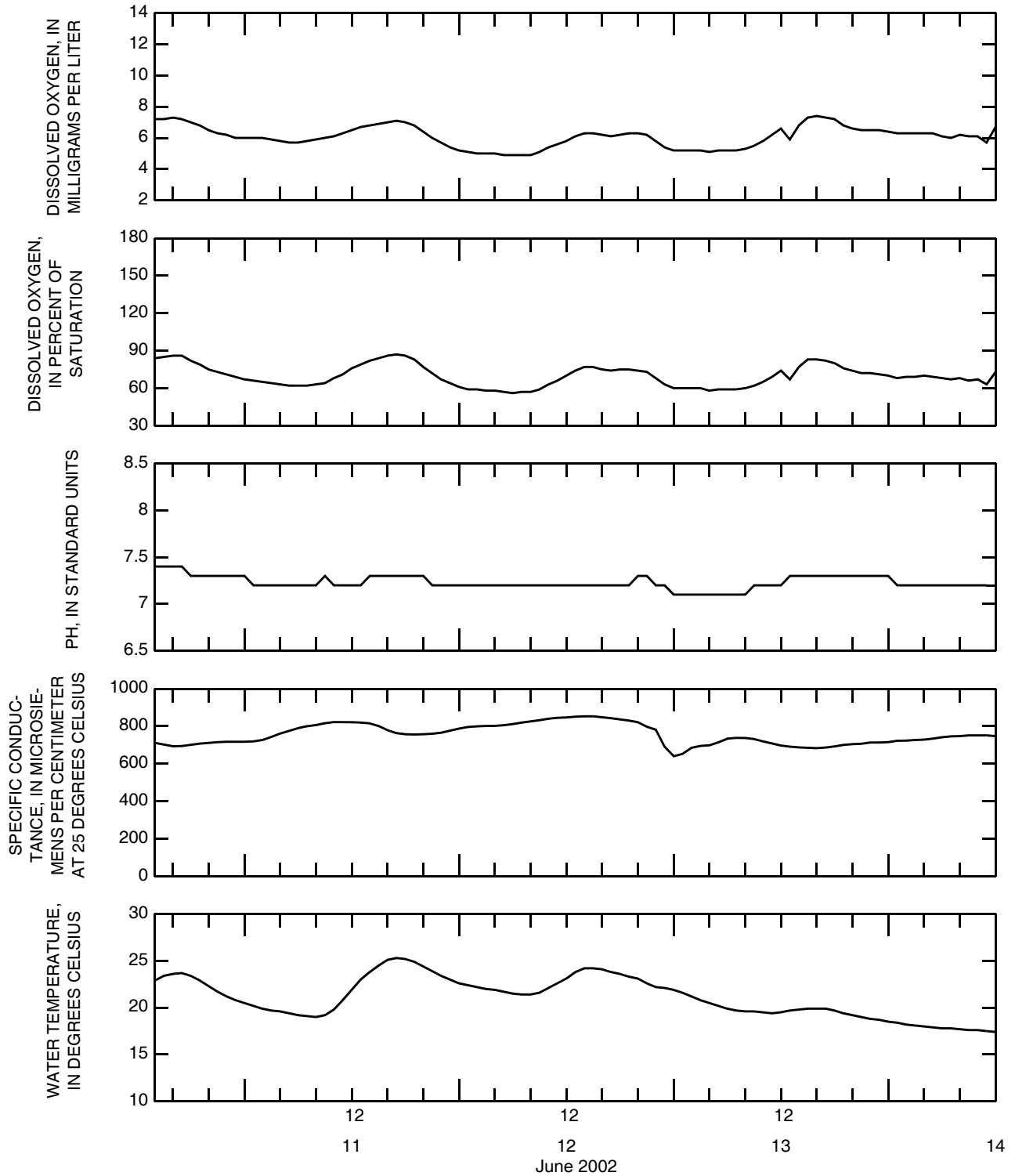


Figure 34. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, June 10 to 14, 2002.

PASSAIC RIVER BASIN

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

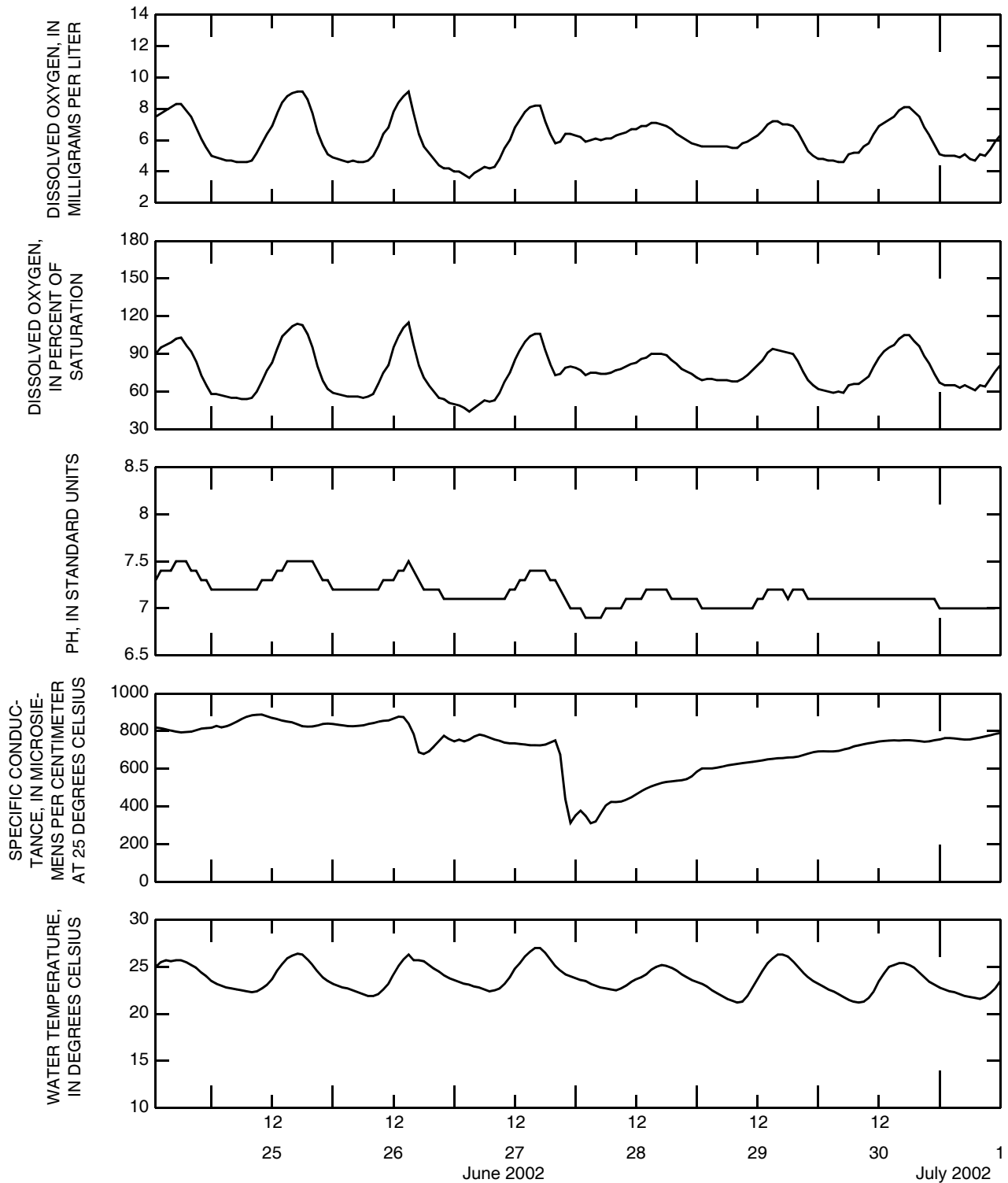


Figure 35. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, June 24 to July 1, 2002.

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

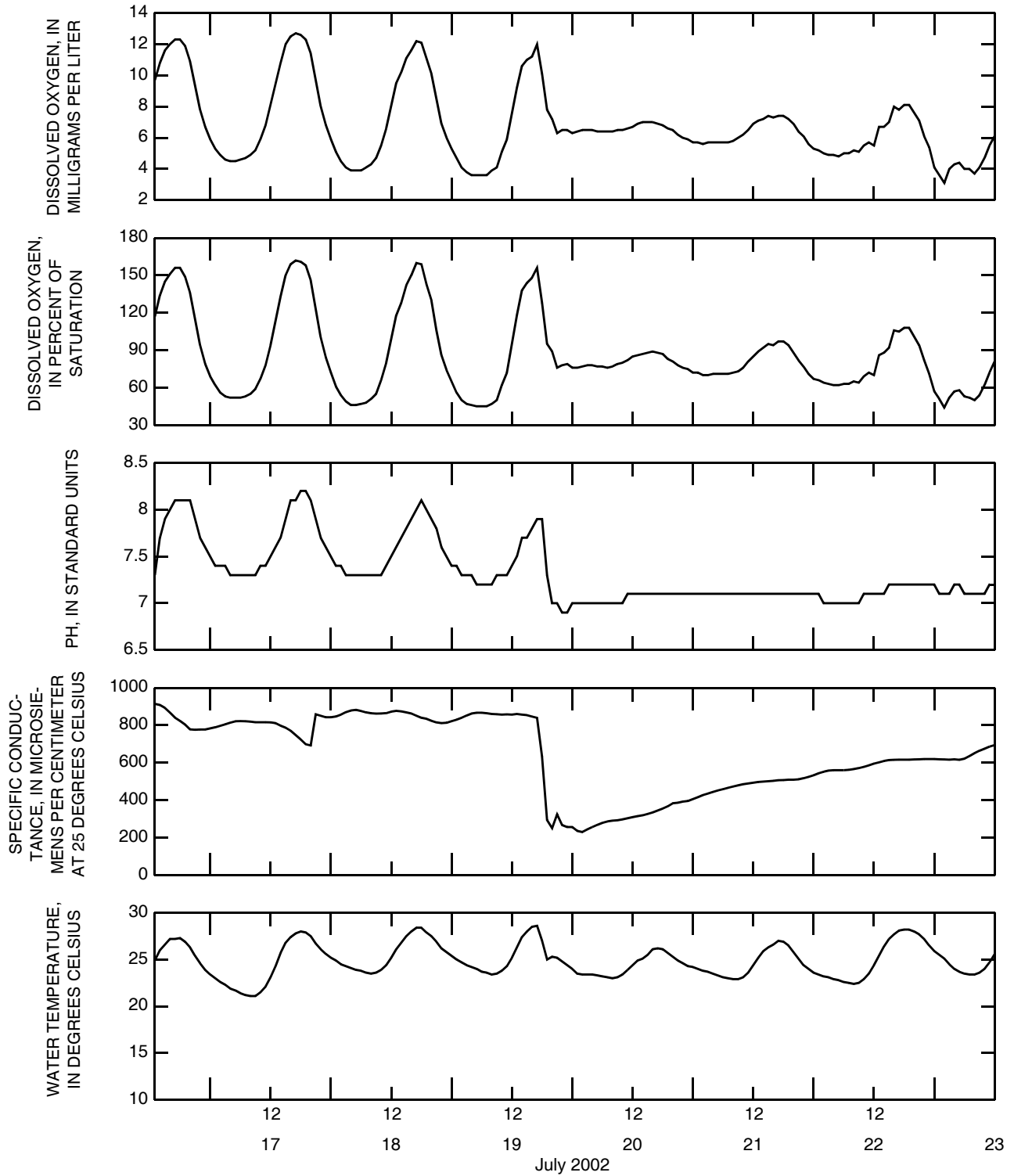


Figure 36. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, July 16 to 23, 2002.

PASSAIC RIVER BASIN

01391550 SADDLE RIVER AT GARFIELD, NJ

LOCATION.--Lat 41°51'50", long 74°06'06", Bergen County, Hydrologic Unit 02030103, at bridge on Marcellus Place just north of intersection with Saddle River Avenue, 0.3 mi southeast of Garfield, and 0.3 mi upstream of mouth.

DRAINAGE AREA.--60.4 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV 20...	0900	3.0	.168	.134	758	63	7.0	7.7	780	10.0	10.5	230	62.4
FEB 07...	0900	2.9	.104	.080	760	--	9.9	7.5	--	4.0	4.5	260	72.0
MAY 28...	0900	4.4	.127	.095	766	70	6.6	7.8	629	21.5	18.5	200	57.0
AUG 15...	1000	2.3	.112	.086	764	68	5.6	7.9	850	25.0	25.0	250	66.5
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 20...	18.4	7.57	67.0	155	138	E.1	12.3	33.3	484	469	.260	.95	.250
FEB 07...	19.9	6.16	88.2	157	175	E.1	12.9	37.0	550	545	1.90	2.6	1.90
MAY 28...	14.3	4.22	58.3	124	118	.1	10.9	26.2	439	386	.260	.80	.260
AUG 15...	19.4	7.56	73.2	144	151	.2	7.3	34.3	423	484	.040	.57	.040
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR- TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 20...	8.32	.174	9.3	.09	1.34	--	1.41	.7	<.1	7.7	.7	3.5	--
FEB 07...	7.58	.131	10	.12	1.30	1.19	1.43	.8	<.1	4.1	.8	E1.6	--
MAY 28...	4.55	.145	5.4	.12	.70	.674	.76	.9	<.1	4.4	.9	2.8	4.30
AUG 15...	7.64	.046	8.2	.07	1.51	1.42	1.52	.3	<.1	4.2	.3	E1.7	5.40

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01391550 SADDLE RIVER AT GARFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
NOV	20...													
FEB	07...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	.2	.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	07...	1.5	<.2	.6	7.9	.2	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.8
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)				
FEB	07...	<.2	<.2	<.1	<.1	1.0	.2	1.4	<.2	3.0				

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	28...	<.006	<.004	<.005	.020	<.010	E.171	<.005	<.018	<.003	E.009	.023	.003

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PASSAIC RIVER BASIN

01391550 SADDLE RIVER AT GARFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 28...	<.004	<.035	<.027	<.050	.025	<.006	<.007	E.020	.03	<.011	.012	E.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 28...	<.010

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0822	>16000	95000	9000	07...	0927	1300	<100	300
17...	1011	800	800	380					
24...	0951	2200	300	3100					
31...	1002	1400	500	180					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 > -- Greater than

01393960 WEST BRANCH RAHWAY RIVER AT NORTHFIELD AVENUE, AT WEST ORANGE, NJ

LOCATION.--Lat 40°46'11", long 74°17'00", Essex County, Hydrologic Unit 02030104, at bridge on Northfield Avenue in West Orange, 0.1 mi upstream of Orange Reservoir, and 2.2 mi east of Northfield.

DRAINAGE AREA.--7.09 mi².

PERIOD OF RECORD.--Water year 1999 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
DEC	05...	1.0	.092	.070	760	70	8.1	7.8	877	11.9	8.5	300	74.3	
FEB	26...	1.1	.066	.048	758	125	15.4	8.9	997	11.5	6.0	310	74.8	
MAY	21...	0900	2.0	.102	.075	758	80	9.0	7.9	634	16.0	10.0	180	44.4
AUG	20...	1000	8.5	.305	.212	752	--	5.8	7.4	--	22.5	22.5	230	56.6
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
DEC	05...	27.8	2.75	71.1	98	232	E.1	13.1	45.0	578	527	<.030	.19	<.030
FEB	26...	28.7	2.62	124	90	339	E.1	7.1	50.5	712	685	<.030	.26	.030
MAY	21...	17.5	1.72	71.2	74	159	.1	15.0	29.1	448	383	<.030	.24	<.030
AUG	20...	20.4	3.25	379	58	691	E.1	5.5	27.1	1310	1220	.150	.69	.190
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570)	PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
DEC	05...	.53	<.003	.73	.13	.031	--	.054	.9	<.1	3.2	.9	E1.6	--
FEB	26...	1.05	.014	1.3	.06	.032	<.020	.051	.5	<.1	2.9	.5	E1.3	--
MAY	21...	<.04	.005	--	.16	.039	.041	.065	1.3	<.1	3.5	1.3	<1.0	20.0
AUG	20...	.82	.028	1.5	.17	.110	.096	.152	1.0	<.1	10.4	1.0	3.8	5.60

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RAHWAY RIVER BASIN

01393960 WEST BRANCH RAHWAY RIVER AT NORTHFIELD AVENUE, AT WEST ORANGE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL											
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)											
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)
DEC	05...							140					13
FEB	26...							140					7
MAY	21...							90					2
AUG	20...							110					15

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-DI-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)
FEB	26...	<.1	<.2	.7	<.1	.2	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.4

DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L) (34423)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)
FEB	26...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
MAY	21...	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

Remark codes used in this report:
 < -- Less than

01393960 WEST BRANCH RAHWAY RIVER AT NORTHFIELD AVENUE, AT WEST ORANGE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 21...	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

MAY
21... <.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN 20...	1120	800	100	80	JUL 02...	1030	1300	600	870
27...	0940	9000	2600	490	10...	0955	16000	1800	300
					17...	0940	3000	1800	1300

Remark codes used in this report:
< -- Less than

RAHWAY RIVER BASIN

01394500 RAHWAY RIVER NEAR SPRINGFIELD

LOCATION.--Lat 40°41'11", long 74°18'44", Union County, Hydrologic Unit 02030104, 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.

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 08...	1045	E5.7	1.5	.080	.061	767	53	6.2	7.6	710	14.0	9.0	220	
FEB 28...	1100	5.1	3.3	.059	.044	763	78	10.2	7.8	747	1.0	4.0	230	
JUN 20...	0715	9.8	2.4	.101	.073	768	52	4.9	7.4	643	16.0	18.5	190	
AUG 15...	1000	5.1	2.6	.076	.058	763	53	4.5	7.7	686	30.0	23.5	230	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 08...	67.5	13.6	2.80	46.7	149	115	.2	16.1	35.3	402	392	.040	.21	
FEB 28...	69.1	13.3	2.04	52.1	142	121	.2	8.7	36.6	422	392	.060	.17	
JUN 20...	59.2	11.3	2.35	46.5	113	100	.1	13.6	31.1	375	339	.110	.31	
AUG 15...	70.2	13.1	2.53	46.0	132	112	.2	11.8	33.0	394	372	.050	.21	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 08...	.030	1.16	.011	1.4	.05	.026	--	.047	.4	<.1	2.9	.4	E1.4	
FEB 28...	.030	.98	.016	1.2	.08	.020	<.020	.053	.7	<.1	2.6	.6	<1.3	
JUN 20...	.120	1.34	.045	1.7	.05	.082	.069	.115	.5	<.1	3.5	.5	<1.0	
AUG 15...	.030	.82	.008	1.0	.09	.081	.080	.108	.7	<.1	3.1	.7	E1.1	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01394500 RAHWAY RIVER NEAR SPRINGFIELD--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A FLUORO-METRIC METHOD					RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED							
DATE		CORR. (UG/L) (32209)					(UG/L) AS B (01020)			(MG/L) (00530)				
NOV														
08...		--					80			1				
FEB														
28...		--					80			2				
JUN														
20...		1.60					80			<1				
AUG														
15...		2.30					80			6				

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)
AUG	15...	2	92.4	<.06	76	.04	<.8	2.3	200	1	68.6	E.01	3

DATE		SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
AUG				
15...		.5	<.05	5

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0932	>16000	1000000	8800	07...	0945	2400	200	330
17...	1000	1300	300	430					
25...	0940	3000	700	260					
31...	0935	800	400	250					

Remark codes used in this report:
 < -- Less than
 > -- Greater than
 E -- Estimated value

LOCATION.--Lat 40°37'08", long 74°17'01", Union County, Hydrologic Unit 02030104, at St. Georges Avenue bridge in Rahway and 0.9 mi upstream from Robinsons Branch.

DRAINAGE AREA.--40.9 mi².

PERIOD OF RECORD.--Water years 1923-24, 1952, 1962, 1967-70, 1979 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT OF SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
DEC											
05...	0800	ENVIRONMENTAL	8.9	3.8	.162	.128	765	51	5.8	7.9	530
05...	0830	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
05...	0831	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--
MAR											
13...	0800	ENVIRONMENTAL	7.7	4.2	.083	.059	761	64	7.6	7.5	636
13...	0800	SPLIT REPLICATE	--	--	--	--	--	--	--	7.5	636
13...	0801	CONCURRENT REPLICATE	--	--	--	--	--	--	--	7.5	636
JUN											
05...	0830	ENVIRONMENTAL	13	3.7	.168	.123	761	60	5.4	7.4	402
05...	0830	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
05...	0831	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--
AUG											
06...	0830	ENVIRONMENTAL	3.3	6.6	.190	.133	750	48	4.0	7.4	433
06...	0830	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
06...	0831	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--

DATE	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
DEC													
05...	12.0	10.0	190	59.8	10.6	3.70	25.6	133	59.8	.1	14.5	40.1	314
05...	--	--	190	59.0	11.0	3.80	25.0	130	63.0	.24	--	43.0	460
05...	--	--	190	59.0	11.0	3.80	25.0	130	64.0	.24	--	44.0	460
MAR													
13...	--	8.0	200	63.1	11.3	1.81	39.3	129	85.1	.1	9.5	44.8	360
13...	--	--	210	65.0	12.0	2.00	43.0	130	91.0	.16	--	48.0	390
13...	--	--	210	65.0	12.0	2.00	43.0	130	85.0	.13	--	55.0	380
JUN													
05...	20.0	20.5	130	41.4	7.37	2.61	24.0	88	53.0	E.1	8.9	27.2	252
05...	--	--	130	40.0	7.10	2.70	24.0	85	53.0	.23	--	28.0	260
05...	--	--	130	40.0	7.20	2.70	24.0	86	53.0	.22	--	28.0	270
AUG													
06...	21.0	24.0	140	44.9	7.96	2.29	24.0	94	50.9	.1	8.3	33.9	273
06...	--	--	150	46.0	8.20	2.70	25.0	94	52.0	.32	--	34.0	290
06...	--	--	150	47.0	8.30	2.60	25.0	95	51.0	.28	--	37.0	290

Remark codes used in this report:
E -- Estimated value

RAHWAY RIVER BASIN

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L) (00623)	NITRO-GEN, AMMONIA TOTAL (MG/L) (00610)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	NITRO-GEN, DIS-SOLVED (MG/L) (00602)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)	PHOS-PHORUS ORTHO TOTAL (MG/L) (70507)	PHOS-PHORUS TOTAL (MG/L) (00665)
DEC													
05...	296	.110	.41	.100	--	.42	.007	.82	.08	.051	.040	.08	.139
05...	285	.074	.44	.075	.43	.290	.025	.73	--	.040	.042	.06	.120
05...	287	.071	.44	.073	.54	.310	.025	.75	--	.040	.042	.06	.120
MAR													
13...	337	.060	.24	.040	--	.97	.010	1.2	.07	.025	<.020	--	.057
13...	343	<.050	<.10	.050	.29	.840	.010	--	--	.018	.036	.04	.036
13...	344	<.050	.17	.060	.19	.850	<.010	1.0	--	.010	.036	.04	.033
JUN													
05...	221	.060	.53	.070	--	.71	.035	1.2	.17	.080	.051	--	.137
05...	209	.110	.28	.110	.35	.700	.035	.98	--	.071	.062	.09	.130
05...	210	.110	.54	.110	.61	.710	.036	1.2	--	.071	.061	.10	.120
AUG													
06...	234	.070	.52	.120	--	1.23	.049	1.8	.17	.089	.078	--	.148
06...	230	.190	.39	.180	.64	1.10	.047	1.5	--	.080	.100	.10	.140
06...	234	.140	.22	.140	.58	1.10	.049	1.3	--	.080	.100	.10	.130

DATE	CARBON, INORG + ORGANIC, PARTIC. TOTAL (MG/L) (00694)	CARBON, INOR-ORGANIC, PARTIC. TOTAL (MG/L) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L) (00689)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
DEC								
05...		.7	<.1	4.8	.7	E1.4	--	8
05...		--	--	4.1	--	--	--	<10
05...		--	--	4.1	--	--	--	<10
MAR								
13...		.6	<.1	3.2	.6	E2.0	--	12
13...		--	--	2.7	--	--	--	<10
13...		--	--	2.7	--	--	--	<10
JUN								
05...		1.2	<.1	3.9	1.2	--	14.6	14
05...		--	--	5.5	--	--	60	6
05...		--	--	5.4	--	--	60	6
AUG								
06...		1.8	<.1	6.7	1.8	2.6	7.50	8
06...		--	--	6.6	--	--	70	11
06...		--	--	6.9	--	--	80	10

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	NITRO-GEN, NH4 + ORG. TOT IN (MG/KG) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG) (00668)	CARBON, INORG + ORGANIC TOT. IN (GM/KG) (00693)	CARBON, INOR-ORGANIC, TOT IN (G/KG) (00686)	ARSENIC TOTAL (UG/L) (01002)	BARIUM, RECOV-ERABLE (UG/L) (01007)	BERYL-LIUM, RECOV-ERABLE (UG/L) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L) (01022)
AUG											
06...	0830	ENVIRONMENTAL	--	--	--	--	--	2	74.7	<.06	76
06...	0830	BED MATERIAL	7.60	140	5400	3.1	<.2	--	--	--	--

DATE	CADMIUM, UNFLTRD TOTAL (UG/L) (01027)	CHRO-MIUM, RECOV-ERABLE (UG/L) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L) (01067)	SILVER, SELE-NIUM, TOTAL RECOV-ERABLE (UG/L) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L) (01092)	ARSENIC IN BOT-TOM MA-TERIAL (UG/G) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01028)
AUG												
06...	.06	E.6	5.7	440	3	240	E.01	3	.6	E.05	15	--
06...	--	--	--	--	--	--	--	--	--	--	1	.090

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RAHWAY RIVER BASIN

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHROMIUM, RECOV. FM BOT-TOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MATERIAL (UG/G) (01038)	COPPER, RECOV. FM BOT-TOM MATERIAL (UG/G) (01043)	IRON, SEDIMENT BED MATERIAL (UG/G) (01170)	LEAD, RECOV. FM BOT-TOM MATERIAL (UG/G) (01052)	MANGANESE, RECOV. FM BOT-TOM MATERIAL (UG/G) (01053)	MERCURY, RECOV. FM BOT-TOM MATERIAL (UG/G) (71921)	NICKEL, RECOV. FM BOT-TOM MATERIAL (UG/G) (01068)	SELENIUM, TOTAL IN BOT-TOM MATERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT-TOM MATERIAL (UG/G) (01093)	4HCYPHENANTHRENE, SEDIMENT, DW (UG/KG) (49411)	9H-FLUORENE, 1METHYL, SEDIMENT, DW (UG/KG) (49398)	9H-FLUORENE, SEDIMENT, DW (UG/KG) (49399)
AUG 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	7.0	2.4	9	8300	27	700	.01	6.9	<1	82	99	E12	E45
DATE	ACENAPHTHENE, SEDIMENT, DW (UG/KG) (49429)	ACENAPHTHYLENE, SEDIMENT, DW (UG/KG) (49428)	ANTHRACENE, 2-METHYL-, SEDIMENT, DW (UG/KG) (49435)	ANTHRACENE, SEDIMENT, DW (UG/KG) (49434)	BENZ(A)ANTHRACENE, SEDIMENT, DW (UG/KG) (49436)	BENZO(A)PYRENE, SEDIMENT, DW (UG/KG) (49389)	BENZOFLUORANTHENE, SEDIMENT, DW (UG/KG) (49458)	BENZO(G)HI-PERYLENE, SEDIMENT, DW (UG/KG) (49408)	BENZO(K)FLUORANTHENE, SEDIMENT, DW (UG/KG) (49397)	CHRYSENE, SEDIMENT, DW (UG/KG) (49450)	DIBENZ(AH), ANTHRACENE, THYRACEN, SEDIMENT, DW (UG/KG) (49461)	FLUORENE, 1,23-CD, BED MATERIAL, DRY WEIGHT, REC (UG/KG) (49466)	INDENO(1,23-CD)PYRENE, SEDIMENT, DW (UG/KG) (49390)
AUG 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	E21	88	53	190	510	520	530	320	440	550	100	1100	390
DATE	ISOPHORONE, SEDIMENT, DW (UG/KG) (49400)	NAPHTH(1,2)DIMETHYL, SEDIMENT, DW (UG/KG) (49403)	NAPHTH(1,6)DIMETHYL, SEDIMENT, DW (UG/KG) (49404)	NAPHTH(2,3,6)TRIMETHYL, SEDIMENT, DW (UG/KG) (49405)	NAPHTH(2,6)DIMETHYL, SEDIMENT, DW (UG/KG) (49406)	NAPHTH(2-ETHYL)-, SEDIMENT, DW (UG/KG) (49948)	NAPHTH(ALENE), SEDIMENT, DW (UG/KG) (49402)	PCB, TOTAL IN BOT-TOM MATERIAL (UG/KG) (39519)	P-CRESOL, SEDIMENT, DW (UG/KG) (49451)	PHENANTHRENE, 1METHYL, SEDIMENT, DW (UG/KG) (49410)	PHENANTHRENE, SEDIMENT, DW (UG/KG) (49409)	PHENANTHRENE, THRI-DINE, SEDIMENT, DW (UG/KG) (49393)	PYRENE, 1-METHYL, SEDIMENT, DW (UG/KG) (49388)
AUG 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<50	<50	E14	E14	E19	E10	E17	7	E25	58	630	<50	51

DATE	PYRENE, SEDIMENT, DW (UG/KG) (49387)	BED MATERIAL, FALL DIAM. % FINER THAN .004 MM (80157)	BED MATERIAL, SIEVE DIAM. % FINER THAN .062 MM (80164)
AUG 06...	--	--	--
06...	890	.3	.6

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLIFORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTEROCOCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLIFORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTEROCOCCI, ME MF, WATER (COL/100 ML) (31649)
JUL 10...	1020	16000	2800	1690	AUG 07...	1015	800	<100	740
17...	1030	1300	600	500					
25...	1015	300	500	360					
31...	1010	3000	1400	1320					

Remark codes used in this report:
< -- Less than
E -- Estimated value

01396030 SOUTH BRANCH RAHWAY RIVER AT COLONIA, NJ

LOCATION.--Lat 40°34'57", long 74°18'04", Middlesex County, Hydrologic Unit 02030104, at bridge on Dover Street in Colonia at intersection of Dover Street and Maplewood Avenue, 1.9 mi upstream of mouth, and 2.2 mi southwest at Rahway.

DRAINAGE AREA.--9.31 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)
DEC											
05...	0930	ENVIRONMENTAL	6.4	.072	.055	773	77	8.9	7.9	651	15.0
05...	0930	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--
05...	0931	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
MAR											
13...	0930	ENVIRONMENTAL	8.6	.094	.067	762	93	11.3	7.9	755	8.0
13...	0930	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--
13...	0931	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
JUN											
05...	0830	ENVIRONMENTAL	4.9	.100	.073	761	72	6.7	7.8	760	26.0
05...	0830	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--
05...	0831	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
AUG											
06...	0930	ENVIRONMENTAL	9.0	.179	.127	756	72	6.1	7.6	553	26.0
06...	0930	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--
06...	0931	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--

DATE	TEMPER- ATURE WATER (DEG C) (00010)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD LAB (MG/L CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
DEC													
05...	9.5	220	66.8	13.6	2.65	38.4	150	99.4	.1	12.6	28.4	376	354
05...	--	220	65.0	14.0	2.70	37.0	150	110	.25	--	30.0	540	350
05...	--	220	65.0	14.0	2.70	38.0	140	110	.25	--	31.0	490	346
MAR													
13...	7.0	210	63.5	13.4	2.16	59.1	122	129	E.1	8.1	44.5	430	396
13...	--	220	64.0	14.0	2.40	66.0	120	130	.09	--	50.0	480	401
13...	--	220	65.0	15.0	2.40	66.0	120	130	.11	--	52.0	460	405
JUN													
05...	18.5	240	69.4	15.2	3.10	56.7	142	130	E.1	12.8	36.8	500	412
05...	--	230	66.0	15.0	3.30	57.0	130	130	.25	--	39.0	500	392
05...	--	230	66.0	15.0	3.30	56.0	140	130	.25	--	39.0	490	397
AUG													
06...	23.0	170	51.3	10.9	3.13	42.6	108	86.8	.1	12.0	35.2	336	310
06...	--	170	51.0	11.0	3.60	43.0	110	87.0	.36	--	36.0	380	301
06...	--	170	50.0	11.0	3.60	42.0	100	85.0	.36	--	35.0	370	290

Remark codes used in this report:
E -- Estimated value

RAHWAY RIVER BASIN

01396030 SOUTH BRANCH RAHWAY RIVER AT COLONIA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULTE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)
DEC													
05...	<.030	.21	<.030	--	.51	<.003	.72	.05	.040	.030	.05	.072	.6
05...	<.010	.24	<.010	.22	.300	.010	.54	--	.030	.036	.04	.060	--
05...	<.010	.23	<.010	.30	.310	.018	.54	--	.020	.036	.04	.060	--
MAR													
13...	<.030	.22	<.030	--	.67	.010	.89	.07	.021	<.020	--	.053	.6
13...	.050	.10	.050	.27	.600	<.010	.70	--	<.010	.030	.02	.030	--
13...	<.050	.18	<.050	.24	.580	<.010	.76	--	.010	.031	.03	.025	--
JUN													
05...	.060	.32	.060	--	.74	.022	1.1	.08	.054	.041	--	.088	.6
05...	.083	.15	.084	.22	.740	.023	.89	--	.050	.170	.10	.083	--
05...	.082	<.10	.088	.48	.740	.022	--	--	.051	.180	.10	.082	--
AUG													
06...	<.030	.40	<.030	--	.75	.019	1.2	.21	.076	.059	--	.126	1.1
06...	.091	.12	.093	.56	.630	<.025	.75	--	.070	.110	.11	.120	--
06...	.095	.10	.095	.47	.600	<.025	.70	--	.100	.110	.11	.120	--

DATE	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)
DEC							
05...	<.1	2.5	.6	E1.3	--	70	4
05...	--	1.6	--	--	--	70	<10
05...	--	1.7	--	--	--	70	<10
MAR							
13...	<.1	4.2	.6	3.3	--	100	15
13...	--	3.7	--	--	--	100	<10
13...	--	3.7	--	--	--	110	<10
JUN							
05...	<.1	3.3	.6	--	11.0	100	11
05...	--	3.5	--	--	--	100	6
05...	--	3.4	--	--	--	100	<5
AUG							
06...	<.1	5.8	1.1	E1.8	11.9	110	2
06...	--	5.4	--	--	--	120	<10
06...	--	6.0	--	--	--	120	<10

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE UNFLTRD REC (UG/L) (34566)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102)
MAR													
13...	0930	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

DATE	CHLORO-BENZENE TOTAL (UG/L) (34301)	BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (77093)	BROMO-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)
MAR													
13...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.7

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01396030 SOUTH BRANCH RAHWAY RIVER AT COLONIA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
MAR 13...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	
JUN 05...	0830	<.006	<.004	<.005	.040	<.010	E.116	<.005	<.018	<.003	E.016	.013	<.002	
DATE	TIME	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PANIL WATER DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, FLTRD 0.7 U GF, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
JUN 05...	<.004	<.035	<.027	<.050	.014	<.006	<.007	<.022	.13	<.011	.007	<.02	<.034	
						DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)							
						JUN 05...	<.009							

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL 31...	0920	1300	900	820	AUG 14...	0915	800	<100	610
AUG 07...	0910	2400	500	620	AUG 21...	0920	3000	<100	6300
					AUG 28...	0940	3000	1200	1800

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01396550 SPRUCE RUN AT NEWPORT, NJ

LOCATION.--Lat 40°43'29", long 74°54'34", Hunterdon County, Hydrologic Unit 02030105, at bridge on Newport Road, 1.2 mi northwest of Woodglen, and 6.4 mi upstream from Spruce Run Reservoir.

DRAINAGE AREA.--5.67 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 07...	0850	1.8	1.0	.073	.057	745	104	12.6	6.9	150	14.5	6.0	54	
FEB 04...	0900	3.5	1.4	.085	.066	738	104	14.5	6.9	128	5.0	.5	40	
MAY 23...	0940	7.5	1.5	.109	.083	752	103	11.5	6.9	119	19.5	10.0	39	
AUG 15...	0950	.50	1.0	.051	.038	751	98	8.4	7.6	161	28.0	22.0	57	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 07...	12.4	5.64	1.16	7.32	43	11.6	<.1	15.8	12.5	102	93	.040	.14	
FEB 04...	9.22	4.22	.81	7.03	25	11.2	<.1	15.7	14.3	88	80	<.030	.15	
MAY 23...	8.94	3.95	.76	6.50	26	9.59	E.1	13.9	11.4	76	73	<.030	.16	
AUG 15...	13.2	5.87	1.04	7.30	46	10.4	.1	16.5	11.9	90	96	<.030	.10	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 07...	.040	.06	<.003	.21	<.02	E.003	--	.011	.3	<.1	2.4	.3	<1.0	
FEB 04...	<.030	.56	<.003	.72	.03	.005	--	.007	.2	<.1	2.5	.1	<1.0	
MAY 23...	.040	.50	.003	.66	.04	.007	<.020	.013	.6	<.1	2.8	.6	<1.0	
AUG 15...	--	.40	<.003	.50	<.02	.014	.040	.019	<.1	<.1	1.7	<.1	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01396550 SPRUCE RUN AT NEWPORT, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN BED MAT SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPTHAL ENE, 2- ETHYL- SED BM WS, <2MM DW REC (UG/KG) (49948)	NAPTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)
AUG													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<5	<50

DATE	PHENAN- THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)	PYRENE, PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
AUG							
15...	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--
15...	<50	<50	<50	<50	<50	1	2

DATE	TIME	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34501)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)
FEB													
04...	0900	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

DATE	TIME	CHLORO- DI- BROMO- BENZENE TOTAL (UG/L) (34301)	CHLORO- BROMO- FORM TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (32106)	ETHENE WATER TOTAL (UG/L) (77093)	CIS-1,2 -DI- CHLORO- ETHANE TOTAL (UG/L) (32101)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (34668)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (81577)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL WATER ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (34371)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER REC (UG/L) (78032)
FEB														
04...		<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	TIME	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
FEB										
04...		<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
MAY													
23...	0940	<.006	<.004	<.005	.010	<.010	E.004	<.005	<.018	<.003	E.012	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01396550 SPRUCE RUN AT NEWPORT, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 23...	<.004	<.035	<.027	<.050	E.009	<.006	<.007	<.022	<.01	<.011	.008	<.02	<.034

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

MAY
23... <.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL	09...	80	200	60	AUG	06...	<20	<100	10
	16...	40	<100	40					
	25...	40	200	110					

Remark codes used in this report:
< -- Less than
E -- Estimated value

RARITAN RIVER BASIN

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ

LOCATION.--Lat 40°38'51", long 74°58'09", Hunterdon County, Hydrologic Unit 02030105, at bridge on Jutland Road, 0.2 mi south of Van Syckel, and 0.3 mi upstream from Spruce Run Reservoir, 0.8 mi north of Perryville.

DRAINAGE AREA.--11.8 mi².

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 1997 to August 1998.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD CON-(STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 08...	1030	3.8	.5	.036	.028	758	107	12.5	8.3	255	14.5	8.5	100
FEB 21...	1000	5.8	1.3	.044	.035	750	96	11.5	7.7	277	14.0	7.0	90
MAY 23...	1100	14	.9	.049	.036	760	104	11.0	7.9	225	19.5	12.5	78
AUG 06...	0930	E3.1	1.6	.046	.035	757	94	8.6	7.8	275	24.0	19.5	110

DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (70300)	SOLIDS, CONSTI-TUENTS, DIS-SOLVED (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 08...	25.3	9.38	1.41	10.2	84	21.9	E.1	13.4	12.7	146	147	<.030	E.10	
FEB 21...	22.7	7.99	1.26	17.2	64	34.8	E.1	12.0	15.2	154	153	<.030	.12	
MAY 23...	20.1	6.88	1.18	11.6	55	22.2	E.1	13.5	14.0	127	126	.030	.11	
AUG 06...	27.5	9.96	1.53	11.1	86	21.2	E.1	15.7	13.1	166	156	<.030	.10	

DATE	TIME	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 08...	.050	.54	<.003	--	<.02	.005	--	.007	.2	<.1	1.4	.2	3.8	
FEB 21...	<.030	.81	<.003	.93	<.02	.008	<.020	.011	.3	<.1	1.6	.2	<1.0	
MAY 23...	<.030	.76	.004	.87	.02	.010	<.020	.013	.2	<.1	1.5	.2	<1.0	
AUG 06...	<.030	.92	<.003	1.0	.03	.022	.025	.028	.3	<.1	1.7	.3	E1.7	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L) AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV 08...	--	E10	<1
FEB 21...	--	E10	7
MAY 23...	1.00	E9	3
AUG 06...	1.80	10	<1

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)
AUG 06...	0900	FIELD BLANK	--	--	--	--	--	--	--	--	--
06...	0930	ENVIRONMENTAL	--	--	--	--	--	<2	46.3	<.06	12
06...	0930	BED MATERIAL	7.40	160	1500	3.6	<.2	--	--	--	--

DATE	TIME	SAMPLE TYPE	CADMIUM UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	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) (71890)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	
AUG 06...	--	--	--	--	<.2	--	--	<.08	--	--	<.01	--	<.06	--	--
06...	<.04	<.8	--	1.0	90	--	<1	19.3	--	<.01	--	<1	.4	--	
06...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

DATE	TIME	SAMPLE TYPE	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)
AUG 06...	--	<1	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<.05	--	1	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	<1	.052	5.0	1.9	4	7000	4.6	190	.01	2.5	--	

DATE	TIME	SAMPLE TYPE	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS ZN) (01148)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ (A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO (G) HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)
AUG 06...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<1	23	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPHTHAL ENE, 2- ETHYL- SED, BM WS <2MM DW REC (UG/KG) (49948)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)
AUG													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<50	<50	<50	60	<50	<50	<50	<50	<50	<50	<50	<50	<5

DATE	PHENAN THRENE CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	1METHYL THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
AUG							
06...	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--
06...	<50	<50	<50	<50	<50	50	2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
09...	0915	300	400	420	06...	0900	<20	<100	<10
16...	0920	140	<100	320					
25...	0830	800	400	320					

Remark codes used in this report:
< -- Less than

01396900 CAPOOLONG CREEK AT LANSDOWNE, NJ

LOCATION.--Lat 40°36'28", long 74°54'58", Hunterdon County, Hydrologic Unit 02030105, at bridge on Lower Lansdowne Road, 0.5 mi west of Lansdowne, 0.4 mi above mouth, and 2.0 mi south of Clinton.

DRAINAGE AREA.--14.1 mi².

PERIOD OF RECORD.--Water years 1959-64, 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 20...	1045	.7	.031	.026	756	99	11.9	7.8	213	8.0	7.0	77	18.5
FEB 05...	1030	.4	.027	.021	765	99	14.3	7.7	222	-6.0	.5	72	17.0
MAY 14...	0930	32	.187	.148	749	102	11.1	7.3	128	14.0	11.0	39	9.54
AUG 06...	0945	1.7	.036	.028	755	90	7.9	7.8	214	23.0	21.0	74	17.8
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 20...	7.43	1.25	9.34	65	14.2	<.1	10.3	12.7	120	123	<.030	.13	<.030
FEB 05...	7.16	1.57	11.9	48	18.5	<.1	14.1	14.9	128	126	<.030	.12	<.030
MAY 14...	3.76	2.49	6.34	28	7.82	<.10	9.7	11.8	83	75	.030	.41	.040
AUG 06...	7.30	1.61	10.3	61	13.9	<.10	14.8	12.3	135	124	<.030	.14	<.030
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 20...	2.37	<.003	2.5	<.02	.005	--	.007	.2	<.1	1.1	.2	<1.0	--
FEB 05...	2.75	.002	2.9	<.02	.019	<.020	.020	.1	<.1	1.1	.1	<1.0	--
MAY 14...	1.56	.005	2.0	.12	.063	.035	.123	1.1	<.1	5.2	1.1	E1.5	1.30
AUG 06...	2.23	<.003	2.4	.04	.037	.048	.040	.3	<.1	1.4	.3	E1.1	1.40

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

RARITAN RIVER BASIN

01396900 CAPOOLONG CREEK AT LANSLOWNE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDED AS B) (MG/L) (01020) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-ETHYLENE TOTAL (UG/L) (34501)	1,2-DI-ETHYLENE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHYLENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)	
NOV	20...													
FEB	05...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-ETHYLENE WATER TOTAL (UG/L) (77093)	BROMO-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	BENZENE ETHYL-TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER (UG/L) (78032)
FEB	05...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	E.1
DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L) (34423)	METHYL-CHLORIDE UNFLTRD REC (UG/L) (85795)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (77135)	O-XYLENE WATER WHOLE (UG/L) (77128)	STYRENE TOTAL (UG/L) (34475)	TETRA-CHLORO-ETHYLENE TOTAL (UG/L) (34010)	TOLUENE TOTAL (UG/L) (39180)	TRI-CHLORO-ETHYLENE UNFLTRD RECOVER (UG/L) (34488)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (39175)	VINYL-CHLORIDE TOTAL (UG/L)			
FEB	05...		<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2			

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC, WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)
MAY	14...	1.01	.020	<.005	2.04	<.010	E.352	<.005	<.018	<.003	E.092	.013	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01396900 CAPOOLONG CREEK AT LANSDOWNE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 14...	<.004	<.035	<.027	E.028	.176	<.006	<.007	<.022	<.01	<.011	.049	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 14...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
09...	1015	80	100	400	06...	0935	60	<100	10
16...	1010	70	<100	210					
25...	1030	260	200	310					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01397950 THIRD NESHANIC RIVER AT COPPER HILL, NJ

LOCATION.--Lat 40°28'29", long 74°51'48", Hunterdon County, Hydrologic Unit 02030105, at bridge on State Route 31 at Copper Hill, 0.6 mi upstream of mouth, 2.3 mi south of Flemington, and 2.5 mi west of Reaville.

DRAINAGE AREA.--10.3 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV	14...	0930	1.4	.089	.071	767	64	8.7	7.9	401	8.0	3.0	170	43.3
FEB	05...	1000	3.7	.063	.048	762	96	14.0	7.6	281	-.5	.0	90	21.5
JUN	06...	0900	3.7	.083	.065	752	42	3.7	7.2	349	24.0	20.5	140	36.1
AUG	15...	0900	3.8	.129	.098	763	26	2.2	7.4	874	24.5	23.5	410	114
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
NOV	14...	15.1	2.09	13.9	130	14.8	E.1	10.0	60.2	240	239	.030	.20	.050
FEB	05...	8.74	1.85	13.6	49	26.0	<.1	11.9	23.0	160	151	<.030	.21	<.030
JUN	06...	11.4	1.79	12.5	77	13.1	E.1	6.8	66.2	234	199	.030	.35	.050
AUG	15...	29.3	3.03	31.7	114	25.8	.1	14.5	308	610	596	.060	.46	.060
DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570)	PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV	14...	.42	<.003	.61	.05	.013	--	.017	.3	<.1	3.2	.3	<1.1	--
FEB	05...	3.49	.007	3.7	.02	.026	<.020	.034	.2	<.1	2.1	.2	E1.6	--
JUN	06...	1.13	.034	1.5	.08	.051	.044	.074	.6	<.1	2.8	.5	E1.4	3.50
AUG	15...	.06	.004	.52	.06	.099	.110	.139	.2	<.1	4.3	.2	E1.2	1.90

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01397950 THIRD NESHANIC RIVER AT COPPER HILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL											
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)											
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLO-RIDE TOTAL (UG/L)
NOV	14...							100					5
FEB	05...							20					1
JUN	06...							80					13
AUG	15...							370					7

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	05...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	E.1

DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)
FEB	05...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED REC (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED REC (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED REC (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
JUN	06...	<.006	<.004	<.005	.044	<.010	<.041	<.005	<.018	<.003	E.038	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01397950 THIRD NESHANIC RIVER AT COPPER HILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 06...	<.004	<.035	<.027	<.050	E.008	<.006	<.007	<.022	<.01	<.011	.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 06...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)		
JUL	09...	1045	5000	1200	280	AUG	06...	1023	<20	<100	<10
	16...	1040	500	1600	240						
	25...	1045	500	500	430						

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

205

01398000 NESHANIC RIVER AT REAVILLE, NJ

LOCATION.--Lat 40°28'18", long 74°49'42", Hunterdon County, Hydrologic Unit 02030105, at 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.

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1997 to August 1998.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD ANCE UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)
NOV 20...	0900	2.1	1.2	.087	.070	759	85	10.3	8.1	399	7.0	7.0	160
FEB 28...	1000	4.8	2.1	.053	.040	760	94	13.3	8.0	391	-4.0	1.0	130
JUL 09...	1000	.71	2.2	.119	.091	755	132	10.6	9.3	386	32.0	26.0	150
SEP 12...	0900	.71	1.0	.109	.082	761	60	5.6	7.9	394	21.0	18.5	150

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 TUENTS, DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 20...	39.5	13.8	2.05	13.3	117	17.2	E.1	3.2	54.8	236	214	.050	.17
FEB 28...	33.0	11.8	2.22	20.9	83	40.9	E.1	2.1	39.9	220	205	.040	.23
JUL 09...	38.0	12.4	2.38	18.6	81	24.2	.1	3.6	74.0	238	222	.030	.41
SEP 12...	38.8	13.4	3.13	19.0	92	26.7	E.1	.9	58.8	239	217	<.030	.41

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-WAT FLT (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 20...	.030	<.04	<.003	--	.02	<.05	--	<.06	.1	<.1	3.1	.1	E1.7
FEB 28...	.040	.99	.016	1.2	<.02	<.05	<.020	E.03	.3	<.1	2.7	.3	<1.0
JUL 09...	<.030	<.04	<.003	--	.05	.07	.042	.08	.4	<.1	4.1	.4	E1.6
SEP 12...	.031	.20	.016	.61	.04	E.04	.034	E.04	.3	<.1	4.1	.3	<1.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A FLUORO-METRIC METHOD					RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED							
DATE		CORR. (UG/L) (32209)					BORON, DIS- SOLVED (UG/L) AS B) (01020)			(MG/L) (00530)				
NOV 20...		--					70			<1				
FEB 28...		--					40			4				
JUL 09...		2.10					90			1				
SEP 12...		1.90					90			<1				

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)
SEP 12...	0900	E2	71.8	<.06	83	<.04	<.8	2.4	50	<1	45.6	<.01	2

DATE		SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)			SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)		ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	
SEP 12...		.4			<.05		1	

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL 09...	1100	130	<100	20	AUG 06...	1000	<20	100	10
JUL 16...	1050	340	<100	160					
JUL 25...	1015	230	600	400					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

207

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ

LOCATION.--Lat 40°32'48", long 74°41'48", Somerset County, Hydrologic Unit 02030105, at bridge on Studdiford Drive at South Branch, 0.8 mi upstream from mouth, and 2.7 mi southeast of Readington.

DRAINAGE AREA.--265 mi².

PERIOD OF RECORD.--Water years 1976-83, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.-- Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 29...	1040	84	1.7	.058	.042	761	83	9.0	7.4	330	--	11.5	110	
FEB 20...	0940	98	4.4	.052	.041	763	103	13.2	8.1	359	9.0	5.0	120	
JUN 12...	1230	90	6.9	.118	.092	757	73	5.9	8.1	288	32.0	25.5	96	
AUG 12...	1150	115	2.1	.084	.064	763	117	9.3	9.1	327	27.0	27.0	110	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 29...	27.1	11.1	2.63	17.4	84	32.8	E.1	2.0	23.3	180	173	.050	.30	
FEB 20...	28.3	11.3	2.22	21.6	79	43.2	E.1	2.9	26.8	194	191	.060	.23	
JUN 12...	22.4	9.68	2.11	17.4	65	32.6	E.1	8.9	19.9	172	158	<.030	.33	
AUG 12...	25.4	10.5	2.42	23.9	82	37.1	.1	5.7	22.4	209	179	.030	.36	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 29...	<.030	1.44	.014	1.7	<.02	.086	--	.098	.4	<.1	2.5	.4	<1.0	
FEB 20...	<.030	1.60	.009	1.8	.03	.056	.031	.075	.6	<.1	2.3	.6	E1.2	
JUN 12...	.030	1.34	.014	1.7	.06	.103	.064	.120	.7	<.1	4.0	.6	E1.7	
AUG 12...	<.030	.39	.012	.74	.06	.144	.123	.154	.3	<.1	3.7	.3	<1.2	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

RARITAN RIVER BASIN

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A FLUORO-METRIC METHOD				BORON, DIS-SOLVED (UG/L AS B) (01020)		RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)						
DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)	
NOV	29...							40						<1
FEB	20...							50						1
JUN	12...					1.10		40						7
AUG	12...					1.20		50						5
AUG	12...	E1	32.3	<.06	43	<.04	<.8	1.6	70	<1	25.0	<.01		1
						SELE- NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)		SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)		ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)				
AUG	12...					E.3	<.05	4						

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY	01...	230	400	270	MAY	15...	1700	1600	4400
	08...	130	100	70		22...	40	100	60
						30...	80	200	40

Remark codes used in this report:
< -- Less than
E -- Estimated value

RARITAN RIVER BASIN

209

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.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 07...	1140	24	1.4	.081	.063	760	109	12.9	7.6	321	18.0	8.0	110	
FEB 04...	1310	48	3.6	.083	.064	751	114	15.5	7.7	331	7.0	2.0	95	
MAY 23...	1320	132	3.6	.136	.103	765	133	13.0	8.5	218	21.5	16.5	70	
AUG 13...	1130	261	4.6	.022	.015	763	112	9.2	8.4	161	35.0	25.5	53	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 07...	26.7	10.6	2.44	18.3	86	33.0	E.1	8.9	18.9	176	175	.040	.25	
FEB 04...	23.4	8.87	2.38	25.1	59	49.0	E.1	11.8	21.5	188	183	<.030	.23	
MAY 23...	17.3	6.62	1.48	13.8	48	25.1	E.1	10.0	13.5	140	120	.030	.23	
AUG 13...	12.6	5.29	1.04	7.97	41	12.2	E.1	2.6	12.8	82	79	<.030	.19	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 07...	.030	1.12	<.003	1.4	.08	.143	--	.151	.4	<.1	3.1	.4	E1.1	
FEB 04...	<.030	1.09	.004	1.3	.02	.081	--	.094	.3	<.1	2.8	.3	<1.0	
MAY 23...	<.030	.64	.006	.88	.08	.036	.020	.046	.4	<.1	3.4	.4	E1.7	
AUG 13...	<.030	.07	<.003	.26	.09	.015	.026	.027	.6	<.1	2.3	.6	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)
NOV 07...	--	50	<1
FEB 04...	--	40	11
MAY 23...	1.70	30	<1
AUG 13...	2.30	10	9

DATE	TIME	SAMPLE TYPE	ARSENIC TOTAL (UG/L) AS AS (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L) AS BA (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE (01012)	BORON, TOTAL RECOV- ERABLE (UG/L) AS B (01022)	CADMIUM WATER TOTAL UNFLTRD (UG/L) AS CD (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, DIS- SOLVED (UG/L) AS CU (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	IRON, TOTAL RECOV- ERABLE (UG/L) AS FE (01045)
AUG 13...	1002	FIELD BLANK	--	--	--	--	--	--	<.2	--	--
AUG 13...	1130	ENVIRONMENTAL	<2	8.2	<.06	17	<.04	<.8	--	1.1	110

DATE	LEAD, DIS- SOLVED (UG/L) AS PB (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN (01055)	MERCURY DIS- SOLVED (UG/L) AS HG (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)	NICKEL, DIS- SOLVED (UG/L) AS NI (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI (01067)	SELE- NIUM, TOTAL (UG/L) AS SE (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L) AS AG (01077)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)
AUG 13...	<.08	--	--	<.01	--	<.06	--	--	--	1	--
AUG 13...	--	<1	22.4	--	<.01	--	<1	E.3	<.05	--	2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY 01...	0930	1300	600	390	MAY 15...	0915	5000	1900	1500
MAY 08...	0920	70	<100	90	MAY 22...	0930	300	400	110
					MAY 30...	0930	130	100	70

Remark codes used in this report:
< -- Less than
E -- Estimated value

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ

LOCATION.--Lat 40°34'14", long 74°40'46", Somerset County, Hydrologic Unit 02030105, 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.--Water years 1923-25, 1960-76, 1978-80, 1997 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV														
15...	1030	161	3.0	.040	.031	767	104	12.4	7.8	214	14.0	8.0	73	
FEB														
20...	1030	91	1.9	.053	.041	765	100	13.2	7.9	323	11.0	4.0	97	
MAY														
16...	1000	362	10	.142	.109	762	95	9.9	7.6	231	20.0	13.5	71	
AUG														
08...	1000	223	4.4	.029	.021	764	92	8.0	7.9	177	24.0	22.5	60	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV														
15...	17.9	6.87	1.74	11.3	56	21.2	E.1	3.6	16.8	120	114	<.030	.23	
FEB														
20...	24.0	9.06	2.16	20.9	61	43.8	E.1	5.7	23.4	170	170	<.030	.20	
MAY														
16...	17.8	6.45	1.88	15.1	47	27.0	E.1	11.5	15.9	135	128	<.030	.26	
AUG														
08...	14.5	5.70	1.38	9.64	44	14.8	E.1	3.4	14.3	103	91	<.030	.21	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV														
15...	.030	.36	.004	.58	.06	E.03	--	E.05	.5	<.1	2.6	.5	<1.1	
FEB														
20...	<.030	.92	.006	1.1	.04	E.04	.033	.07	.4	<.1	2.3	.4	E1.6	
MAY														
16...	.080	.82	.003	1.1	.12	<.05	<.020	<.06	.8	<.1	4.1	.7	E1.3	
AUG														
08...	<.030	.21	.003	.42	.05	.035	.023	.047	.5	<.1	2.2	.5	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO- PHYLL A FLUORO- METRIC METHOD			RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED											
DATE	TIME	SAMPLE TYPE	CORR. (UG/L) (32209)	(UG/L) (01020)	(UG/L) (00530)											
NOV	15...		--	30	2											
FEB	20...		--	50	15											
MAY	16...		2.40	40	<1											
AUG	08...		1.10	20	6											
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)					
AUG	08...	0859	SPLITTER BLANK	--	--	--	--	--	--	--	--	--				
	08...	0900	FIELD BLANK	--	--	--	--	--	--	--	--	--				
	08...	1000	ENVIRONMENTAL	--	--	--	--	<2	13.8	<.06	23	--				
	08...	1000	BED MATERIAL	6.90	1700	8800	45	.3	--	--	--	--				
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	
AUG	08...	--	--	--	<.2	--	--	--	--	--	--	--	--	--	--	--
	08...	--	--	3.6	--	--	E.07	--	--	<.01	--	--	<.06	--	--	--
	08...	<.04	<.8	--	1.1	120	--	<1	32.5	--	<.01	--	--	<1	E.3	--
	08...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	TIME	SAMPLE TYPE	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01053)	MERCURY FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)	
AUG	08...	--	<1	--	--	--	--	--	--	--	--	--	--	--	--	--
	08...	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--
	08...	<.05	--	3	--	--	--	--	--	--	--	--	--	--	--	--
	08...	--	--	--	<1	.359	18	7.4	25	18000	27	330	.05	13	--	--
DATE	TIME	SAMPLE TYPE	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	4HCYPEN PHENAN- THRENE SED, EM WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU- ORENE, 1METHYL SED, EM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU- ORENE SED, EM WS, <2MM DW, REC (UG/KG) (49399)	ACENAPH- THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH- THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZOB FLUOR- ANTHENE SED, EM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI) PERY LENE SED, EM WS, <2MM DW, REC (UG/KG) (49408)	
AUG	08...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08...	<1	110	110	E20	E49	E27	E67	E63	180	530	640	770	450	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT WS <2MM REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPHTHAL ETHYL- ALENE, SED, BM WS <2MM DW REC (UG/KG) (49948)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)
AUG													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	560	740	E92	1400	520	<100	<100	E46	E28	260	<100	E36	12

DATE	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)	BED MAT. FALL DIAM. % FINER THAN (UG/KG) (49387)	BED MAT. SIEVE DIAM. % FINER THAN (UG/KG) (80157)	BED MAT. SIEVE DIAM. % FINER THAN (UG/KG) (80164)
AUG								
08...	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--
08...	E84	E58	580	<100	E78	1100	36	76

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	1000	1700	1200	520	15...	1000	>16000	1800	3000
08...	1015	230	100	90	22...	1015	110	400	70
					30...	1020	170	100	40

Remark codes used in this report:
 < -- Less than
 > -- Greater than
 E -- Estimated value

RARITAN RIVER BASIN

01400530 MILLSTONE RIVER AT BAIRD ROAD, NEAR PERRINEVILLE, NJ

LOCATION.--Lat 40°14'28", long 74°24'07", Monmouth County, Hydrologic Unit 02030105, at bridge on Baird Road, 1.2 mi south of Manalapan, 2.1 mi northeast of Perrineville Lake, and 2.2 mi northeast of Perrineville.

DRAINAGE AREA.--4.58 mi².

PERIOD OF RECORD.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 07...	1030	11	.104	.086	760	80	9.4	7.0	120	16.0	8.0	30	5.40
FEB 06...	1030	11	.088	.065	766	88	12.3	6.8	131	3.5	2.0	28	5.40
JUN 06...	1030	17	.163	.136	756	80	7.0	7.0	109	26.0	21.0	27	4.88
SEP 04...	1000	9.1	.098	.084	757	86	7.6	6.2	155	30.0	21.0	38	8.40
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 07...	4.02	3.08	8.04	19	15.4	<.1	9.2	7.6	76	67	.070	.17	.100
FEB 06...	3.48	2.23	8.61	8	17.9	.1	9.6	12.3	74	70	.110	.34	.120
JUN 06...	3.57	2.46	7.90	15	15.1	E.09	8.1	6.0	76	61	.060	.25	.060
SEP 04...	4.15	2.79	8.52	4	15.5	.13	10.8	32.0	93	87	.068	.24	.064
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 07...	.65	.004	.82	.12	.010	--	.070	1.0	<.1	2.2	1.0	<1.0	--
FEB 06...	1.36	.011	1.7	.09	.005	<.020	.064	1.0	<.1	1.0	1.0	E1.3	--
JUN 06...	.84	.013	1.1	.09	.020	<.020	.110	1.3	<.1	2.4	1.3	<1.0	6.40
SEP 04...	.48	<.003	.72	.08	.004	<.020	.060	1.2	<.1	2.1	1.2	<1.0	5.70

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01400530 MILLSTONE RIVER AT BAIRD ROAD, NEAR PERRINEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL										
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)										
DATE	TIME											
NOV	07...	10										6
FEB	06...	20										3
JUN	06...	E10										7
SEP	04...	20										14

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)
FEB	06...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	BENZENE ETHYL-TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WATER UNF REC (UG/L) (78032)
FEB	06...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L) (34423)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)
FEB	06...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD (UG/L) (82673)	CAR-BARYL, WATER, FLTRD (UG/L) (82680)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD (UG/L) (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC, WATER, FLTRD (UG/L) (82668)
JUN	06...	<.006	<.004	<.005	.015	<.010	E.268	<.005	<.018	<.003	E.004	<.005	<.002

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

RARITAN RIVER BASIN

01400530 MILLSTONE RIVER AT BAIRD ROAD, NEAR PERRINEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 06...	<.004	<.035	<.027	<.050	.020	<.006	<.007	<.022	<.01	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 06...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	1035	2400	<100	1060	07...	0922	1100	200	260
17...	1114	330	400	360					
24...	1030	300	100	630					
31...	1040	700	400	650					

Remark codes used in this report:
< -- Less than

RARITAN RIVER BASIN

217

01400640 MILLSTONE RIVER NEAR GROVERS MILL, NJ

LOCATION.--Lat 40°18'48", long 74°35'22", Mercer County, Hydrologic Unit 02030105, at bridge on Cranbury Road near Grovers Mill, 1.4 mi southeast of Plainsboro and 2.0 mi upstream from Cranbury Brook.

DRAINAGE AREA.--43.4 mi².

PERIOD OF RECORD.--Water years 1999 to current year. Site location was 01400650 during water years 1976-95, 1997-98.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT OF SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
DEC											
05...	0940	ENVIRONMENTAL	16	3.4	.081	.065	767	82	9.1	6.8	285
05...	0940	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
05...	0941	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--
FEB											
05...	0900	ENVIRONMENTAL	28	--	.058	.044	763	90	12.3	--	370
JUN											
05...	1020	ENVIRONMENTAL	14	--	.088	.067	761	95	8.6	6.9	323
05...	1020	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
05...	1021	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--
AUG											
06...	0900	ENVIRONMENTAL	19	5.2	.137	.105	755	66	5.5	6.6	255
06...	0900	SPLIT REPLICATE	--	5.2	--	--	--	--	--	6.6	255
06...	0901	CONCURRENT REPLICATE	--	5.0	--	--	--	--	--	6.6	255

DATE	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
DEC													
05...	14.5	11.0	52	12.0	5.40	5.19	31.1	42	35.3	.2	9.5	26.0	172
05...	--	--	49	11.0	5.20	5.80	31.0	43	37.0	.27	--	27.0	500
05...	--	--	49	11.0	5.20	5.90	31.0	43	37.0	.26	--	27.0	370
FEB													
05...	-5.0	2.5	60	14.1	6.04	4.38	41.6	32	61.6	.1	10.7	31.8	206
JUN													
05...	--	20.0	90	13.8	13.4	4.91	20.4	46	36.4	.2	7.2	29.8	196
05...	--	--	89	14.0	13.0	5.20	21.0	43	38.0	.32	--	31.0	210
05...	--	--	89	14.0	13.0	5.20	21.0	44	37.0	.31	--	31.0	220
AUG													
06...	23.0	24.0	59	11.5	7.34	4.93	18.1	26	29.6	.2	8.3	27.0	132
06...	--	--	60	12.0	7.40	5.80	18.0	27	29.0	.29	--	27.0	170
06...	--	--	61	12.0	7.50	5.80	19.0	27	29.0	.30	--	27.0	170

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR-TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORTHO-TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
DEC													
05...	167	.070	.44	.070	--	3.77	.018	4.2	<.02	.169	--	--	.21
05...	152	<.010	.46	.030	.50	2.00	.028	2.5	--	.160	.068	.07	.200
05...	154	.031	.51	.030	.54	2.40	.018	2.9	--	.150	.065	.07	.190
FEB													
05...	203	.770	1.2	.790	--	2.78	.130	3.9	.16	.054	--	--	.140
JUN													
05...	176	<.030	.45	.030	--	4.90	.010	5.3	.04	.160	.127	--	.135
05...	169	<.050	.16	.051	<.10	4.70	.010	4.9	--	<.050	.110	.17	.180
05...	169	<.050	.18	<.050	.22	4.70	.013	4.9	--	.150	.100	.18	.180
AUG													
06...	137	.080	.52	.090	--	3.24	.030	3.8	.06	.083	.065	--	.130
06...	129	.130	.17	.130	.62	2.70	.027	2.9	--	.080	.098	.11	.140
06...	129	.120	<.10	.130	.49	2.70	.026	--	--	.080	.096	.11	.120

Remark codes used in this report:
 < -- Less than

RARITAN RIVER BASIN

01400640 MILLSTONE RIVER NEAR GROVERS MILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L AS C) (00310)	CHLORO-PHYLL A FLUORO-METRIC CORR. (UG/L AS B) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
DEC								
05...	.3	<.1	2.9	.3	<1.0	--	80	2
05...	--	--	2.6	--	--	--	80	<10
05...	--	--	2.3	--	--	--	80	<10
FEB								
05...	1.3	<.1	2.7	1.3	E1.2	--	60	13
JUN								
05...	.4	<.1	3.2	.4	--	1.30	80	12
05...	--	--	3.6	--	--	--	80	<5
05...	--	--	3.5	--	--	--	80	<5
AUG								
06...	.6	<.1	4.3	.6	<1.0	.500	70	<1
06...	--	--	4.5	--	--	--	70	<10
06...	--	--	4.3	--	--	--	80	<10

DATE	TIME	SAMPLE TYPE	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
AUG	06...	0900 ENVIRONMENTAL	E1	47.2	<.06	75	.05	<.8	3.0	520	<1

DATE	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)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	
AUG	06...	61.7	<.01	3	E.4	<.05	9

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
31...	0955	1300	1000	420	14...	0950	2400	800	170
AUG					21...	1000	2400	200	2600
07...	0955	5000	1300	390	28...	0955	230	<100	180

Remark codes used in this report:
< -- Less than
E -- Estimated value

01401400 HEATHCOTE BROOK AT KINGSTON, NJ

LOCATION.--Lat 40°22'10", long 74°36'59", Middlesex County, Hydrologic Unit 02030105, at bridge on Mapleton Road, at abandoned railroad bridge, 0.3 mi south of Kingston, and 0.4 mi upstream from mouth.

DRAINAGE AREA.--9.0 mi².

PERIOD OF RECORD.--Water years 1976-82, 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT OF SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)		
DEC													
05...	0940	ENVIRONMENTAL	1.3	1.8	.055	.045	769	75	8.7	7.5	238		
05...	0940	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--		
05...	0941	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--		
FEB													
05...	1150	ENVIRONMENTAL	3.9	2.7	.088	.067	763	102	14.3	6.5	476		
JUN													
05...	0950	ENVIRONMENTAL	1.8	2.5	.134	.103	761	84	8.2	6.5	261		
05...	0950	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--		
05...	0951	CONCURRENT REPLICATE	--	--	--	--	--	--	--	--	--		
AUG													
07...	0850	ENVIRONMENTAL	1.1	1.8	.061	.047	760	81	7.7	8.5	220		
DATE	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
DEC													
05...	17.0	9.5	69	15.8	7.19	2.76	13.8	30	34.1	E.1	12.9	6.5	148
05...	--	--	66	15.0	7.00	3.00	13.0	30	37.0	.16	--	7.1	380
05...	--	--	67	15.0	7.10	3.00	14.0	30	37.0	.16	--	7.2	400
FEB													
05...	4.0	1.5	97	22.9	9.78	2.90	48.1	34	91.6	E.1	13.6	30.1	276
JUN													
05...	27.0	16.5	71	16.4	7.36	2.76	17.4	35	35.8	<.1	12.3	15.4	171
05...	--	--	69	16.0	7.10	2.90	18.0	34	37.0	.20	--	16.0	200
05...	--	--	70	16.0	7.20	2.90	18.0	33	37.0	.20	--	16.0	180
AUG													
07...	23.0	17.5	61	13.9	6.45	2.63	13.0	25	31.2	E.1	12.4	4.9	165
DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRO-GEN, PAR TICULTE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORTHO PHORUS TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	
DEC													
05...	137	.030	.19	<.030	--	5.84	.006	6.0	.02	.005	--	.013	
05...	114	<.010	.29	<.010	.27	3.10	.025	3.4	--	<.010	.026	<.010	
05...	114	<.010	.29	<.010	.28	2.80	.029	3.1	--	<.010	.026	<.010	
FEB													
05...	253	<.030	.21	<.030	--	3.06	.002	3.3	.04	.007	--	.013	
JUN													
05...	147	.070	.33	.160	--	4.23	.011	4.6	.07	.020	<.020	.086	
05...	136	.063	<.10	.064	.26	4.10	.011	--	--	<.050	.088	<.050	
05...	135	.090	<.10	.064	.22	4.00	.011	--	--	<.050	.090	<.050	
AUG													
07...	126	<.030	.21	<.030	--	5.90	.005	6.1	.07	.016	.034	.027	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01401400 HEATHCOTE BROOK AT KINGSTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- ORGANIC, GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC								
05...	.4	<.1	1.6	.4	<1.0	--	20	8
05...	--	--	1.0	--	--	--	10	<10
05...	--	--	<1.0	--	--	--	10	<10
FEB								
05...	.2	<.1	2.8	.2	2.1	--	30	1
JUN								
05...	.4	<.1	3.3	.4	--	1.50	30	7
05...	--	--	3.3	--	--	--	20	<5
05...	--	--	3.5	--	--	--	20	<5
AUG								
07...	.5	<.1	1.8	.5	<1.0	1.20	20	<1

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
31...	0930	1700	500	190	14...	0930	800	500	240
AUG					21...	0930	1100	<100	500
07...	0920	170	<100	160	28...	0920	220	<100	100

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

221

01401560 ROCK BROOK AT ZION, NJ

LOCATION.--Lat 40°26'22", long 74°44'23", Somerset County, Hydrologic Unit 02030105, at bridge on Long Hill Road at Zion, 0.9 mi northeast of Amwell, and 2.8 mi upstream of Sylvan Lake.

DRAINAGE AREA.--3.19 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR-BID-ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
DEC	11...	1100	.8	.149	.116	762	92	11.4	7.7	196	12.0	6.0	76	15.5
FEB	27...	0930	1.1	.073	.057	746	96	11.8	7.8	171	2.0	5.5	64	13.4
JUN	20...	1000	5.3	.257	.200	771	97	9.4	7.7	112	22.0	17.5	43	9.20
AUG	29...	1000	20	.152	.120	756	93	8.9	7.6	141	17.0	17.0	56	11.4
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00610)
DEC	11...	9.03	1.35	6.45	64	10.8	<.1	28.1	16.2	140	125	<.030	.21	<.030
FEB	27...	7.46	.70	6.69	48	9.01	<.1	27.7	19.6	124	113	.030	.13	.040
JUN	20...	4.92	.89	4.58	35	5.87	E.1	21.7	10.3	97	79	<.030	.33	<.030
AUG	29...	6.59	1.37	4.44	44	5.39	<.1	20.2	13.7	104	91	<.030	.22	<.030
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)
DEC	11...	<.04	<.003	--	<.02	.005	--	.007	.2	<.1	5.0	.2	<1.0	--
FEB	27...	<.04	<.003	--	<.02	.005	<.020	.007	.2	<.1	2.3	.2	<1.0	--
JUN	20...	.11	<.003	.43	.03	.020	<.020	.032	.3	<.1	6.3	.3	2.1	.600
AUG	29...	.31	.004	.53	.18	.020	.022	.100	1.8	<.1	4.3	1.8	E1.8	14.3

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01401560 ROCK BROOK AT ZION, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
DEC	11...													
FEB	27...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	27...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)					
FEB	27...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2					

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED REC (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED REC (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED REC (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
JUN	20...	<.006	<.004	<.005	.017	<.010	<.041	<.005	<.018	<.003	E.009	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01401560 ROCK BROOK AT ZION, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 20...	<.004	<.035	<.027	<.050	E.010	<.006	<.007	<.022	.02	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 20...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	1120	80	100	80	15...	1105	40	<1000	140
08...	1125	20	<100	40	22...	1120	80	200	30
					30...	1130	40	100	30

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ

LOCATION.--Lat 40°28'30", long 74°34'34", Somerset County, Hydrologic Unit 02030105, at highway bridge at Blackwells Mills, and 0.3 mi downstream from Six Mile Run.

DRAINAGE AREA.--258 mi².

PERIOD OF RECORD.--Water years 1962-69, 1973, 1976-80, 1991 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 29...	1000	76	4.5	.096	.072	771	70	7.6	7.5	397	8.5	12.0	99	
FEB 20...	1000	87	3.7	.084	.065	765	103	13.0	8.0	478	8.0	5.5	100	
MAY 16...	0930	305	8.8	.169	.129	764	70	7.1	7.3	256	14.5	15.0	64	
AUG 15...	0900	54	8.6	.122	.090	766	47	3.8	7.3	409	--	26.5	100	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 29...	21.3	11.1	6.14	33.1	63	45.1	.2	4.8	41.3	218	217	.140	.60	
FEB 20...	23.5	10.8	5.39	45.2	47	73.4	.2	5.8	42.0	256	255	.050	.41	
MAY 16...	14.8	6.53	2.98	19.4	39	29.6	.1	10.0	24.1	152	139	.130	.52	
AUG 15...	22.8	11.3	7.23	36.7	54	52.2	.4	7.8	44.5	226	239	.120	.68	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 29...	.150	3.76	.021	4.4	.03	.45	--	.46	.3	<.1	4.2	.3	<1.0	
FEB 20...	.050	4.23	.018	4.6	.07	.40	.391	.50	.4	<.1	3.4	.4	E1.2	
MAY 16...	.140	1.71	.035	2.2	.09	.18	.168	.17	.5	<.1	5.0	.5	<1.0	
AUG 15...	.110	4.80	.034	5.5	.11	.75	.729	.79	.7	<.1	4.9	.7	E1.4	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A		BORON, DIS-SOLVED		RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE							
DATE		CORR. (UG/L) (32209)		(UG/L) (01020)		(MG/L) (00530)							
NOV 29...		--		110		<1							
FEB 20...		--		90		6							
MAY 16...		1.10		50		9							
AUG 15...		8.00		130		8							
DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)
AUG 15...	0900	3	46.9	<.06	138	E.03	<.8	2.7	250	<1	138	<.01	2
DATE		SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)		SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)		ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)							
AUG 15...		.7		<.05		13							

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)		
MAY 01...		1050	700	<100	380	MAY 15...		1035	230	300	400
08...		1050	110	100	100	22...		1050	130	<100	190
						30...		1100	1700	300	180

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01403171 WEST BRANCH MIDDLE BROOK AT CHIMNEY ROCK ROAD, AT MARTINSVILLE, NJ

LOCATION.--Lat 40°35'21", long 74°33'49", Somerset County, Hydrologic Unit 02030105, at bridge on Chimney Rock Road, 0.1 mi downstream of Washington Valley Reservoir, and 0.8 mi south of Martinsville.

DRAINAGE AREA.--6.29 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). This station was sampled only three times in water year 2002 because bridge construction prevented access to the stream in the August-September sampling period.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TURBIDITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORBANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORBANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BAROMETRIC PRESURE (MM HG) (00025)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WHOLE FIELD (STANDARD) (UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL AS CaCO3 (MG/L) (00900)	CALCIUM DISSOLVED AS Ca (MG/L) (00915)	
DEC 06...	1015	2.4	.091	.070	763	77	8.8	7.6	263	15.0	9.7	93	24.1	
FEB 14...	1015	3.7	.095	.073	769	93	13.0	7.8	463	5.0	2.0	120	30.8	
MAY 28...	0940	3.3	.197	.153	761	85	7.6	7.6	191	23.0	21.0	62	15.4	
DATE		MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	ANIONIC TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SULFATE, DISSOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC, DISSOLVED (MG/L AS N) (00623)	NITROGEN, AMMONIA + ORGANIC, TOTAL (MG/L AS N) (00610)
DEC 06...	7.97	1.50	13.0	76	23.7	E.1	9.7	16.1	160	143	<.030	.31	<.030	
FEB 14...	10.8	1.54	34.5	62	83.4	E.1	11.8	20.1	244	232	.060	.27	.030	
MAY 28...	5.70	1.38	10.7	47	18.5	E.1	11.7	14.3	124	108	<.030	.34	.030	
DATE		NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE, DISSOLVED (MG/L AS N) (00613)	NITROGEN, GEN, DISSOLVED (MG/L AS N) (00602)	NITROGEN, PAR TICULATE, WAT FLT (MG/L AS N) (49570)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CARBON, INORGANIC, PARTIC. (MG/L AS C) (00694)	CARBON, INORGANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC, DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC, PARTICULATE, TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	CHLOROPHYLL A FLUORESCENCE, METRIC METHOD CORR. (UG/L) (32209)
DEC 06...	.27	<.003	.58	.12	.007	--	.018	.9	<.1	4.1	.9	2.3	--	
FEB 14...	.40	<.003	.67	.06	.005	<.020	.018	.5	<.1	3.3	.4	<1.0	--	
MAY 28...	.39	.007	.74	.06	.017	<.020	.030	.5	<.1	5.4	.4	E1.1	5.20	
DATE		RESIDUE TOTAL AT 105 DEG. C, DISSOLVED (UG/L AS B) (01020)		RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)										
DEC 06...	190	4												
FEB 14...	170	11												
MAY 28...	120	5												

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01403171 WEST BRANCH MIDDLE BROOK AT CHIMNEY ROCK ROAD, AT MARTINSVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	0945	1300	<100	500	15...	0940	9000	5700	2000
08...	0950	20	<100	20	22...	1000	500	400	100
					30...	1000	170	200	20

Remark codes used in this report:
 < -- Less than

RARITAN RIVER BASIN

01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, NJ

LOCATION.--Lat 40°33'34", long 74°31'41", Somerset County, Hydrologic Unit 02030105, at Queens Bridge on Main street in Bound Brook, 1.7 mi upstream from Fieldsville Dam.

DRAINAGE AREA.--804 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.--Data collected as part of the Long Island-New Jersey National Water-Quality Assessment Program (LINJ NAWQA). Instantaneous discharges are determined at Raritan River below Calco Dam at Bound Brook (station 01403060). For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the Records, Quality-Control Data" in the "Introduction". Site is in New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	
NOV											
06...	0920	ENVIRONMENTAL	161	766	87	9.9	7.6	466	--	10.0	66
DEC											
03...	0930	ENVIRONMENTAL	146	775	97	11.0	7.5	464	--	10.5	63
JAN											
03...	1000	ENVIRONMENTAL	172	767	108	15.6	7.3	347	--	.5	58
MAR											
06...	1000	ENVIRONMENTAL	431	765	108	14.0	8.0	350	--	4.5	42
APR											
04...	0930	ENVIRONMENTAL	536	770	102	11.0	8.4	298	8.5	12.5	50
MAY											
06...	1045	ENVIRONMENTAL	577	768	101	9.8	7.2	245	--	17.0	40
06...	1046	SPLIT REPLICATE	--	--	--	--	--	--	--	--	40
JUN											
10...	0900	FIELD BLANK	--	--	--	--	--	--	--	--	--
10...	1030	ENVIRONMENTAL	431	766	98	8.5	7.3	260	24.0	22.5	41
JUL											
09...	1050	ENVIRONMENTAL	152	760	111	9.0	7.5	387	30.0	26.0	55
SEP											
10...	0930	ENVIRONMENTAL	155	759	93	8.0	7.2	394	30.5	22.5	52

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
NOV											
06...	80	51.4	58.3	.62	.07	4.46	.018	.56	.66	--	2.4
DEC											
03...	77	48.7	67.5	.69	.04	4.51	.019	.58	.67	--	6.0
JAN											
03...	70	42.1	42.9	.52	E.04	3.87	.013	.36	.43	--	2.2
MAR											
06...	52	51.2	29.6	.64	<.04	2.39	.013	.09	.21	--	7.4
APR											
04...	61	43.2	31.8	.43	.05	2.08	.011	.15	.20	--	5.4
MAY											
06...	49	29.0	27.0	.62	.05	1.88	.014	.14	.20	16.1	11
06...	49	29.4	27.1	.57	.04	1.83	.013	.13	.21	15.6	10
JUN											
10...	--	<.30	<.1	<.10	<.04	<.05	<.008	<.02	<.004	--	--
10...	50	31.8	25.1	.52	.05	1.95	.023	.20	.26	--	7.7
JUL											
09...	67	42.3	42.4	.67	<.04	3.42	.034	.54	.64	--	4.2
SEP											
10...	63	43.1	50.0	.56	E.03	3.49	.012	.60	.64	2.0	5.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	1,1,1-TRI-CHLOROETHANE TOTAL (UG/L) (34506)	1,2,3-TRI-CHLOROETHANE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI-METHYL-WATER UNFLTRD REC (UG/L) (77221)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI-METHYL UNFLT REC (UG/L) (77222)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	ISO-PROPYL-BENZENE WHOLE REC (UG/L) (77223)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	
NOV 06...	0920	ENVIRONMENTAL	<.03	M	<.1	M	<.06	E.04	E.02	<.06	.10	
JAN 03...	1000	ENVIRONMENTAL	<.03	M	M	E.1	E.02	E.08	E.02	<.06	.18	
	03...	1001	SEQUENTIAL REPLICATE	<.03	M	M	E.1	E.02	E.08	E.02	<.06	.18
APR 04...	0930	ENVIRONMENTAL	<.03	<.3	<.1	<.1	<.06	.17	.15	E.01	.72	
JUL 09...	1049	FIELD BLANK	<.03	<.3	<.1	<.1	<.06	<.03	<.05	<.06	<.03	
	09...	1050	ENVIRONMENTAL	<.03	<.3	<.1	<.1	<.06	.12	E.03	<.06	.50

DATE	BENZENE TOTAL (UG/L) (34030)	CARBON DI-SULFIDE WATER TOTAL (UG/L) (77041)	CHLORO-BROMO-METHANE TOTAL (UG/L) (34301)	CHLORO-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHENE WATER TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-PENTYL WATER UNFLTRD RECOVER (UG/L) (50005)	METHYL TERT-BUTYL WATER UNF REC (UG/L) (78032)	METHYL ETHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	
NOV 06...	1.43	E.04	E.01	.2	1.03	<.04	.49	<.2	<.08	E.2	M	<5.0	<.06	
JAN 03...	3.68	E.03	E.02	E.2	.60	E.01	.33	<.2	<.08	E.1	<.2	<5.0	E.02	
	03...	3.70	E.03	E.02	.2	.59	E.01	.33	<.2	<.08	E.1	<.2	<5.0	E.02
APR 04...	12.6	E.05	E.08	.2	2.73	<.04	.92	.6	<.08	.4	<.2	<5.0	E.11	
JUL 09...	<.04	<.07	<.03	<.2	<.02	<.04	<.05	<.2	<.08	<.2	<.2	<5.0	<.06	
	09...	1.92	<.07	E.06	.4	2.81	<.04	1.02	<.2	<.08	.4	<.2	<5.0	E.03

DATE	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	
NOV 06...	<.03	<.07	<.04	E.03	<.06	E.05	E.02	
JAN 03...	E.02	E.03	<.04	E.03	E.02	.21	E.03	
	03...	E.02	E.03	<.04	E.03	E.02	.21	E.03
APR 04...	<.03	E.05	<.04	E.05	<.06	1.12	E.03	
JUL 09...	<.03	<.07	<.04	<.03	<.06	<.05	<.04	
	09...	<.03	<.07	<.04	E.03	<.06	.12	<.04

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (UG/L) (82673)	CAR-BARYL WATER FLTRD (UG/L) (82680)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD (UG/L) (82682)	
NOV	06...	0920	ENVIRONMENTAL	<.004	<.002	<.005	.019	<.010	E.077	<.005	<.018	<.003
DEC	03...	0930	ENVIRONMENTAL	<.004	<.002	<.005	.011	<.010	E.006	<.005	<.018	<.003
JAN	03...	0915	FIELD BLANK	<.004	<.002	<.005	<.007	<.010	<.041	<.005	<.018	<.003
	03...	1000	ENVIRONMENTAL	<.004	<.002	<.005	.014	<.010	E.007	<.005	<.018	<.003
MAR	06...	1000	ENVIRONMENTAL	<.006	<.004	<.005	.014	<.010	<.041	<.005	<.018	<.003
APR	04...	0930	ENVIRONMENTAL	<.006	<.004	<.005	.015	<.010	E.006	<.005	<.018	<.003
MAY	06...	1045	ENVIRONMENTAL	.056	<.004	<.005	.158	<.010	E.100	<.005	<.018	<.003
	06...	1046	SPLIT REPLICATE	.055	<.004	<.005	.146	<.010	E.091	<.005	<.018	<.003
JUN	10...	1030	ENVIRONMENTAL	.035	.010	<.005	.401	<.010	E.030	<.005	<.018	<.003
JUL	09...	1050	ENVIRONMENTAL	<.006	<.004	<.005	.015	<.010	<.041	<.005	<.018	<.003
SEP	10...	0930	ENVIRONMENTAL	<.006	<.004	<.005	.026	<.010	E.023	<.005	<.018	<.003

DATE	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC WATER FLTRD (UG/L) (82668)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT (UG/L) (82686)	METRI-BUZIN SENCOR WATER (UG/L) (39415)	METRI-BUZIN SENCOR WATER (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD (UG/L) (82684)	PENDI-METH-ALIN WAT FLT (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-PANIL WATER FLTRD (UG/L) (82679)	
NOV	06...	E.016	<.005	<.002	.009	<.035	<.027	<.050	E.012	<.006	<.007	<.010	E.01	<.011
DEC	03...	E.010	<.005	<.002	<.004	<.035	<.027	<.050	E.010	<.006	<.007	<.010	E.01	<.011
JAN	03...	<.006	<.005	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.010	<.01	<.011
	03...	E.012	<.005	<.002	<.004	<.035	<.027	<.050	E.010	<.006	<.007	<.010	E.01	<.011
MAR	06...	E.016	<.005	<.002	<.004	<.035	<.027	<.050	.018	<.006	<.007	<.022	.09	<.011
APR	04...	E.009	<.005	<.002	<.004	<.035	<.027	<.050	.015	<.006	<.007	<.022	.04	<.011
MAY	06...	E.021	.008	<.002	<.004	<.035	<.027	<.050	.025	<.006	<.007	<.022	.03	<.011
	06...	E.022	.008	<.002	<.004	<.035	<.027	<.050	.024	<.006	<.007	<.022	.02	<.011
JUN	10...	E.049	.014	<.002	<.004	<.035	<.027	<.050	.102	<.006	<.007	<.022	.10	<.011
JUL	09...	<.006	<.005	<.002	<.004	<.035	<.027	<.050	E.009	<.006	<.007	<.022	.02	<.011
SEP	10...	E.022	<.010	<.002	<.004	<.035	<.027	<.050	.026	<.006	<.007	<.022	.02	E.008

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
NOV 06...	<.011	<.02	<.034
DEC 03...	E.004	<.02	<.034
JAN 03...	<.011	<.02	<.034
JAN 03...	<.011	<.02	<.034
MAR 06...	<.005	<.02	<.034
APR 04...	.012	<.02	<.034
MAY 06...	.010	<.02	<.034
MAY 06...	.009	<.02	<.034
JUN 10...	.022	<.02	<.034
JUL 09...	<.005	<.02	<.034
SEP 10...	.011	<.02	<.034

PLANT TISSUE ANALYSES

DATE	TIME	PERI-PHYTON BIOMASS ASH WEIGHT (G/SQ M) (00572)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT (G/SQ M) (00573)	PHEO-PHYTIN A, PERI-PHYTON (MG/M2) (62359)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)
JUL 23...	0930	390	412.8	16	30.6

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

233

01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ

LOCATION.--Lat 40°34'51", long 74°29'58", Middlesex County, Hydrologic Unit 02030105, at bridge on State Route 28, 0.3 mi upstream from Green Brook, 0.9 mi northeast of Middlesex, and 2.4 mi west of the intersection of State Route 28 and Washington Avenue in Dunellen.

DRAINAGE AREA.--23.9 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 19...	1130	2.6	4.1	.119	.091	764	86	10.5	7.5	647	15.5	7.0	280	
FEB 06...	1210	7.4	14	.111	.079	765	104	14.4	7.5	663	5.5	2.0	170	
JUN 12...	1020	7.2	4.8	.168	.124	757	46	3.8	7.3	472	29.5	24.0	170	
AUG 20...	1200	6.8	6.0	.189	.138	761	52	4.3	7.2	543	29.0	25.0	200	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 19...	85.3	15.5	3.34	27.1	160	49.8	.1	10.3	118	418	405	.030	.25	
FEB 06...	51.4	10.5	2.34	55.0	97	105	.1	9.8	60.3	382	357	.080	.33	
JUN 12...	51.7	11.1	2.79	26.7	106	45.9	.1	14.5	54.0	288	275	.110	.50	
AUG 20...	59.1	13.4	3.19	23.7	97	44.1	.1	6.2	95.0	321	307	.110	.55	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 19...	.050	<.04	<.003	--	.72	.013	--	.103	4.5	<.1	4.3	4.5	4.0	
FEB 06...	.110	1.03	.020	1.4	.09	.014	<.020	.064	.9	<.1	3.8	.9	<1.1	
JUN 12...	.120	.99	.031	1.5	.07	.110	.079	.156	.8	<.1	5.3	.7	EL.7	
AUG 20...	.090	.66	.019	1.2	.13	.152	.130	.17	.8	<.1	E6.4	.8	2.3	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

RARITAN RIVER BASIN

01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV 19...	--	200	10
FEB 06...	--	130	10
JUN 12...	.500	160	4
AUG 20...	.200	200	5

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL 31...	0930	800	400	340	AUG 14...	1023	800	<100	70
AUG 07...	0947	300	<100	160	21...	0954	230	200	310
					28...	0900	1300	<100	310

Remark codes used in this report:
< -- Less than

01403900 BOUND BROOK AT MIDDLESEX, NJ

LOCATION.--Lat 40°35'06", long 74°30'30", Somerset County, Hydrologic Unit 02030105, at bridge on Sebring Mill Road, 0.4 mi downstream from mouth of Green Brook, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--48.4 mi².

PERIOD OF RECORD.--Water years 1996-98, 2001 to current year.

REMARKS.--Data collected as part of the Long Island-New Jersey National Water-Quality Assessment Program (LINJ NAWQA). For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the Records, Quality-Control Data" in the "Introduction". Site is in New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)
NOV											
06...	1220	ENVIRONMENTAL	6.9	766	87	10.1	7.8	580	--	9.0	112
DEC											
03...	1240	ENVIRONMENTAL	8.2	775	94	11.2	7.5	469	--	8.5	97
JAN											
03...	1240	ENVIRONMENTAL	9.9	767	103	14.7	7.4	508	--	1.0	95
MAR											
06...	1340	ENVIRONMENTAL	17	765	108	13.7	7.7	421	--	5.5	57
APR											
04...	1310	ENVIRONMENTAL	26	770	140	14.7	8.4	445	21.0	13.5	79
MAY											
01...	1000	ENVIRONMENTAL	62	758	84	9.0	7.3	348	20.0	12.0	61
01...	1001	SPLIT REPLICATE	--	--	--	--	--	--	--	--	62
JUN											
11...	0929	FIELD BLANK	--	--	--	--	--	--	--	--	--
11...	0930	ENVIRONMENTAL	11	760	80	7.2	7.6	398	23.0	20.5	74
JUL											
09...	1320	ENVIRONMENTAL	4.2	760	124	10.3	7.5	519	34.5	24.5	108
SEP											
10...	1140	ENVIRONMENTAL	6.5	757	95	8.3	7.3	497	29.5	21.5	94

DATE	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 (MG/L AS N) (00631)	NITRO-GEN, NITRITE (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
NOV											
06...	137	56.3	80.8	.31	<.04	.18	<.008	E.01	.037	.04	2.4
DEC											
03...	119	46.1	61.9	.32	.04	.49	.008	.03	.083	.09	4.0
JAN											
03...	116	53.8	67.1	.30	.06	1.10	.011	<.02	.044	.05	2.0
MAR											
06...	70	64.7	35.1	.50	E.03	1.18	.010	E.01	.074	.28	6.1
APR											
04...	97	66.3	43.0	.34	<.04	.64	.011	E.01	.046	--	2.5
MAY											
01...	74	44.0	35.5	.59	.10	1.00	.024	<.04	.085	--	7.6
01...	75	44.7	35.9	.55	.11	.98	.023	<.04	.084	--	7.8
JUN											
11...	--	<.30	<.1	<.10	<.04	<.05	<.008	<.02	<.004	--	.2
11...	90	45.6	39.2	.46	.06	.76	.019	.05	.111	--	3.9
JUL											
09...	131	49.6	69.2	.35	<.04	.33	.021	E.02	.109	--	2.7
SEP											
10...	114	45.8	68.4	.32	E.03	.84	.009	.04	.087	.04	2.5

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	1,1,1-TRI-CHLOROETHANE TOTAL (UG/L) (34506)	1,2,3-TRI-CHLOROETHANE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI METHYL-WATER UNFLTRD REC (UG/L) (77221)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFLT REC (UG/L) (77222)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	ISO-PROPYL-BENZENE WHOLE REC (UG/L) (77223)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	
NOV	06...	1220	ENVIRONMENTAL	<.03	<.3	<.1	<.1	<.06	<.03	<.05	<.06	<.03
JAN	03...	1240	ENVIRONMENTAL	E.02	<.3	<.1	<.1	<.06	<.03	<.05	<.06	<.03
	03...	1241	SEQUENTIAL REPLICATE	E.02	<.3	<.1	<.1	<.06	<.03	<.05	<.06	<.03
APR	04...	1310	ENVIRONMENTAL	E.01	<.3	<.1	<.1	<.06	<.03	<.05	<.06	<.03
JUL	09...	1319	FIELD BLANK	<.03	<.3	<.1	<.1	<.06	<.03	<.05	<.06	<.03
	09...	1320	ENVIRONMENTAL	<.03	<.3	<.1	<.1	<.06	<.03	<.05	<.06	<.03

DATE	BENZENE TOTAL (UG/L) (34030)	CARBON DI-SULFIDE WHOLE WATER TOTAL (UG/L) (77041)	CHLORO-BROMO-METHANE TOTAL (UG/L) (34301)	CHLORO-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-ETHENE WATER TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	ETHER ETHYL WATER UNFLTRD REC (UG/L) (81576)	ETHER TERT-PENTYL WATER UNFLTRD REC (UG/L) (50005)	METHYL TERT-BUTYL ETHER WATER UNF REC (UG/L) (78032)	METHYL-ETHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)	META-PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	
NOV	06...	<.04	E.04	.11	<.2	E.07	E.02	<.05	<.2	.14	42.0	<.2	E2.2	<.06
JAN	03...	E.01	E.03	.12	<.2	E.08	.12	E.04	<.2	.10	20.0	<.2	<5.0	<.06
	03...	E.01	E.03	.12	<.2	E.08	.12	E.04	<.2	.11	19.2	<.2	<5.0	<.06
APR	04...	<.04	.13	E.08	<.2	E.08	E.09	<.05	<.2	<.08	6.1	<.2	<5.0	<.06
JUL	09...	<.04	<.07	<.03	<.2	<.02	<.04	<.05	<.2	<.08	<.2	<.2	<5.0	<.06
	09...	<.04	<.07	E.06	<.2	E.04	E.02	<.05	<.2	E.04	20.9	<.2	<5.0	<.06

DATE	O-CHLORO-TOLUENE WHOLE WATER TOTAL (UG/L) (77275)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE O-ETHYL WATER UNFLTRD REC (UG/L) (77220)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	
NOV	06...	<.03	<.07	E.01	E.03	<.06	E.01	E.04
JAN	03...	<.03	<.07	<.04	E.04	<.06	E.04	E.10
	03...	<.03	<.07	<.04	E.04	<.06	E.04	.10
APR	04...	<.03	<.07	<.04	E.03	<.06	E.03	E.07
JUL	09...	<.03	<.07	<.04	<.03	<.06	<.05	<.04
	09...	<.03	<.07	<.04	E.03	<.06	E.03	E.04

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (UG/L) (82673)	CAR-BARYL WATER FLTRD (UG/L) (82680)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (UG/L) (82682)
NOV 06...	1220	ENVIRONMENTAL	<.004	<.002	<.005	.009	<.010	<.041	<.005	<.018	<.003
DEC 03...	1240	ENVIRONMENTAL	<.004	<.002	<.005	E.006	<.010	<.041	<.005	<.018	<.003
JAN 03...	1240	ENVIRONMENTAL	<.004	<.002	<.005	E.006	<.010	E.005	<.005	<.018	<.003
MAR 06...	1340	ENVIRONMENTAL	<.006	<.004	<.005	.007	<.010	<.041	<.005	<.018	<.003
APR 04...	1309	FIELD BLANK	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003
APR 04...	1310	ENVIRONMENTAL	<.006	<.004	<.005	E.006	<.010	E.007	<.005	<.018	<.003
MAY 01...	1000	ENVIRONMENTAL	<.006	<.004	<.005	.025	<.010	E.029	<.005	<.018	E.003
MAY 01...	1001	SPLIT REPLICATE	<.006	<.004	<.005	.026	<.010	E.030	<.005	<.018	E.003
JUN 11...	0930	ENVIRONMENTAL	<.006	<.004	<.005	.030	<.010	E.026	<.005	<.018	<.003
JUL 09...	1320	ENVIRONMENTAL	<.010	<.004	<.005	.101	<.010	E.021	<.005	<.018	<.003
SEP 10...	1140	ENVIRONMENTAL	<.006	<.004	<.005	.009	<.010	<.041	<.005	<.018	<.003

DATE	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC WATER FLTRD (UG/L) (82668)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL-AZIN-PHOS WAT FLT (UG/L) (82686)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD (UG/L) (82684)	PENDI-METH-ALIN WAT FLT (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-PANIL WATER, FLTRD (UG/L) (82679)
NOV 06...	E.006	.009	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.010	<.01	<.011
DEC 03...	<.006	.008	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.010	E.01	<.011
JAN 03...	E.004	<.005	<.002	<.004	<.035	<.027	<.050	E.002	<.006	<.007	<.010	E.01	<.011
MAR 06...	<.006	.008	<.002	<.004	<.035	<.027	<.050	E.011	<.006	<.007	<.022	.02	<.011
APR 04...	<.006	<.005	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011
APR 04...	<.006	.012	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011
MAY 01...	E.011	.023	<.002	<.004	<.035	<.027	<.050	.021	<.006	<.007	.025	.03	<.011
MAY 01...	E.011	.022	<.002	<.004	<.035	<.027	<.050	.023	<.006	<.007	.025	.03	<.011
JUN 11...	E.011	.012	<.015	<.004	<.035	<.027	<.050	.013	<.006	<.007	<.022	.05	<.011
JUL 09...	E.025	<.005	<.002	<.004	<.035	<.027	<.050	.025	<.006	<.007	<.022	.02	<.011
SEP 10...	E.009	.006	<.002	<.004	<.035	<.027	<.050	E.007	<.006	<.007	<.022	.03	<.011

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
NOV 06...	<.011	E.01	<.034
DEC 03...	E.009	E.01	<.034
JAN 03...	<.011	E.02	<.034
MAR 06...	<.005	E.01	<.034
APR 04...	<.005	<.02	<.034
APR 04...	.005	<.02	<.034
MAY 01...	.010	<.04	<.034
MAY 01...	.009	<.04	<.034
JUN 11...	<.009	.02	<.034
JUL 09...	.016	<.02	<.034
SEP 10...	.005	.03	<.034

PLANT TISSUE ANALYSES

DATE	TIME	PERI-PHYTON BIOMASS ASH WEIGHT (G/SQ M) (00572)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT (G/SQ M) (00573)	PHEO-PHYTIN A, PERI-PHYTON (MG/M2) (62359)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)
JUL 22...	0905	400	419.4	24	79.5

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ

LOCATION.--Lat 40°17'46", long 74°23'53", Middlesex County, Hydrologic Unit 02030105, at bridge on Federal Road, 2.6 mi north of Manalapan, 3.1 mi southwest of Matchaponix, 3.3 mi downstream from Still House Brook, and 4.1 mi northeast of Applegarth.

DRAINAGE AREA.--20.9 mi².

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DATE							CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)					
NOV 14...	1030	6.1	3.5	.046	.037	771	96	12.4	6.6	217	16.0	5.0	41	
FEB 05...	0940	11	5.8	.018	.014	765	99	14.3	4.3	271	-2.0	.5	46	
MAY 09...	0910	9.4	12	.057	.045	764	94	9.6	5.3	219	12.5	14.5	41	
AUG 13...	1100	2.6	9.6	.128	.102	748	96	8.0	7.9	283	36.0	23.5	41	
NOV 14...	9.38	4.36	3.32	21.3	11	46.8	.2	10.5	17.9	122	123	.080	.15	
FEB 05...	11.1	4.54	3.04	19.6	--	41.9	E.1	12.5	--	144	--	.230	.36	
MAY 09...	9.79	4.00	2.85	19.1	2	39.4	.2	10.6	31.2	129	121	.090	.30	
AUG 13...	10.1	3.94	4.05	31.4	10	61.8	.2	8.6	17.4	171	147	<.030	.21	
NOV 14...	.100	.54	.004	.69	.10	<.004	--	.027	.5	<.1	1.6	.5	<1.0	
FEB 05...	.230	.94	.005	1.3	.08	<.004	--	.041	.8	<.1	1.1	.8	2.3	
MAY 09...	.120	.62	<.003	.92	.16	E.003	<.020	.069	1.6	<.1	2.1	1.6	<1.0	
AUG 13...	<.030	.81	.003	1.0	.07	.012	<.020	.086	.5	<.1	3.4	.5	<1.0	
NOV 14...								20					8	
FEB 05...								20					14	
MAY 09...						3.90		20					14	
AUG 13...						1.30		30					8	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RARITAN RIVER BASIN

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)
AUG 13...	1100	<2	27.7	<.06	31	<.04	<.8	.7	1420	<1	53.8	<.01	2
						SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)					
						AUG 13...	E.3	<.05	5				
DATE	TIME	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ETHANE TOTAL (UG/L) (34501)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)
FEB 05...	0940	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2
DATE	TIME	CHLORO- DI- BROMO- BENZENE TOTAL (UG/L) (34301)	CHLORO- METHANE FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER TERT- BUTYL ETHER, WATER, UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHER, WATER, UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL ETHER, WATER, UNFLTRD RECOVER (UG/L) (50005)	BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER REC (UG/L) (78032)
FEB 05...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	STYRENE TOTAL (UG/L) (77128)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLURO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)			
FEB 05...		<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2		

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, SOLVED (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
MAY 09...	0910	<.006	<.004	<.005	.011	<.010	E.194	<.005	<.018	<.003	E.004	E.003	<.002

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LIN- URON WATER	MALA- THION, DIS-	METHYL AZIN- PHOS WAT FLT	METO- LACHLOR WATER	METRI- BUZIN SENCOR WATER	NAPROP- AMIDE WATER	PENDI- METH- ALIN WAT FLT	PRO- METON, WATER, DISS,	PRO- PANIL WATER FLTRD	SI- MAZINE, WATER, DISS,	TEBU- THIURON WATER FLTRD	TER- BACIL WATER FLTRD	
	LINDANE DIS- SOLVED (UG/L) (39341)	0.7 U GF, REC (UG/L) (82666)	0.7 U SOLVED (UG/L) (39532)	0.7 U GF, REC (UG/L) (82686)	0.7 U DISSOLV (UG/L) (39415)	0.7 U DISSOLV (UG/L) (82630)	0.7 U GF, REC (UG/L) (82684)	0.7 U GF, REC (UG/L) (82683)	0.7 U DISS, REC (UG/L) (04037)	0.7 U GF, REC (UG/L) (82679)	0.7 U DISS, REC (UG/L) (04035)	0.7 U GF, REC (UG/L) (82670)	0.7 U GF, REC (UG/L) (82665)
MAY 09...	<.004	<.035	<.027	<.050	.053	<.006	<.007	E.009	.03	<.011	.011	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 09...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
31...	0945	1300	2500	1510	14...	0950	1300	<100	670
AUG					21...	1010	1100	<100	600
07...	0915	800	<100	440	28...	0920	1300	200	1200

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHALE POND BROOK BASIN

01407617 WHALE POND BROOK AT LARCHWOOD AVENUE, AT OAKHURST, NJ

LOCATION.--Lat 40°16'31", long 74°00'37", Monmouth County, Hydrologic Unit 02030104, at bridge on Larchwood Avenue at Oakhurst, 0.6 mi upstream of Lake Takanassee, and 1.1 mi south of West Long Branch.

DRAINAGE AREA.--5.25 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV 28...	1100	4.4	.088	.074	770	69	7.4	6.7	150	13.0	12.5	40	12.6
FEB 05...	0945	8.1	.042	.038	767	79	10.3	6.8	157	-2.0	4.5	36	11.1
MAY 14...	0845	12	.122	.096	751	75	7.9	6.4	101	13.0	12.5	20	6.12
AUG 15...	0930	8.1	.069	.058	764	71	6.6	6.8	159	28.0	19.0	44	14.0
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 28...	2.04	2.49	8.46	22	19.5	<.1	14.8	12.2	96	87	<.030	E.09	<.030
FEB 05...	2.00	2.33	10.4	16	21.0	<.1	15.1	15.2	92	89	.070	.14	.060
MAY 14...	1.24	1.62	7.52	10	12.8	<.1	8.0	11.0	63	56	.060	.20	.050
AUG 15...	2.11	2.59	9.62	25	19.8	E.1	15.7	12.5	76	94	.040	.14	.040
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 28...	.43	.003	--	.06	E.003	--	.027	.4	<.1	1.5	.4	<1.0	--
FEB 05...	.42	.003	.56	.02	E.002	<.020	.032	.7	<.1	.8	.7	<1.0	--
MAY 14...	.36	.003	.56	.09	.006	<.020	.047	1.6	<.1	3.1	1.6	<1.0	.400
AUG 15...	.55	.003	.68	.07	.005	<.020	.032	.3	<.1	1.3	.3	<1.0	.500

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01407617 WHALE POND BROOK AT LARCHWOOD AVENUE, AT OAKHURST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
NOV	28...													
FEB	05...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	05...	<.1	<.2	<.1	3.3	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.7
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER REC (UG/L)	ALPHA-BHC DISS-SOLVED REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)			
FEB	05...	<.2	<.2	<.1	<.1	<.1	<.1	10.0	<.2	<.2				

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA-BHC DISS-SOLVED REC (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED REC (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED REC (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	14...	<.006	<.004	<.005	.093	<.010	E.050	<.005	<.018	<.003	E.015	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHALE POND BROOK BASIN

01407617 WHALE POND BROOK AT LARCHWOOD AVENUE, AT OAKHURST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 14...	<.004	<.035	<.027	<.050	.029	<.006	<.007	<.022	.02	<.011	.025	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 14...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	1000	300	<100	1400	07...	1010	500	100	180
17...	0925	60	100	260					
24...	1016	>16000	<100	38100					
31...	1011	300	600	610					

Remark codes used in this report:
< -- Less than
> -- Greater than

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°12'13", long 74°03'58", Monmouth County, Hydrologic Unit 02030104, 60 ft downstream from dam on Jumping Brook Reservoir, 0.8 mi upstream from mouth, and 1.4 mi west of Neptune City.

DRAINAGE AREA.--6.46 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV														
08...	1000	1.9	4.3	.083	.065	770	76	9.0	6.7	193	10.0	8.5	42	
FEB														
06...	1000	2.7	4.4	.101	.083	768	90	12.5	6.8	278	2.0	2.0	44	
MAY														
23...	0900	3.1	5.2	.115	.087	767	89	9.8	6.6	183	17.0	11.5	37	
AUG														
27...	0945	1.5	6.9	.151	.111	762	52	4.8	6.7	188	25.0	19.5	39	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV														
08...	11.9	2.90	3.25	14.8	16	28.4	.1	10.5	22.4	114	104	.060	.17	
FEB														
06...	12.7	2.94	2.91	28.1	12	50.6	E.1	9.5	30.2	152	145	.160	.31	
MAY														
23...	10.7	2.55	2.72	15.5	11	26.7	E.1	8.3	24.6	107	99	.140	.42	
AUG														
27...	10.9	2.77	3.72	14.3	13	22.6	.1	9.0	20.9	94	95	1.80	2.1	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, SUSP SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULTE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV														
08...	.060	E.03	<.003	--	.06	E.003	--	.035	.9	<.1	2.5	.9	2.1	
FEB														
06...	.140	.18	.004	.49	<.02	E.002	<.020	.011	.5	<.1	1.8	.5	E1.8	
MAY														
23...	.150	.16	.003	.58	<.02	<.004	<.020	.023	.5	<.1	3.7	.5	<1.0	
AUG														
27...	1.80	.06	.020	2.2	.16	.012	<.020	.072	1.3	<.1	4.9	1.3	2.2	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

SHARK RIVER BASIN

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A FLUORO-METRIC METHOD			RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED											
DATE	TIME	SAMPLE TYPE	CORR. (UG/L) (32209)	(UG/L) (01020)	BORON, DIS- SOLVED AS B (01020)	(UG/L) (00530)										
NOV	08...		--	30		3										
FEB	06...		--	20		6										
MAY	23...		1.20	20		8										
AUG	27...		5.00	40		8										
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)					
AUG	27...	0900	FIELD BLANK	--	--	--	--	--	--	--	--	--	--			
		0945	ENVIRONMENTAL	--	--	--	--	<2	34.1	E.05	39	--	--			
		0945	BED MATERIAL	6.10	50	2200	1.2	<.2	--	--	--	--	--			
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CU) (01034)	COPPER, DIS- SOLVED ERABLE (UG/L AS CU) (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED ERABLE (UG/L AS PB) (01049)	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) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, DIS- SOLVED ERABLE (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	
AUG	27...		--	--	<.2	--	--	<.08	--	--	<.01	--	<.06	--	--	--
			.04	<.8	--	1.4	2310	--	<1	77.2	--	<.01	--	2	E.3	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	TIME	SAMPLE TYPE	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED ERABLE (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, FM BOT- TOM MA- SEDIMT, TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)	
AUG	27...		--	1	--	--	--	--	--	--	--	--	--	--	--	--
			<.05	--	13	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	<1	.013	.6	.104	<2	2000	2.5	3.1	.01	.416	--
DATE	TIME	SAMPLE TYPE	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU- ORENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ (A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO (G HI) PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	
AUG	27...		--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			<1	<3.1	E1	<50	<50	<50	E3	E11	E10	E9	E15	E11	E1	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPHTHAL ENE, 2- ETHYL- SED, BM WS <2MM DW, REC (UG/KG) (49948)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)
AUG													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	E10	E7	E7	E18	E13	<50	<50	<50	<50	E4	<50	<50	<5

DATE	PHENAN THRENE CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	1METHYL THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
AUG							
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	<50	E9	E9	<50	E7	E16	1

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC WATER BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0946	2400	<100	2050	07...	0940	300	<100	200
17...	0855	700	500	110					
24...	0946	500	700	710					
31...	0946	170	200	230					

Remark codes used in this report:
< -- Less than
E -- Estimated value

01407806 HANNABRAND BROOK AT OLD MILL ROAD, NEAR SPRING LAKE HEIGHTS, NJ

LOCATION.--Lat 40°08'36", long 74°03'14", Monmouth County, Hydrologic Unit 02030104, at bridge on Old Mill Road, 650 ft upstream from mouth, and 1.0 mi southwest of Spring Lake Heights.

DRAINAGE AREA.--3.13 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV 27...	0900	1.0	.089	.069	767	81	9.2	6.4	159	12.1	10.0	34	7.57	
FEB 06...	0900	1.5	.069	.055	770	90	12.1	6.4	170	-2.5	3.5	34	7.72	
MAY 28...	0830	1.8	.079	.062	767	104	10.7	6.8	151	17.5	14.5	33	7.39	
AUG 13...	0900	2.5	.080	.064	767	75	6.9	6.4	146	29.0	20.0	31	6.99	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
NOV 27...	3.58	2.66	12.1	14	21.8	<.1	7.7	16.1	94	85	.060	.21	.070	
FEB 06...	3.64	2.43	14.2	11	24.5	<.1	7.2	16.9	92	90	.060	.20	.070	
MAY 28...	3.49	2.31	12.0	12	21.9	<.1	6.8	15.7	85	--	.100	.11	.110	
AUG 13...	3.27	2.41	12.1	12	19.7	<.1	8.4	15.3	90	80	.070	.19	.090	
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR- TICULATE SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PAR- TICULATE SUSP SOLVED (MG/L AS P) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 27...	1.12	<.003	1.3	.02	.005	--	.012	.3	<.1	2.6	.3	3.8	--	
FEB 06...	1.55	.007	1.8	<.02	.004	<.020	.011	.2	<.1	1.7	.2	E1.5	--	
MAY 28...	--	<.007	--	.08	.008	<.020	.024	1.1	<.1	2.2	1.1	<1.0	4.00	
AUG 13...	1.02	<.003	1.2	.05	.005	.037	.024	.4	<.1	2.2	.4	E1.1	.500	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01407806 HANNABRAND BROOK AT OLD MILL ROAD, NEAR SPRING LAKE HEIGHTS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	RESIDUE TOTAL												
		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL, WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	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)	DEETHYL, ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC, WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)	
NOV 27...						20							<1	
FEB 06...						20							3	
MAY 28...						20							5	
AUG 13...						20							5	
MAY 28...	0830	<.006	<.004	<.005	.167	<.010	E.016	<.005	<.018	<.003	E.025	E.005	<.002	
MAY 28...		LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL-AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHYL-PHOS, WAT FLT 0.7 U DISSOLV (UG/L) (39415)	METO-LACHLOR, WATER, DISSOLV (UG/L) (82630)	METRI-SENCCOR, WATER, FLTRD 0.7 U GF, REC (UG/L) (82684)	NAPROP-AMIDE, WATER, FLTRD 0.7 U GF, REC (UG/L) (82683)	PENDI-METH-ALIN, WAT FLT 0.7 U REC (UG/L) (04037)	PRO-METON, WATER, DISS, REC (UG/L) (82679)	PRO-PANIL, WATER, FLTRD 0.7 U GF, REC (UG/L) (04035)	SI-MAZINE, WATER, DISS, REC (UG/L) (82670)	TEBU-THIURON, WATER, FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BACIL, WATER, FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 28...		<.004	<.035	<.027	<.050	.079	<.006	<.007	<.022	.02	<.011	.008	<.02	<.034
MAY 28...							TRI-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82661)							<.010

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102)
FEB 06...	0900	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WRECK POND BROOK BASIN

01407806 HANNABRAND BROOK AT OLD MILL ROAD, NEAR SPRING LAKE HEIGHTS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- DI- BENZENE TOTAL (UG/L) (34301)	BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER REC (UG/L) (78032)
FEB 06...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.3

DATE	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
FEB 06...		<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	1035	800	100	2220	07...	1045	300	<100	330
17...	1000	110	<100	310					
24...	1100	5000	700	1500					
31...	1047	300	600	610					

Remark codes used in this report:
< -- Less than

01408000 MANASQUAN RIVER AT SQUANKUM, NJ

LOCATION.--Lat 40°09'41", Long 74°09'18", Monmouth County, Hydrologic Unit 02040301, 50 ft upstream from northbound bridge on County Highway 547 (Squankum Park Road) in Squankum, and 0.4 mi downstream from Marsh Bog Brook.

DRAINAGE AREA.--44.0 mi².

PERIOD OF RECORD.--Water years 1963-81, 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 definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
DEC	11...	0930	23	6.0	.045	.035	771	88	10.5	7.5	229	9.0	8.0	76
FEB	21...	1000	24	10	.029	.022	757	91	10.5	7.4	258	13.0	9.0	86
JUN	20...	0900	37	22	.085	.063	775	87	8.7	7.3	221	24.0	16.0	69
AUG	07...	0900	14	11	.050	.038	763	89	8.4	7.7	253	27.0	18.0	92
DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD LAB AS (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC	11...	25.8	2.72	2.81	8.10	42	19.6	.1	12.7	31.2	138	129	<.030	.14
FEB	21...	29.5	3.10	2.81	10.7	41	24.5	.2	14.8	39.5	158	151	.040	.10
JUN	20...	22.7	3.00	3.24	11.1	26	25.3	.1	15.1	30.8	150	--	.060	.33
AUG	07...	32.1	2.88	3.28	9.00	53	19.7	.2	14.9	31.8	178	147	<.030	.13
DATE	TIME	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC	11...	<.030	.21	<.003	.35	.03	.004	--	.030	.3	<.1	1.9	.3	E1.1
FEB	21...	.040	.23	<.003	.33	.03	<.004	<.020	.029	.2	<.1	1.2	.2	<1.0
JUN	20...	.040	--	.010	--	.07	.005	<.020	.096	.9	<.1	2.7	.9	<1.0
AUG	07...	<.030	.23	<.003	.36	.17	.012	.026	.041	.7	<.1	1.9	.7	E1.2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MANASQUAN RIVER BASIN

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO- PHYL A FLUORO- METRIC METHOD			RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED											
DATE	TIME	SAMPLE TYPE	CORR. (UG/L) (32209)	(UG/L) (01020)	BORON, DIS- SOLVED AS B (01020)	(UG/L) (00530)										
DEC	11...		--	20		3										
FEB	21...		--	20		4										
JUN	20...		1.80	30		18										
AUG	07...		1.50	30		1										
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)					
AUG	07...	0830	FIELD BLANK	--	--	--	--	--	--	--	--	--				
		0900	ENVIRONMENTAL	7.10	--	--	--	<2	32.7	E.03	26					
		1000	BED MATERIAL	7.10	90	50000	2.1	<.2	--	--	--					
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, DIS- SOLVED ERABLE (UG/L AS CU) (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED ERABLE (UG/L AS PB) (01049)	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) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, DIS- SOLVED ERABLE (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	
AUG	07...		--	--	<.2	--	--	<.08	--	--	<.01	--	<.06	--	--	--
			.04	<.8	--	1.0	1250	--	<1	47.5	--	<.01	--	4	E.3	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	TIME	SAMPLE TYPE	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED ERABLE (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068)		
AUG	07...		--	<1	--	--	--	--	--	--	--	--	--	--	--	
			<.05	--	10	--	--	--	--	--	--	--	--	--	--	
			--	--	--	<1	.346	29	1.4	<2	47000	6.8	66	<.01	4.0	
DATE	TIME	SAMPLE TYPE	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093)	4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU- ORENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU- ORENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49399)	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ (A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO (G HI) PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	
AUG	07...		--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
			<1	120	<50	<50	<50	<50	<50	<50	E9	<50	E6	E10	E6	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT WS <2MM REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPHTHAL ENE, 2- ETHYL- SED, BM WS <2MM DW REC (UG/KG) (49948)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)
AUG													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	E3	<50	E16	E10	E15	<50	<50	<50	<50	<50	<50	<50	<5

DATE	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
AUG							
07...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	<50	<50	E4	<50	<50	E11	.2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0935	3000	<100	1700	07...	0923	40	<100	250
17...	0950	300	500	210					
24...	0930	2400	600	520					
31...	0930	1300	900	400					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MANASQUAN RIVER BASIN

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ

LOCATION.--Lat 40°12'45", long 74°10'07", Monmouth County, Hydrologic Unit 02040301, at bridge on Cranberry Bog Road, 0.6 mi upstream from Branch Mingamahone Brook, and 1.7 mi west of Earle.

DRAINAGE AREA.--3.32 mi².

PERIOD OF RECORD.--Water years 1971-74, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 19...	1000	1.3	35	.155	.150	767	76	9.1	7.0	155	14.0	8.0	68	
FEB 05...	1210	2.2	7.3	.063	.057	764	87	11.8	6.4	151	.5	3.0	43	
MAY 09...	1150	4.2	63	.151	.128	764	80	8.5	6.2	129	14.0	12.5	35	
AUG 13...	0850	.79	25	.077	.067	748	84	7.9	--	204	30.0	17.5	81	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 19...	24.4	1.72	2.12	5.62	37	12.0	.1	20.8	21.2	102	110	.050	E.05	
FEB 05...	14.2	1.84	1.78	6.16	19	11.5	<.1	16.9	22.2	106	86	<.030	E.08	
MAY 09...	11.4	1.57	1.95	6.07	16	11.1	E.1	15.1	19.9	90	77	<.030	.11	
AUG 13...	29.5	1.64	2.34	4.30	54	10.4	.1	26.1	23.3	149	130	.050	E.07	
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 19...	.040	<.04	<.003	--	.06	E.002	--	.197	1.1	<.1	1.9	1.1	<1.0	
FEB 05...	<.030	E.03	.008	--	.06	<.004	--	.044	.9	<.1	1.5	.9	E1.4	
MAY 09...	.030	.06	<.003	.17	.17	E.002	<.020	.109	4.2	<.1	2.4	4.1	<1.0	
AUG 13...	<.030	E.02	<.003	--	<.02	.004	<.020	.040	.4	<.1	1.4	.4	<1.0	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

MANASQUAN RIVER BASIN

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)
NOV			
19...	--	20	40
FEB			
05...	--	20	13
MAY			
09...	2.10	20	30
AUG			
13...	.100	20	6

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0918	500	<100	350	07...	0820	1300	100	230
17...	1030	340	200	120					
24...	0924	130	<100	450					
31...	0926	800	500	940					

Remark codes used in this report:
< -- Less than

METEDECONK RIVER BASIN

01408100 NORTH BRANCH METEDECONK RIVER AT LAKEWOOD, NJ

LOCATION.--Lat 40°06'35", long 74°13'10", Ocean County, Hydrologic Unit 02040301, at highway bridge on U.S. Route 9, 0.3 mi north of County Line Road in Lakewood, and 3.6 mi upstream from Muddy Ford Brook.

DRAINAGE AREA.--19.4 mi².

PERIOD OF RECORD.--Water years 1959-63, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 19...	1250	8.7	4.3	.094	.077	767	97	11.6	7.2	140	19.0	8.0	36	
FEB 12...	1050	20	10	.126	.098	760	95	12.7	6.7	165	8.0	3.0	32	
JUN 03...	0920	10	6.1	.304	.238	762	81	7.7	6.9	134	23.0	17.5	29	
AUG 14...	0920	3.4	5.5	.168	.134	765	67	5.8	6.5	170	--	22.5	37	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 19...	11.0	2.12	2.57	11.2	22	22.3	.1	8.8	13.9	90	87	.030	.11	
FEB 12...	9.92	1.83	2.02	14.9	13	27.0	E.1	9.3	18.4	102	93	.030	.22	
JUN 03...	9.03	1.67	2.36	10.1	16	18.0	E.1	8.1	12.4	91	73	.050	.35	
AUG 14...	11.4	2.15	2.81	12.6	26	22.4	E.1	7.4	11.4	93	87	<.030	.21	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 19...	.040	.48	<.003	.59	.06	.005	--	.026	.4	<.1	2.2	.4	<1.0	
FEB 12...	.040	.41	.006	.63	.06	.010	<.020	.041	1.2	<.1	3.3	1.2	2.1	
JUN 03...	.070	.41	.008	.76	.06	.019	<.020	.064	.9	<.1	5.9	.9	<1.0	
AUG 14...	.040	.36	<.003	.57	.09	<.05	<.020	E.05	.7	<.1	3.6	.7	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01408100 NORTH BRANCH METEDECONK RIVER AT LAKEWOOD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

				CHLORO- PHYL A			RESIDUE TOTAL							
				FLUORO- METRIC METHOD			BORON, DIS- SOLVED	AT 105 DEG. C, SUS- PENDED						
				DATE			(UG/L) AS B	(MG/L) (00530)						
				(32209)			(01020)							
				NOV										
				19...	--		20	6						
				FEB										
				12...	--		20	8						
				JUN										
				03...	--		20	3						
				AUG										
				14...	2.30		20	7						
		ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)	
AUG	14...	0920	M	54.7	<.06	27	E.03	<.8	.7	1300	<1	46.4	E.01	<1
						SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)						
						AUG								
						14...	<.4	<.05	6					

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
	01...	0805	16000	2100	220	15...	0815	1300	850
	08...	0800	1100	500	140	23...	0930	220	80
						30...	0930	500	260

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

TOMS RIVER BASIN

01408300 TOMS RIVER AT WHITESVILLE, NJ

LOCATION.--Lat 40°03'42", long 74°16'29", Ocean County, Hydrologic Unit 02040301, at bridge on South Hope Chapel Road, 0.5 mi south of Whitesville, 0.6 mi downstream of Dove Mill Lake, and 3.7 mi southwest of Lakewood.

DRAINAGE AREA.--45.2 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 28...	0900	2.2	.189	.149	767	84	9.4	6.3	110	13.0	10.5	19	5.17
FEB 14...	0800	3.7	.173	.135	774	90	12.7	5.8	110	-1.5	2.0	17	4.50
MAY 07...	0900	4.2	.362	.283	762	89	9.0	5.9	93	16.0	15.0	15	3.89
AUG 22...	0800	2.9	.157	.126	765	80	7.6	6.3	101	25.0	18.0	18	4.71
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 28...	1.55	1.83	9.65	7	18.1	E.1	7.5	9.8	72	59	<.030	.19	<.030
FEB 14...	1.50	1.48	9.67	5	17.3	<.1	6.8	11.2	68	58	<.030	.17	<.030
MAY 07...	1.28	1.48	8.99	4	15.9	<.1	4.9	8.8	55	49	<.030	.37	<.030
AUG 22...	1.54	2.11	8.86	8	14.5	E.1	6.0	8.7	55	54	<.030	.14	<.030
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 28...	.29	<.003	.48	.54	.010	--	.024	3.8	<.1	4.8	3.8	<1.2	--
FEB 14...	.64	<.003	.81	.07	.010	<.020	.027	1.5	<.1	4.2	1.4	<1.0	--
MAY 07...	.31	<.003	.68	.08	.012	<.020	.035	1.2	<.1	7.5	1.2	E1.9	3.00
AUG 22...	.55	<.003	.70	.05	.013	.032	.033	.5	<.1	3.3	.5	E1.5	1.40

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01408300 TOMS RIVER AT WHITESVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL											
		BORON, AT 105 DEG. C, DIS-SOLVED (UG/L AS B) (01020) PENDEDED (MG/L) (00530)											
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)
NOV	28...							20					1
FEB	14...							E10					7
MAY	07...							E10					10
AUG	22...							E9					<1

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	14...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	E.1

DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)
FEB	14...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	07...	<.006	<.004	<.005	.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

TOMS RIVER BASIN

01408300 TOMS RIVER AT WHITESVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER (UG/L) (39415)	METRI- BUZIN SENCOR WATER (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 07...	<.004	<.035	<.027	<.050	E.010	<.006	<.007	<.022	<.01	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 07...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					MAY				
01...	0825	220	100	160	15...	0830	140	200	180
08...	0820	20	<100	90	23...	0948	<20	<100	10
					30...	0958	130	<100	70

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01408500 TOMS RIVER NEAR TOMS RIVER, NJ

LOCATION.--Lat 39°59'11", long 74°13'25", Ocean County, Hydrologic Unit 02040301, at bridge on County 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.

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1974 to September 1981.

WATER TEMPERATURE: November 1963 to May 1966, November 1974 to September 1981.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC	06...	89	2.8	.133	.107	765	87	9.8	6.3	109	14.0	10.5	15	
FEB	27...	92	3.4	.103	.079	755	90	10.3	5.8	107	3.5	9.0	15	
JUN	05...	95	3.7	.357	.282	763	83	7.7	5.9	88	20.0	19.0	13	
AUG	27...	58	2.7	.180	.144	764	86	7.8	6.4	123	25.5	20.5	18	
DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC	06...	3.34	1.66	1.68	11.0	6	15.3	E.1	6.0	11.0	64	58	.210	.37
FEB	27...	3.24	1.60	1.54	10.7	5	14.2	<.1	4.7	12.1	64	55	.228	.41
JUN	05...	2.97	1.42	1.68	10.4	4	14.2	<.1	4.1	9.5	69	--	.200	.78
AUG	27...	4.01	1.88	2.12	13.4	7	16.6	<.1	4.3	12.5	71	64	.070	.26
DATE	TIME	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC	06...	.210	1.03	.004	1.4	.04	.007	--	.020	.8	<.1	2.7	.8	E1.5
FEB	27...	.220	.82	.004	1.2	.05	.004	<.020	.017	.8	<.1	2.9	.8	<1.0
JUN	05...	.240	--	.008	--	.14	.012	<.020	.029	1.4	<.1	6.5	1.4	--
AUG	27...	.050	1.19	.010	1.5	.09	.008	<.020	.026	.7	<.1	3.7	.7	<1.0

Remark codes used in this report:

< -- Less than

E -- Estimated value

TOMS RIVER BASIN

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	PH SED BOT MAT (STD UNITS) (70310)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)		
DEC	06...		--	10											
FEB	27...		--	20											
JUN	05...		2.10	20											
AUG	27...		2.60	20											
AUG	27...	ENVIRONMENTAL	--	--	--	--	--	--	--	<2	30.3	E.04	22		
AUG	27...	BED MATERIAL	5.20	90	670	2.4	<.2	--	--	--	--	--	--		
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)
AUG	27...		.04	<.8	E.5	800	<1	25.6	E.01	<1	E.3	<.05	4	--	--
AUG	27...		--	--	--	--	--	--	--	--	--	--	--	<1	.019
DATE	TIME	SAMPLE TYPE	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) (01043)	IRON, RECOV. SEDIMT, BED MA-TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	4HCYPEN PHENAN THRENE WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU-ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU-ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)
AUG	27...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	27...		<.4	.059	<2	1400	8.2	1.4	.01	.178	<1	3.6	M	<50	E4
DATE	TIME	SAMPLE TYPE	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA-CENE, 2-METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZOB ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY-SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR-ANTHENE BED MAT WS <2MM DW, REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)
AUG	27...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	27...		E4	E7	E18	E29	E19	E26	E24	E6	E22	E25	<50	120	E21
DATE	TIME	SAMPLE TYPE	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPTHAL ENE, 236 TRIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPTHAL ENE, 2-ETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49948)	NAPHTH-ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	P-CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN-THRI-DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1-METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)
AUG	27...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	27...		<50	<50	E10	E4	E9	<50	E12	<5	<50	E16	E50	<50	E11

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

TOMS RIVER BASIN

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN .004 MM (80157)	% FINER THAN .062 MM (80164)
AUG			
27...	--	--	--
27...	80	1	1

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
01...	0850	20	100	130	05...	1037	40	<100	<10
08...	0845	20	<100	50					
15...	0905	110	<100	220					
23...	1015	<20	<100	30					
30...	1029	20	200	680					

Remark codes used in this report:
< -- Less than

01408702 JAKES BRANCH AT DOVER ROAD, NEAR DOUBLE TROUBLE, NJ

LOCATION.--Lat 39°54'55", long 74°16'26", Ocean County, Hydrologic Unit 02040301, at bridge on Dover Road, 4.7 mi upstream of mouth, and 69 mi southeast of Whiting.

DRAINAGE AREA.--0.25 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR-BID-ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD CON-ARD (STAND-UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL AS (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED AS (MG/L CA) (00915)
NOV 14...	1000	.4	.120	.096	770	22	2.7	4.0	36	5.5	7.0	2	.22
FEB 05...	1000	.3	.230	.173	768	57	7.4	3.6	59	3.5	5.0	4	.48
MAY 07...	0900	.4	.879	.676	760	39	4.1	3.4	84	17.5	13.0	2	.28
AUG 08...	0900	.5	.264	.213	762	15	1.5	3.8	31	19.0	16.0	1	.11

DATE	TIME	MAGNE-SIUM, DIS-SOLVED AS (MG) (00925)	POTAS-SIUM, DIS-SOLVED AS (MG/L) (00935)	SODIUM, DIS-SOLVED AS (MG/L) (00930)	CHLO-RIDE, DIS-SOLVED AS (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED AS (MG/L) (00950)	SILICA, DIS-SOLVED AS (MG/L) (00955)	SULFATE DIS-SOLVED AS (MG/L) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED AS (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED AS (MG/L) (00623)	NITRO-GEN, AMMONIA TOTAL AS (MG/L) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED AS (MG/L) (00631)	NITRO-GEN, DIS-SOLVED AS (MG/L) (00613)
NOV 14...	.273	.11	2.85	4.76	<.1	5.7	3.4	16	<.030	E.07	.060	<.04	<.003	
FEB 05...	.652	.21	4.42	6.83	<.1	5.5	9.7	32	<.030	.13	<.030	<.04	<.002	
MAY 07...	.397	E.07	4.64	7.06	<.1	3.8	5.6	54	<.030	.34	<.030	<.04	<.003	
AUG 08...	.212	.18	2.80	5.12	<.1	6.0	2.6	24	<.030	.11	<.030	<.04	<.003	

DATE	TIME	NITRO-GEN, PAR-TICULATE WAT FLT AS (MG/L) (49570)	PHOS-PHORUS DIS-SOLVED AS (MG/L) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED AS (MG/L) (00671)	PHOS-PHORUS TOTAL AS (MG/L) (00665)	CARBON, INORG + ORGANIC TOTAL AS (MG/L) (00694)	CARBON, INOR-GANIC, TOTAL AS (MG/L) (00688)	CARBON, ORGANIC DIS-SOLVED AS (MG/L) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL AS (MG/L) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED AS (UG/L) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
NOV 14...	.03	<.004	--	E.002	.2	<.1	2.7	.2	<1.0	--	E7	6	
FEB 05...	.04	<.004	<.020	E.003	.4	--	6.1	--	<1.0	--	E8	2	
MAY 07...	<.02	<.004	<.020	<.004	.4	<.1	18.8	.4	E1.2	.400	E10	1	
AUG 08...	.17	E.003	<.020	.005	1.5	<.1	5.7	1.5	<1.0	.200	<10	<1	

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102)
FEB 05...	1000	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01408702 JAKES BRANCH AT DOVER ROAD, NEAR DOUBLE TROUBLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)
FEB 05...	<.1	<.2	.2	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	METHYL ENE CHLO- RIDE REC (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
FEB 05...		<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
MAY 07...	0900	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 07...	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 07...	<.009

Remark codes used in this report:
< -- Less than

TOMS RIVER BASIN

01408702 JAKES BRANCH AT DOVER ROAD, NEAR DOUBLE TROUBLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)
MAY					MAY				
01...	0945	<20	<100	<10	15...	1010	<20	<100	<10
08...	0945	<20	<100	<10	23...	1050	<20	<100	<10
					30...	1100	<20	<100	<10

Remark codes used in this report:
 < -- Less than

CEDAR CREEK RIVER BASIN

01408830 CEDAR CREEK AT CEDAR CREST, NJ

LOCATION.--Lat 39°53'50", long 74°19'00", Ocean County, Hydrologic Unit 02040301, at bridge on Whiting-Lacey Road in Cedar Crest, 0.2 mi downstream from outlet of Bamber Lake, and 3.7 mi southeast of Keswick Grove.

DRAINAGE AREA.--20.1 mi².

PERIOD OF RECORD.--Water years 1977-78, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 28...	1130	22	.7	.054	.042	761	100	10.6	5.5	24	17.5	12.5	3
FEB 07...	1020	18	.7	.064	.050	758	99	13.3	5.5	25	4.0	3.0	3
JUN 12...	1150	28	2.8	.358	.281	755	101	8.3	4.5	30	33.0	24.5	4
AUG 08...	1050	16	.7	.096	.077	765	96	8.2	5.2	23	31.0	23.5	3

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 28...	.61	.396	E.45	2.09	2	3.97	<.1	5.2	2.3	24	--	<.030	<.10
FEB 07...	.63	.446	.34	2.29	2	4.10	<.1	5.0	2.6	20	17	<.030	E.10
JUN 12...	.75	.517	.31	2.33	1	3.86	<.1	4.0	4.0	32	17	<.030	.17
AUG 08...	.59	.395	.35	2.33	2	3.77	<.1	4.9	2.0	22	15	<.030	.10

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC CORR. (UG/L) (32209)
NOV 28...	<.030	<.04	<.003	<.02	<.004	--	<.004	.3	<.1	1.6	.3	E1.8	--
FEB 07...	.030	<.04	<.002	<.02	E.002	<.020	<.004	.4	<.1	1.7	.4	E1.4	--
JUN 12...	<.030	<.04	<.003	.03	E.003	<.020	.007	.3	<.1	8.1	.2	E1.4	1.30
AUG 08...	.030	<.04	<.003	.03	E.003	<.020	.006	.5	<.1	3.0	.5	<1.0	1.00

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

CEDAR CREEK RIVER BASIN

01408830 CEDAR CREEK AT CEDAR CREST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	RESIDUE TOTAL	
	BORON, DIS-SOLVED (UG/L AS B) (01020)	AT 105 DEG. C, SUS-PENDEDED (MG/L) (00530)
NOV 28...	E7	2
FEB 07...	E7	2
JUN 12...	10	15
AUG 08...	<10	1

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)
MAY 01...	0930	<20	<100	30	MAY 15...	0930	<20	100	10
08...	0915	<20	<100	<10	23...	1125	<20	<100	<10
					30...	1124	<20	<100	10

Remark codes used in this report:
 < -- Less than

MULLICA RIVER BASIN

269

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.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
DEC	17...	14	2.1	.173	.137	764	100	12.0	5.2	32	8.0	7.5	6
FEB	20...	11	1.2	.087	.066	762	104	13.0	4.7	48	14.5	6.0	7
JUN	19...	24	3.1	.411	.322	770	87	7.8	4.7	38	23.0	21.0	5
AUG	19...	1200	8.6	.220	.172	760	75	6.0	5.0	30	32.5	26.5	5

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC	1.29	.631	.71	2.65	<1	4.23	<.1	4.5	5.5	18	--	<.030	.10
FEB	1.52	.795	.81	3.59	--	5.83	<.1	4.7	8.9	30	--	<.030	E.10
JUN	1.08	.553	.52	2.80	1	4.66	<.1	4.0	5.3	27	20	<.030	.23
AUG	1.07	.578	.48	2.31	2	3.75	<.1	2.9	4.2	16	16	<.030	.15

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC	<.030	.09	<.003	.20	.09	<.004	--	.008	1.0	<.1	3.0	1.0	<1.0
FEB	<.030	.08	<.003	--	.03	<.004	<.020	E.003	.6	<.1	2.6	.5	2.4
JUN	<.030	.08	<.003	.31	.12	E.003	<.020	.014	1.5	<.1	7.1	1.5	<1.0
AUG	<.030	<.04	<.003	--	.22	E.002	.027	.015	3.2	<.1	4.4	3.2	<1.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MULLICA RIVER BASIN

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC 17...	--	E10	3
FEB 20...	--	10	4
JUN 19...	10.8	E10	9
AUG 19...	6.70	E8	8

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL 01...	1000	500	200	1400	JUL 15...	1135	<20	<100	<10
08...	0925	20	<100	<10	22...	1015	20	<100	10
					29...	1050	80	<100	20

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

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, 1.1 mi upstream of Sleeper Branch, and 1.3 mi north of Batsto.

DRAINAGE AREA.--47.0 mi².

PERIOD OF RECORD.--Water Years 1997 to 1998, 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV	28...	1100	3.7	.286	.232	768	78	8.5	6.3	56	18.0	12.0	8	1.53
FEB	20...	1100	2.2	.209	.172	765	82	10.1	6.3	55	14.5	6.5	7	1.51
MAY	21...	1130	3.4	.386	.299	770	76	8.3	5.1	54	16.0	12.0	9	1.86
SEP	12...	1000	3.6	.173	.140	762	82	7.8	--	52	22.0	17.5	9	1.93
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV	28...	.969	1.16	4.38	3	8.31	<.1	4.7	4.8	44	28	<.030	.24	<.030
FEB	20...	.888	.83	4.11	1	7.15	<.1	4.7	6.8	34	27	<.030	.13	<.030
MAY	21...	1.10	.72	4.44	1	6.86	E.1	3.6	8.4	48	28	<.030	.26	<.030
SEP	12...	1.04	.59	3.45	1	5.41	<.1	4.5	8.5	49	26	<.030	.17	<.030
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN,PAR TICULATE SUSP SOLVED (MG/L AS P) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV	28...	.10	<.003	.34	.09	E.002	--	.007	1.7	<.1	4.0	1.7	E1.1	--
FEB	20...	.12	.003	.24	<.02	<.004	<.020	E.004	.6	<.1	2.7	.6	E1.3	--
MAY	21...	E.02	<.003	--	.09	E.002	<.020	.013	1.6	<.1	8.2	1.6	E1.7	1.20
SEP	12...	<.04	<.003	--	.12	E.003	<.020	E.003	1.5	<.1	3.1	1.5	E1.8	1.20

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

MULLICA RIVER BASIN

0140940050 MULLICA RIVER AT CONSTABLE BRIDGE, NEAR BATSTO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B (MG/L) (00530) (01020)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
NOV	28...							10					5	
FEB	20...							E7					15	
MAY	21...							E10					8	
SEP	12...							10					11	

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	20...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
FEB	20...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)
FEB	20...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	21...	<.006	<.004	<.005	.008	<.010	<.041	<.005	<.018	<.003	E.003	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

0140940050 MULLICA RIVER AT CONSTABLE BRIDGE, NEAR BATSTO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 21...	<.004	<.035	<.027	<.050	E.010	<.006	.036	<.022	<.01	<.011	.008	<.02	E.037

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

MAY
21... <.009

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MULLICA RIVER BASIN

0140940950 BLUE ANCHOR BROOK AT ELM, NJ

LOCATION.--Lat 39°41'17", long 74°50'06", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30 at Elm, at outlet of Winslow Lake, and 1.4 mi upstream from confluence with Pump Branch.

DRAINAGE AREA.--4.86 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC 03...	1130	.80	1.1	.150	.122	768	81	9.0	6.7	81	14.0	11.0	14	
FEB 13...	1120	.59	2.1	.114	.090	762	93	11.9	6.2	115	9.0	5.0	14	
JUN 03...	1140	.75	2.4	.253	.201	761	87	7.2	6.3	77	24.5	25.0	13	
AUG 19...	1000	.31	2.5	.330	.265	759	54	4.3	6.5	92	32.0	27.0	13	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC 03...	2.98	1.59	1.93	7.21	8	11.0	E.1	.7	9.0	50	39	.080	.34	
FEB 13...	3.21	1.56	1.74	15.4	8	25.9	<.1	.7	7.4	68	62	.070	.26	
JUN 03...	2.68	1.53	1.07	7.93	11	12.5	<.1	1.3	4.2	48	38	.070	.45	
AUG 19...	2.47	1.64	.94	9.54	12	14.0	E.1	1.6	3.4	42	41	.170	.66	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 03...	.150	E.02	<.003	--	.08	.011	--	.022	.7	<.1	2.7	.7	<1.0	
FEB 13...	.080	.23	<.003	.49	.08	.010	<.020	.024	.8	<.1	2.2	.8	E1.7	
JUN 03...	.060	<.04	<.003	--	.12	.023	<.020	.046	1.3	<.1	4.6	1.3	E1.6	
AUG 19...	.180	<.04	<.003	--	.11	.024	.021	.043	.7	<.1	5.1	.7	E1.5	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MULLICA RIVER BASIN

0140940950 BLUE ANCHOR BROOK AT ELM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC			
03...	--	20	6
FEB			
13...	--	20	6
JUN			
03...	10.9	20	7
AUG			
19...	--	20	4

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
29...	1030	<20	<100	10	12...	1130	20	<100	10
JUN					19...	1055	20	100	10
05...	1135	20	<100	50	26...	1110	<20	<100	10

Remark codes used in this report:

< -- Less than

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.

PERIOD OF RECORD.--Water years 1974 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

REVISIONS.--WDR NJ-83-1: Drainage area.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC 10...	1210	7.9	3.1	.163	.132	769	89	10.9	6.2	122	9.0	7.0	23	
FEB 07...	1230	8.8	6.6	.077	.062	757	93	11.6	5.9	134	5.5	5.5	23	
JUN 06...	1210	9.4	34	.255	.202	759	--	6.5	6.3	--	--	21.0	27	
AUG 26...	1250	5.3	5.4	.157	.125	763	89	7.9	6.0	149	31.5	21.0	20	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC 10...	5.22	2.30	4.20	10.8	9	16.7	E.1	7.6	14.1	78	72	<.030	.33	
FEB 07...	5.45	2.40	3.65	11.7	10	18.6	E.1	7.4	13.8	84	77	.030	.26	
JUN 06...	6.19	2.89	5.38	10.1	11	14.1	.1	6.1	18.7	101	76	.180	.60	
AUG 26...	4.70	2.10	4.70	15.4	17	20.4	.1	7.0	12.6	88	81	<.030	.28	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
DEC 10...	.080	1.21	<.003	1.5	.07	.13	--	.19	.7	<.1	4.0	.7	E2.0	
FEB 07...	<.030	1.84	.004	2.1	.10	.06	.025	.23	1.1	<.1	2.4	1.1	<1.0	
JUN 06...	.180	1.22	.009	1.8	.16	.09	.074	.27	1.7	<.1	6.0	1.7	E1.6	
AUG 26...	<.030	.65	.004	.93	.06	.13	.135	.17	.4	<.1	4.5	.3	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

						CHLORO- PHYL A			RESIDUE TOTAL					
						FLUORO- METRIC METHOD	BORON, DIS- SOLVED	AT 105 DEG. C, SUS- PENDED						
						CORR. (UG/L) (32209)	(UG/L) AS B (01020)	(MG/L) (00530)						
DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)	
DEC														
10...						--	40			3				
FEB														
07...						--	40			2				
JUN							4.00			9				
AUG														
26...						10.2	60			5				
AUG	26...	1250	3	27.6	E.04	63	.05	<.8	2.9	640	1	15.4	E.01	<1
								SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)				
AUG	26...						<.4	.21	26					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MULLICA RIVER BASIN

01409435 SKIT BRANCH NEAR HAMPTON GATE, NJ

LOCATION.--Lat 39°47'09", long 74°39'31", Burlington County, Hydrologic Unit 02040301, at bridge on Carranza Road, 0.2 mi upstream from confluence with Roberts Branch, 1.6 mi southeast of Hampton Gate, and 1.6 mi northeast of Hampton Furnace.

DRAINAGE AREA.--4.91 mi².

PERIOD OF RECORD.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV	15...	1100	.9	.074	.061	766	72	8.9	4.8	22	20.5	6.5	2	.30
FEB	14...	1045	.5	.042	.032	773	83	11.5	4.6	30	4.0	2.5	2	.40
MAY	14...	1100	1.2	.214	.167	752	71	6.9	4.5	33	21.0	16.5	2	.33
SEP	10...	1100	1.0	.134	.109	759	66	5.9	4.8	28	32.0	21.0	2	.41
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, AM- MONIA + DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	
NOV	15...	.248	.39	1.53	<1	2.80	<.1	6.0	2.7	<10	.040	<.10	.070	<.04
FEB	14...	.331	.39	1.54	<1	3.00	<.1	5.6	5.7	20	<.030	E.06	<.030	E.02
MAY	14...	.246	.22	1.58	--	2.31	<.1	3.7	6.3	21	<.030	.11	<.030	<.04
SEP	10...	.351	.31	1.67	<1	3.14	<.1	4.4	5.0	15	<.030	.12	<.030	<.04
DATE	TIME	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)
NOV	15...	<.003	.06	<.004	--	<.004	.3	<.1	1.5	.3	<1.0	--	E7	2
FEB	14...	<.003	.03	<.004	<.020	E.003	.4	<.1	1.6	.4	E1.1	--	<13	7
MAY	14...	<.003	.08	<.004	<.020	.004	.8	<.1	4.8	.8	<1.0	.200	E6	9
SEP	10...	<.003	<.02	<.004	<.020	E.003	.4	<.1	2.5	.4	<1.0	.500	E10	6
DATE	TIME	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	
FEB	14...	1045	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01409435 SKIT BRANCH NEAR HAMPTON GATE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)
FEB 14...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	METHYL CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
FEB 14...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
MAY 14...	1100	<.006	<.004	<.005	.009	<.010	<.041	<.005	<.018	<.003	E.004	<.005	<.002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U DIS- SOLVED (UG/L) (82686)	METO- BUZIN LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER WAT FLT 0.7 U DIS- SOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U DIS- SOLV (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 14...	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 14...	<.009

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MULLICA RIVER BASIN

01409435 SKIT BRANCH NEAR HAMPTON GATE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)
JUL					JUL				
01...	1030	<20	<100	<10	15...	1005	<20	<100	10
08...	0950	<20	100	10	22...	0849	<20	<100	10
					29...	1105	110	<200	10

Remark codes used in this report:
 < -- Less than

01409500 BATSTO RIVER AT BATSTO, NJ

LOCATION.--Lat 39°38'33", long 74°39'02", Burlington County, Hydrologic Unit 02040301, at bridge on County Highway 542 at Batsto, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--67.8 mi².

PERIOD OF RECORD.--Water years 1925, 1956, 1962-63, 1976 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD ANCE UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 14...	1130	42	1.0	.040	.032	772	89	10.9	5.6	23	17.0	7.0	3	
FEB 05...	1100	55	1.2	.036	.027	770	91	12.2	5.1	45	-1.0	3.5	8	
MAY 07...	1100	74	1.2	.119	.088	762	93	8.9	4.9	49	26.5	17.5	8	
AUG 13...	1030	36	1.7	.096	.077	765	83	7.1	5.3	22	31.5	23.0	3	
NOV 14...	.60	.437	.53	2.11	1	3.24	<.1	5.9	3.2	20	17	.030	E.10	
FEB 05...	1.59	.953	.79	2.85	1	4.91	<.1	6.5	8.8	30	28	<.030	E.08	
MAY 07...	1.72	.993	.73	3.18	--	5.52	<.1	4.6	9.2	40	--	<.030	.14	
AUG 13...	.52	.381	.42	1.98	2	3.17	<.1	3.7	2.6	18	14	<.030	E.07	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 14...	<.030	.06	<.003	--	.05	<.004	--	E.002	.4	<.1	1.1	.4	<1.0	
FEB 05...	.030	.13	<.002	--	<.02	<.004	<.020	E.004	.5	<.1	1.4	.5	E1.6	
MAY 07...	<.030	.11	<.003	.25	.05	E.002	<.020	.007	.8	<.1	3.7	.8	<1.0	
AUG 13...	<.030	<.04	<.003	--	.08	E.002	<.020	.007	.5	<.1	1.9	.5	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MULLICA RIVER BASIN

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	CHLORO-PHYLL A FLUOROMETRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDEDED (MG/L) (00530)	NITRO-GEN, NH4 + ORG. PH SED TOT IN BOT MAT (STD UNITS) (70310)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG) AS N) (00626)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG) AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG) AS C) (00686)	ARSENIC TOTAL (UG/L) AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L) AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L) AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L) AS B) (01022)
NOV	14...		--	E7	1								
FEB	05...		--	E8	3								
MAY	07...		.900	E9	3								
AUG	13...		.900	E9	5								
AUG	13...	1030 ENVIRONMENTAL	--	--	--	--	--	--	--	<2	12.7	<.06	8
AUG	13...	1030 BED MATERIAL	6.20	40	910	1.2	<.2	--	--	--	--	--	--
AUG	13...	E.02	<.8	<.6	1020	<1	12.2	<.01	<1	<.4	<.05	3	--
AUG	13...	--	--	--	--	--	--	--	--	--	--	<1	.008
AUG	13...	1.1	.165	<2	1700	2.8	8.3	<.01	.521	<1	6.0	E10	E4
AUG	13...	E22	E9	E16	E25	E32	E18	E32	E11	E17	E33	E18	100
AUG	13...	E12	E10	E18	E11	E21	<5	E26	E6	E47	<50	E11	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS,<2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN .004 MM (80157)	% FINER THAN .062 MM (80164)
AUG			
13...	--	--	--
13...	70	.3	.6

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
15...	1115	<20	100	<10	05...	0920	110	<100	20
22...	0955	<20	<100	<10					
29...	1026	<20	<100	<10					

Remark codes used in this report:
< -- Less than

MULLICA RIVER BASIN

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ

LOCATION.--Lat 39°40'30", long 74°32'28", Burlington County, Hydrologic Unit 02040301, at bridge on County Highway 563 in Maxwell, 1.6 mi southeast of Washington, 1.8 mi southwest of Jenkins, and 2.2 mi upstream from confluence with Oswego River.

DRAINAGE AREA.--85.9 mi².

PERIOD OF RECORD.--Water years 1976-93, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
DEC 10...	1030	44	5.3	.111	.091	770	90	11.0	4.7	36	9.0	7.0	4
FEB 07...	1000	60	3.3	.082	.065	760	96	12.6	4.4	37	1.5	4.0	4
JUN 06...	0930	53	8.9	.273	.219	759	88	8.0	4.6	30	26.5	20.0	3
AUG 26...	0940	49	3.6	.059	.043	763	90	8.1	4.1	70	27.0	20.5	6

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
DEC 10...	.79	.432	1.55	2.17	<1	4.12	<1	6.9	6.5	24	<.030	.11	<.030
FEB 07...	.77	.434	1.05	2.24	<1	3.99	<1	6.8	6.5	28	.030	E.06	.030
JUN 06...	.58	.378	.89	2.14	<1	3.80	<1	5.7	5.2	30	.030	E.09	.030
AUG 26...	1.32	.742	2.66	2.62	--	4.36	E.1	5.4	14.8	33	<.030	E.09	<.030

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR-TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY CORR. (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)
DEC 10...	<.04	<.003	.10	.007	--	.066	2.2	<.1	2.4	2.2	E1.6	--	E12
FEB 07...	<.04	<.002	.05	E.003	<.020	.027	.6	<.1	2.0	.6	2.5	--	E10
JUN 06...	E.02	<.003	.23	.004	<.020	.113	5.0	<.1	4.4	5.0	<1.0	3.40	<13
AUG 26...	<.04	<.003	.09	E.003	<.020	.032	1.2	<.1	2.5	1.2	<1.0	1.90	E9

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MULLICA RIVER BASIN

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
DEC 10...	14
FEB 07...	2
JUN 06...	19
AUG 26...	5

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					JUL				
01...	1110	40	<100	60	15...	1030	<20	<100	50
08...	1020	1100	300	260	22...	0915	40	100	50
					29...	0945	<20	200	20

Remark codes used in this report:
< -- Less than

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ

LOCATION.--Lat 39°37'23", long 74°26'30", Burlington County, Hydrologic Unit 02040301, at 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.

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV														
20...	1030	10	.4	.049	.040	760	73	8.4	4.7	37	11.0	9.0	3	
FEB														
26...	1100	8.8	.7	.052	.039	758	72	8.7	4.6	37	15.5	7.0	3	
JUN														
19...	1030	11	.6	.227	.177	771	71	7.0	4.5	37	26.0	16.5	3	
AUG														
15...	1030	9.2	.8	.110	.090	768	63	5.8	4.7	32	30.5	19.5	3	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00610)
NOV														
20...	.42	.483	.56	2.54	<1	4.71	<.1	9.6	4.9	30	<.030	E.06	<.030	
FEB														
26...	.45	.522	.63	2.69	<1	4.67	<.1	9.1	5.4	22	<.030	E.06	.030	
JUN														
19...	.40	.453	.46	2.64	--	4.69	<.1	7.6	5.2	26	<.030	.10	<.030	
AUG														
15...	.39	.417	.62	2.74	<1	4.93	<.1	9.9	3.4	<10	<.030	E.10	<.030	
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY CORR. (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)
NOV														
20...	<.04	<.003	.03	<.004	--	<.004	.3	<.1	1.1	.3	<1.0	--	<13	
FEB														
26...	<.04	<.003	<.02	<.004	<.020	E.003	.2	<.1	1.3	.2	<1.0	--	E8	
JUN														
19...	<.04	<.003	<.02	<.004	<.020	.004	.2	<.1	4.7	.2	<1.0	.400	E11	
AUG														
15...	E.02	<.003	.10	<.004	<.020	E.003	.5	<.1	2.1	.5	<1.0	.500	E9	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MULLICA RIVER BASIN

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, EM WS, <2MM DW, REC (UG/KG)	% FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM.
AUG			
15...	--	--	
15...	E41	.1	

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					JUL				
01...	1200	300	300	70	15...	1045	<20	<100	<10
08...	1050	340	500	80	22...	0925	20	<100	10
					29...	0956	<20	<100	10

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

GREAT EGG HARBOR RIVER BASIN

01411035 HOSPITALITY BRANCH AT BLUE BELL ROAD, NEAR CECIL, NJ

LOCATION.--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 Lakes and 2.0 mi west of Cecil.

DRAINAGE AREA.--4.51 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC 11...	1250	1.1	1.4	.090	.071	767	79	9.1	5.6	58	13.0	9.5	15	
FEB 19...	1210	1.0	1.8	.051	.042	765	93	12.1	5.6	60	13.5	4.5	15	
JUN 03...	0940	.99	3.3	.133	.109	761	62	6.1	5.5	60	17.0	16.0	15	
AUG 20...	1200	.23	2.1	.066	.054	760	86	7.4	5.6	73	--	22.5	19	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC 11...	3.04	1.70	1.61	3.37	5	6.26	<.1	8.4	5.5	52	40	<.030	.13	
FEB 19...	3.16	1.66	2.64	3.24	4	5.44	<.1	7.6	5.6	36	41	.040	E.09	
JUN 03...	3.07	1.73	1.70	3.33	6	6.32	<.1	6.8	5.2	45	38	.030	.14	
AUG 20...	4.39	1.97	2.58	3.08	5	6.05	<.1	7.2	8.6	48	46	<.030	.13	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 11...	<.030	1.56	<.003	1.7	.04	E.003	--	.009	.4	<.1	2.1	.4	E1.2	
FEB 19...	.030	2.04	.004	--	<.02	E.003	<.020	.009	.4	<.1	1.3	.4	E1.8	
JUN 03...	<.030	1.48	.006	1.6	.06	.007	<.020	.026	.9	<.1	2.1	.9	<1.0	
AUG 20...	<.030	1.95	.012	2.1	.04	.004	<.020	.017	.4	<.1	1.4	.4	<1.0	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

GREAT EGG HARBOR RIVER BASIN

01411035 HOSPITALITY BRANCH AT BLUE BELL ROAD, NEAR CECIL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC 11...	--	E10	<1
FEB 19...	--	<13	8
JUN 03...	5.00	E7	9
AUG 20...	2.80	E9	6

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY 29...	1045	300	200	260	JUN 12...	1055	300	300	90
JUN 05...	1035	130	<100	210	JUN 19...	1125	300	200	80
					JUN 26...	1130	170	<100	50

Remark codes used in this report:
< -- Less than

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 definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 29...	1230	72	1.1	.080	.061	770	93	10.0	6.2	51	16.0	12.5	10
FEB 13...	0940	94	2.0	.075	.058	762	93	11.6	6.0	58	7.0	6.0	10
JUN 06...	1140	118	8.4	.183	.143	760	91	8.2	5.6	46	39.0	20.5	9
AUG 15...	1040	44	2.2	.075	.059	766	92	8.1	6.2	45	34.0	22.0	8

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 29...	1.96	1.13	1.32	4.84	4	7.99	<.1	6.9	5.3	40	34	<.030	.16
FEB 13...	2.11	1.26	1.21	5.85	3	9.90	<.1	7.4	6.5	44	39	.110	.20
JUN 06...	1.75	1.10	1.13	4.39	3	7.14	<.1	6.1	5.3	48	31	<.030	.15
AUG 15...	1.57	.984	1.04	4.71	4	7.38	<.1	5.4	4.4	25	30	<.030	E.10

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 29...	.030	.52	<.003	.68	<.02	E.003	--	.009	.5	<.1	2.1	.4	<1.0
FEB 13...	.120	.64	<.003	.84	.02	.005	<.020	.012	.5	<.1	2.1	.5	<1.0
JUN 06...	<.030	.54	<.003	.69	.24	.006	<.020	.067	4.4	<.1	3.6	4.4	<1.0
AUG 15...	<.030	.55	<.003	--	.06	.006	<.020	.014	.6	<.1	1.8	.6	<1.0

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

GREAT EGG HARBOR RIVER BASIN

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)
NOV 29...	--	50	<1
FEB 13...	--	40	9
JUN 06...	6.20	30	16
AUG 15...	1.60	50	7

DATE	TIME	SAMPLE TYPE	ARSENIC TOTAL (UG/L) AS AS (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L) AS BA (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE (01012)	BORON, TOTAL RECOV- ERABLE (UG/L) AS B (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, DIS- SOLVED (UG/L) AS CU (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	IRON, TOTAL RECOV- ERABLE (UG/L) AS FE (01045)
AUG 15...	1039	FIELD BLANK	--	--	--	--	--	--	<.2	--	--
AUG 15...	1040	ENVIRONMENTAL	<2	28.2	E.03	49	E.03	<.8	--	.9	490

DATE	LEAD, DIS- SOLVED (UG/L) AS PB (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN (01055)	MERCURY DIS- SOLVED (UG/L) AS HG (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)	NICKEL, DIS- SOLVED (UG/L) AS NI (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI (01067)	SELE- NIUM, TOTAL ERABLE (UG/L) AS SE (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L) AS AG (01077)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)
AUG 15...	<.08	--	--	<.01	--	<.06	--	--	--	<1	--
AUG 15...	--	<1	8.9	--	E.01	--	1	<.4	<.05	--	22

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

GREAT EGG HARBOR RIVER BASIN

293

01411196 BABCOCK CREEK NEAR MAYS LANDING, NJ

LOCATION.--Lat 39°28'08", long 74°41'34", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322, 1.1 mi east from intersection of U.S. Route 50, 2.2 mi northeast of Mays Landing, and 2.8 mi upstream from Watering Race Branch.

DRAINAGE AREA.--16.3 mi².

PERIOD OF RECORD.--Water years 1965, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD ANCE UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-AIRE (DEG C) (00020)	TEMPER-AIRE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 29...	1000	5.0	.7	.142	.113	770	72	7.8	5.1	43	15.0	12.0	8
FEB 12...	1650	5.8	.8	.077	.060	--	--	11.4	5.1	59	8.5	6.5	9
JUN 06...	1000	5.3	.7	.111	.089	760	80	7.7	5.0	36	27.0	17.0	7
AUG 15...	1310	1.6	.9	.112	.093	766	73	6.5	5.2	34	35.0	21.5	6

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 29...	1.47	1.13	.83	3.49	2	6.46	E.1	9.1	4.3	42	31	<.030	.15
FEB 12...	1.52	1.18	.77	6.69	2	11.7	<.1	8.9	4.5	46	40	<.030	E.09
JUN 06...	1.09	.942	.69	3.33	2	6.28	<.1	5.6	3.2	34	25	<.030	.11
AUG 15...	.91	.956	.74	3.07	2	6.12	<.1	3.9	2.4	34	22	<.030	.15

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 29...	<.030	.69	<.003	.84	<.02	E.002	--	.006	.4	<.1	3.4	.4	E1.0
FEB 12...	.100	.68	<.003	--	<.02	E.003	<.020	.005	.3	<.1	2.2	.3	E1.2
JUN 06...	.070	.63	<.003	.74	<.02	.004	<.020	.010	.5	<.1	2.1	.5	<1.0
AUG 15...	.040	.60	<.003	.75	.05	.012	<.020	.015	.6	<.1	2.0	.6	<1.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

GREAT EGG HARBOR RIVER BASIN

01411196 BABCOCK CREEK NEAR MAYS LANDING, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV 29...	--	E10	<1
FEB 12...	--	E10	9
JUN 06...	.600	<13	5
AUG 15...	1.60	E7	8

Remark codes used in this report:

< -- Less than
E -- Estimated value

TUCKAHOE RIVER BASIN

295

01411290 TUCKAHOE RIVER NEAR ESTELL MANOR, NJ

LOCATION.--Lat 39°22'19", long 74°51'14", Atlantic County, Hydrologic Unit 02040302, at bridge on Cumberland Avenue, at Atlantic-Cumberland County boundary, 0.8 mi upstream from Sharps Branch, and 2.8 mi west of Estell Manor.

DRAINAGE AREA.--8.78 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV	07...	1.0	.150	.123	763	79	9.3	6.5	35	16.0	8.5	6	1.03	
FEB	20...	4.2	.090	.073	762	86	10.6	6.3	34	13.5	6.5	6	1.03	
MAY	14...	0930	1.0	.270	750	96	8.9	5.2	34	17.0	18.0	6	.90	
AUG	07...	1000	1.3	.159	764	42	3.7	6.1	33	22.0	22.0	6	1.01	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
NOV	07...	.817	.92	2.84	6	4.63	<.1	4.8	1.4	32	20	.060	.26	.070
FEB	20...	.861	.77	2.59	5	4.61	<.1	5.7	2.3	26	22	.060	.28	.060
MAY	14...	.875	.50	2.72	1	4.16	<.1	5.8	4.3	<10	20	<.030	.27	<.030
AUG	07...	.888	.94	2.71	6	5.06	<.1	2.0	1.5	32	18	.040	.49	.050
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	
NOV	07...	.14	<.003	.40	.05	.005	--	.011	.5	<.1	4.2	.4	E1.1	--
FEB	20...	.21	.003	.49	.14	.008	<.020	.017	1.5	E.1	2.2	E1.4	<1.0	--
MAY	14...	<.04	.004	--	.03	.005	<.020	.009	.6	<.1	7.4	.6	E1.6	1.30
AUG	07...	E.03	<.003	--	.08	.009	.020	.020	.8	<.1	4.9	.8	E1.1	4.10

Remark codes used in this report:

< -- Less than
E -- Estimated value

TUCKAHOE RIVER BASIN

01411290 TUCKAHOE RIVER NEAR ESTELL MANOR, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL											
		BORON, AT 105 DEG. C, DIS-SOLVED (UG/L AS B) (01020) PENDEDED (MG/L) (00530)											
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)
NOV	07...							E6					2
FEB	20...							E9					4
MAY	14...							E11					6
AUG	07...							E12					<1

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	20...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)
FEB	20...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA-BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL-ATRA-ZINE, WATER DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	14...	<.006	<.004	<.005	.021	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

Remark codes used in this report:
 < -- Less than

01411290 TUCKAHOE RIVER NEAR ESTELL MANOR, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 14...	<.004	<.035	<.027	<.050	E.010	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

MAY
14... <.009

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

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, 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.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV	07...	1045	.8	.116	.096	766	83	10.0	6.3	31	14.0	7.5	6	1.14
FEB	04...	1045	1.3	.077	.062	756	93	11.8	6.1	36	6.0	5.0	6	1.25
MAY	07...	0900	1.7	.444	.340	761	81	8.0	4.5	46	22.0	16.0	6	1.04
SEP	04...	0930	.9	.334	.254	762	71	6.4	4.3	67	27.0	21.0	10	1.78
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
NOV	07...	.675	.70	2.79	4	4.60	<.1	8.2	2.5	26	23	.060	.13	.050
FEB	04...	.799	.71	2.67	3	4.89	<.1	8.5	4.4	30	26	<.030	E.09	.030
MAY	07...	.770	.50	2.96	--	5.14	<.1	5.6	6.9	41	--	.040	.29	<.030
SEP	04...	1.43	.57	3.55	--	5.65	<.1	10.6	15.2	56	--	<.030	.30	<.030
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)
NOV	07...	E.04	<.003	.03	.007	--	.009	.3	<.1	2.3	.3	<1.0	--	E7
FEB	04...	.13	<.003	.05	.006	<.020	.011	.4	<.1	1.7	.3	<1.0	--	10
MAY	07...	<.04	<.003	.37	.008	<.020	.014	3.1	<.1	10.0	3.1	<1.0	1.40	E10
SEP	04...	<.04	<.003	.05	.008	<.020	.013	.4	<.1	8.9	.3	<1.0	1.60	20

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)												
		DATE												
		NOV 07... 2												
		FEB 04... 14												
		MAY 07... <1												
		SEP 04... 5												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
FEB	04...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	04...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)				
FEB	04...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2				

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	07...	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

Remark codes used in this report:
 < -- Less than

TUCKAHOE RIVER BASIN

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 07...	<.004	<.035	<.027	<.050	.024	<.006	<.007	<.022	<.01	<.011	.020	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 07...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN					JUL				
05...	1000	<20	200	80	02...	1000	20	<100	30
12...	1015	20	<100	10					
19...	1020	20	100	10					
26...	1015	<20	<100	<10					

Remark codes used in this report:
< -- Less than

FISHING CREEK BASIN

301

01411400 FISHING CREEK AT RIO GRANDE, NJ

LOCATION.--Lat 39°01'39", long 74°53'48", Cape May County, Hydrologic Unit 02040206, at bridge on State Route 47 at Wildwood Pumping Station, and 1.4 mi northwest of Rio Grande.

DRAINAGE AREA.--2.29 mi².

PERIOD OF RECORD.--Water year 1965, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD ANCE UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)
DEC 13...	1010	.25	2.0	.386	.293	763	85	9.6	7.0	160	12.0	10.0	44
FEB 12...	1040	E.73	1.5	.504	.390	769	93	11.7	6.3	152	9.5	6.0	41
JUN 18...	1010	.45	2.5	.891	.691	765	86	7.2	6.8	130	27.0	24.5	33
AUG 21...	1000	.03	6.2	.720	.534	769	35	2.9	6.7	171	--	25.5	46

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC 13...	11.0	4.02	2.34	12.7	23	20.4	<.1	4.1	17.1	112	86	.040	.51
FEB 12...	10.3	3.75	1.71	13.4	16	22.0	<.1	5.9	24.1	118	91	.030	.50
JUN 18...	8.69	2.77	1.25	10.7	22	16.1	E.1	4.0	8.8	104	66	.030	.77
AUG 21...	12.5	3.57	1.73	16.7	37	25.0	<.1	3.6	6.3	130	92	.130	.88

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 13...	.030	.06	.003	.57	.07	.010	--	.024	.4	<.1	9.9	.4	E1.8
FEB 12...	.030	<.04	<.003	--	.07	.009	<.020	.028	.7	<.1	12.9	.7	2.1
JUN 18...	.050	<.04	<.003	--	.14	.024	<.020	.046	1.0	<.1	18.7	1.0	E1.0
AUG 21...	.130	.05	.007	.93	.24	.024	.021	.087	1.5	<.1	19.3	1.4	2.1

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

FISHING CREEK BASIN

01411400 FISHING CREEK AT RIO GRANDE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
DEC			
13...	--	20	4
FEB			
12...	--	20	5
JUN			
18...	8.70	30	3
AUG			
21...	24.7	50	12

01411427 DENNIS CREEK TRIBUTARY 2 ON LITTLE ROAD, AT DENNISVILLE, NJ

LOCATION.--Lat 39°12'23", long 74°49'22", Cape May County, Hydrologic Unit 02040206, 0.3 mi upstream of Johnson Pond, 1.0 mi north of Dennisville, and 1.5 mi southwest of Woodbine Municipal Airport.

DRAINAGE AREA.--2.77 mi

PERIOD OF RECORD.--December 2001 to September 2002. Data was collected 0.9 mi downstream at 01411428 Dennis Creek Tributary 2 at Dennisville during water years 2000-01.

REMARKS.--Site is tide-affected; all samples collected at low tide. Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD ANCE UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	
DEC	11...	0800	.8	.080	.064	765	78	9.5	5.4	63	7.0	7.0	10	1.21
MAR	05...	0800	.7	.062	.048	767	69	9.0	5.2	73	-9.0	4.5	11	1.36
JUL	10...	0745	2.0	.083	.068	762	55	5.3	5.1	67	23.0	17.0	10	1.13
SEP	12...	0715	.9	.048	.039	748	67	6.8	5.1	64	10.0	14.0	10	.99
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CaCO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00610)
DEC	11...	1.71	1.67	5.32	2	9.88	<.1	8.8	6.7	48	39	<.030	.11	<.030
MAR	05...	1.92	1.92	5.44	2	9.62	<.1	9.7	9.1	44	44	.050	E.09	.190
JUL	10...	1.71	2.07	5.60	3	9.28	<.1	7.6	6.1	49	38	<.030	.16	<.030
SEP	12...	1.77	1.81	5.76	2	9.21	<.1	8.6	6.3	51	39	.038	.12	<.030
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY CORR. (MG/L) (00310)	CHLORO-FLUORO-METRIC METHOD (UG/L) (32209)
DEC	11...	.72	<.003	.83	.03	E.003	--	.007	.8	<.1	2.4	.8	<1.0	--
MAR	05...	.78	<.003	--	.04	<.004	<.020	.004	.7	<.1	2.3	.7	<1.1	--
JUL	10...	.64	<.003	.80	.05	.007	<.020	.019	.7	<.1	2.1	.7	<1.0	1.30
SEP	12...	.68	<.003	.79	.03	E.004	<.020	.004	.4	<.1	1.8	.4	E2.2	2.00

Remark codes used in this report:

< -- Less than
E -- Estimated value

DENNIS CREEK BASIN

01411427 DENNIS CREEK TRIBUTARY 2 ON LITTLE ROAD, AT DENNISVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL											
		BORON, AT 105 DEG. C, DIS-SOLVED (UG/L AS B) (01020) PENDEDED (MG/L) (00530)											
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)
DEC	11...							E10					6
MAR	05...							E9					5
JUL	10...							20					2
SEP	12...							10					3

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
MAR	05...	<.1	<.2	.2	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	E.1

DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)
MAR	05...	<.2	<.2	<.1	<.1	.4	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA-BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
JUL	10...	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01411444 WEST CREEK NEAR LEESBURG, NJ

LOCATION.--Lat 39°15'36", long 74°54'42", Cumberland County, Hydrologic Unit 02040206, at bridge on County Route 550, 1.5 mi upstream of Hands Millpond, 2.4 mi south of Halberton, and 4.0 mi east of Leesburg.

DRAINAGE AREA.--6.64 mi².

PERIOD OF RECORD.--Water years 1999 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
DEC 13...	1230	1.0	1.0	.150	.114	760	80	9.0	4.2	55	13.0	10.0	5
FEB 12...	1240	E5.0	7.2	.172	.129	769	92	11.9	4.1	60	11.5	5.0	5
JUN 18...	1210	1.4	1.1	.609	.469	766	87	7.5	4.0	51	27.0	23.0	4
SEP 04...	0920	.35	2.9	.384	.281	762	47	4.0	3.9	116	23.0	23.5	16

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
DEC 13...	.53	.777	.85	2.89	4.54	<.1	13.0	8.5	36	<.030	.12	<.030	E.03
FEB 12...	.60	.917	.91	3.17	5.19	<.1	12.0	10.3	40	<.030	.15	<.030	.18
JUN 18...	.49	.591	.28	2.43	4.95	<.1	7.9	5.7	42	<.030	.39	<.030	<.04
SEP 04...	2.16	2.64	.94	4.89	7.76	E.1	15.3	27.1	84	<.030	.37	<.030	<.04

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY CORR. (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)
DEC 13...	<.003	--	.03	E.002	--	E.003	.3	<.1	4.0	.3	E1.2	--	E8
FEB 12...	<.003	.33	.19	.004	<.020	.015	2.7	<.1	5.0	2.7	E1.2	--	E10
JUN 18...	<.003	--	.05	.004	<.020	.009	.4	<.1	13.6	.4	<1.0	1.00	E10
SEP 04...	<.003	--	.07	.004	.022	.013	.4	<.1	12.3	.4	2.3	1.20	30

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01411444 WEST CREEK NEAR LEESBURG, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYLENE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHYLENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
DEC	13...													
FEB	12...													
JUN	18...													
SEP	04...													
FEB	12...	1240	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHYLENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	12...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYLENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYLENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)				
FEB	12...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2				

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)	
JUN	18...	1210	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

Remark codes used in this report:
 < -- Less than

WEST CREEK BASIN

01411444 WEST CREEK NEAR LEESBURG, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 18...	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 18...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN	05...	20	<100	<10	JUN	02...	<20	<100	<10
	12...	<20	<100	<10		1058	<20	<100	<10
	19...	20	100	10					
	26...	<20	<100	10					

Remark codes used in this report:
< -- Less than

01411452 STILL RUN AT LITTLE MILL ROAD, NEAR CLAYTON, NJ

LOCATION.--Lat 39°38'08", long 75°05'59", Gloucester County, Hydrologic Unit 02040206, at bridge on Little Mill Road, 1.3 mi downstream of Silver Lake, and 1.5 mi south of Clayton.

DRAINAGE AREA.--10.6 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV 29...	1000	2.5	.101	.077	769	71	7.5	6.5	122	13.5	13.0	28	5.49
FEB 26...	1000	4.0	.053	.042	755	83	9.9	6.5	133	19.0	7.5	29	5.56
MAY 30...	1000	1.4	.151	.118	760	74	7.0	6.6	124	25.0	18.0	28	5.35
AUG 13...	1000	1.7	.091	.072	762	53	4.7	6.6	126	31.0	21.0	29	5.71
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 29...	3.50	2.58	8.59	17	16.5	E.1	5.3	6.9	70	64	.050	.24	.040
FEB 26...	3.57	2.33	10.2	12	17.2	<.1	5.5	9.8	68	71	<.030	.15	<.030
MAY 30...	3.47	2.17	9.94	18	17.0	E.1	5.1	7.4	67	68	.050	.27	.080
AUG 13...	3.51	1.59	10.5	24	15.4	<.1	8.5	2.8	81	70	.040	.14	.030
DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 29...	1.10	<.003	1.3	.12	E.002	--	.018	1.2	<.1	2.7	1.2	<1.0	--
FEB 26...	2.17	.007	2.3	.13	E.004	<.020	.021	1.3	<.1	1.5	1.3	E1.3	--
MAY 30...	1.38	.003	1.6	.04	.007	<.020	.018	.4	<.1	3.2	.4	<1.0	2.90
AUG 13...	1.58	.003	1.7	.09	.004	<.020	.009	.3	<.1	2.3	.3	<1.0	.800

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

MAURICE RIVER BASIN

01411452 STILL RUN AT LITTLE MILL ROAD, NEAR CLAYTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
NOV	29...													
FEB	26...	<.1	<.1	<.1	.2	<.1	<.1	<.1	<.1	<.1	.4	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF (UG/L)
FEB	26...	<.1	<.2	<.1	<.1	<.1	<.2	.5	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)					
FEB	26...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2					

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	30...	<.006	<.004	<.005	.020	<.010	<.041	<.005	<.018	<.003	E.008	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01411452 STILL RUN AT LITTLE MILL ROAD, NEAR CLAYTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 30...	<.004	<.035	<.027	<.050	.027	<.006	<.007	<.022	E.01	<.011	<.005	E.01

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 30...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY 29...	1015	170	<100	50	JUN 12...	1025	170	300	130
JUN 05...	1005	230	300	140	JUN 19...	1055	170	100	100
					JUN 26...	1100	70	<100	110

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MAURICE RIVER BASIN

01411466 INDIAN BRANCH NEAR MALAGA, NJ

LOCATION.--Lat 39°35'27", long 75°03'36", Gloucester County, Hydrologic Unit 02040206, at bridge on U.S. Route 47 (Delsea Drive), 0.4 mi upstream of Malaga Lake, and 1.4 mi north of Malaga.

DRAINAGE AREA.--6.50 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC	11...	1040	3.6	2.6	.175	.137	767	86	10.1	5.5	43	12.5	8.5	8
FEB	19...	1000	3.2	2.3	.127	.100	767	92	12.2	4.7	44	6.0	4.0	7
JUN	18...	1320	5.1	.9	.805	.626	766	--	--	4.1	55	31.0	16.5	7
AUG	20...	1000	.65	1.7	.487	.404	760	48	4.2	5.2	36	29.5	22.0	5
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC	11...	1.48	1.14	.95	3.14	<1	5.86	<.1	9.6	4.6	42	--	<.030	.16
FEB	19...	1.24	1.05	.90	2.93	1	4.46	<.1	8.5	5.6	30	28	<.030	.15
JUN	18...	1.15	.903	.72	2.83	--	5.03	<.1	8.1	6.4	56	--	.030	.49
AUG	20...	.89	.784	1.12	2.99	3	5.40	<.1	10.5	2.8	43	27	.080	.44
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC	11...	<.030	.57	<.003	.73	.07	E.003	--	.013	.3	<.1	4.1	.3	<1.0
FEB	19...	.040	.58	<.003	.73	<.02	E.003	<.020	.008	.8	E.1	3.2	E.6	<1.0
JUN	18...	.090	.47	<.003	.96	.05	.008	<.020	.012	.4	<.1	15.8	.4	<1.0
AUG	20...	.130	.15	.005	.60	.14	.033	.031	.044	.7	<.1	6.9	.7	<1.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MAURICE RIVER BASIN

01411466 INDIAN BRANCH NEAR MALAGA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC			
11...	--	E10	15
FEB			
19...	--	<10	7
JUN			
18...	.500	20	2
AUG			
20...	3.50	E8	3

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
29...	1030	40	<100	10	12...	1035	40	<100	30
JUN					19...	1110	40	100	20
05...	1020	90	100	40	26...	1110	80	100	50

Remark codes used in this report:

< -- Less than

E -- Estimated value

01411500 MAURICE RIVER AT NORMA, NJ

LOCATION.--Lat 39°29'44", long 75°04'38", Salem County, Hydrologic Unit 02040206, at bridge on Almond Road (County Route 540) in Norma, 0.8 mi downstream from Blackwater Branch, and 2.9 mi west of Vineland.

DRAINAGE AREA.--112.0 mi².

PERIOD OF RECORD.--Water years 1953, 1962-63, 1965 to September 1997, December 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD ANCE UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC 04...	1000	67	1.1	.066	.052	772	86	10.0	6.6	96	12.0	9.5	22	
FEB 07...	1000	71	1.1	.072	.055	762	92	11.9	6.6	107	3.5	4.5	22	
MAY 29...	0830	79	1.7	.183	.141	765	81	7.5	6.1	94	23.0	19.5	21	
AUG 08...	1000	36	1.1	.077	.061	765	86	8.1	6.5	104	25.0	18.5	20	
DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC 04...	4.45	2.57	2.34	6.68	10	11.4	<.1	5.3	6.6	54	53	<.030	.17	
FEB 07...	4.59	2.67	1.72	8.52	7	12.6	<.1	5.9	9.4	64	59	<.030	.19	
MAY 29...	4.16	2.46	1.72	7.28	8	12.0	E.1	4.1	7.7	58	--	.040	.27	
AUG 08...	4.11	2.36	2.08	10.0	11	13.3	E.1	5.1	6.2	67	--	<.030	.32	
DATE	TIME	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 04...		.030	1.84	<.003	2.0	.03	.004	--	.007	.4	<.1	2.0	.4	<1.0
FEB 07...		<.030	2.11	.004	2.3	.05	.005	<.020	.007	.4	<.1	2.3	.4	<1.0
MAY 29...		<.030	--	<.004	--	.10	.008	<.020	.013	1.4	<.1	3.5	1.4	<1.0
AUG 08...		<.030	--	<.003	--	.09	.005	<.020	.009	.5	<.1	2.3	.5	E1.5

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MAURICE RIVER BASIN

315

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

			CHLORO- PHYLL A FLUORO- METRIC METHOD	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED											
DATE			CORR. (UG/L) (32209)	(UG/L) AS B (01020)	(MG/L) AS B (00530)										
DEC	04...		--	30	1										
FEB	07...		--	30	4										
MAY	29...		.900	40	5										
AUG	08...		.500	20	1										
			PH SED TOT IN BED MAT (STD UNITS) (70310)	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL ERABLE (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)				
DATE	TIME	SAMPLE TYPE													
AUG	08...	1000 ENVIRONMENTAL	--	--	--	--	--	6	68.4	E.03	30				
08...	1000	BED MATERIAL	6.40	40	150	.7	<.2	--	--	--	--				
			CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)
AUG	08...	.04	<.8	.7	340	<1	34.7	.02	2	<.4	<.05	7	--	--	
08...		--	--	--	--	--	--	--	--	--	--	--	3	.017	
			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 (01043)	IRON, SEDIMT, BED MA- TERIAL (UG/G) AS FE (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS PB (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS HG (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS NI (01068)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS ZN (01093)	4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)
AUG	08...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08...		<.4	.965	<2	810	3.6	42	.03	.590	<1	<3.1	<50	<50	<50	<50
			ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT DRY WGT REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)
AUG	08...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08...		<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
			ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPHTHAL ENE, 236 TRIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPHTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)
AUG	08...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08...		<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

MAURICE RIVER BASIN

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, EM WS, <2MM	BED MAT. SIEVE DIAM. % FINER
	DW, REC (UG/KG) (49387)	THAN .062 MM (80164)
AUG		
08...	--	--
08...	<50	.2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN					JUL				
05...	0913	80	<100	80	02...	0935	800	300	140
12...	0912	230	<100	70					
19...	0913	40	200	100					
26...	0914	<20	<100	70					

Remark codes used in this report:
< -- Less than

MAURICE RIVER BASIN

317

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ

LOCATION.--Lat 39°20'14", long 75°03'04", Cumberland County, Hydrologic Unit 02040206, at bridge on Battle Lane, 0.3 mi upstream from mouth and Buckshutem Creek, 1.1 mi west of community of Laurel Lake, and 2.5 mi southeast of Millville Municipal Airport.

DRAINAGE AREA.--3.19 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
------	------	---	---	--	--	--	---	-----------------------------------	--	---	----------------------------------	------------------------------------	---

DEC	06...	1130	.52	1.3	.073	.061	764	80	8.8	5.4	23	14.0	11.0	4
FEB	12...	1420	.64	1.5	.057	.045	769	90	11.4	5.3	26	9.0	5.5	5
JUN	11...	1100	.60	1.1	.090	.072	760	83	8.2	4.7	23	31.0	16.0	4
AUG	21...	1220	.09	1.3	.145	.119	769	66	5.6	5.4	23	30.5	24.0	5

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
------	---	---	--	---	---	--	---	---	-------------------------------	---	---	---	--

DEC	06...	.61	.596	.48	2.01	2	4.08	E.1	7.1	2.0	22	19	<.030	E.06
FEB	12...	.70	.718	.54	2.39	2	4.45	<.1	7.0	2.8	22	21	<.030	<.10
JUN	11...	.53	.549	.42	2.23	2	3.85	E.1	4.1	1.7	15	15	<.030	E.07
AUG	21...	.71	.675	.55	1.87	3	3.72	<.1	7.6	1.6	29	20	<.030	.14

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
------	--	---	---	---	--	--	--	---------------------------------------	---	---	--	--	--

DEC	06...	<.030	.15	<.003	--	.13	E.002	--	.004	3.2	<.1	1.6	3.2	E1.0
FEB	12...	<.030	.21	<.003	--	.04	.005	<.020	.007	1.3	<.1	1.7	1.3	E1.6
JUN	11...	<.030	.13	<.003	--	<.02	<.004	<.020	E.003	.4	<.1	1.7	.4	<1.0
AUG	21...	<.030	.23	<.003	.38	.08	.005	<.020	.011	1.0	<.1	2.4	1.0	<1.0

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

MAURICE RIVER BASIN

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED SUS-AS B) (UG/L) (01020)	RESIDUE TOTAL AT 105 DEG. C, PENDEDED (MG/L) (00530)										
DEC	06...	--	<10	5										
FEB	12...	--	E7	15										
JUN	11...	5.00	E10	8										
AUG	21...	1.20	E10	4										

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE UNFLTRD REC (UG/L) (34566)	BENZENE UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102)
FEB	12...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (77093)	BROMO-DI-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL-TERT-BUTYL-ETHER WAT UNF REC (UG/L) (78032)
FEB	12...	<.1	<.2	.2	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L) (34423)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)
FEB	12...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA-BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC, (UG/L) (39632)	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)	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)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
JUN	11...	<.006	<.004	<.005	E.003	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 11...	<.004	<.035	<.027	<.050	E.002	<.006	<.007	<.022	<.01	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 11...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN	05...	40	<100	80	JUL	02...	500	700	130
	12...	20	<100	10					
	19...	80	200	70					
	26...	20	<100	30					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

COHANSEY RIVER BASIN

01412800 COHANSEY RIVER AT SEELEY, NJ

LOCATION.--Lat 39°28'21", long 75°15'21", Cumberland County, Hydrologic Unit 02040206, at 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 definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC 11...	1020	25	3.5	.070	.055	767	91	10.5	7.0	230	10.0	9.5	60	
FEB 14...	1110	17	7.2	.033	.025	772	102	13.0	6.4	220	3.5	5.5	60	
JUN 18...	1010	26	23	.179	.141	766	--	--	6.2	185	25.0	19.0	49	
AUG 22...	1020	6.3	4.8	.091	.074	769	71	6.7	6.4	320	26.5	18.5	50	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC 11...	11.8	7.41	6.91	11.4	17	25.7	<.1	9.6	23.3	136	130	.070	.33	
FEB 14...	11.9	7.44	4.55	10.7	12	25.6	<.1	9.2	24.8	120	129	<.030	.19	
JUN 18...	9.67	6.05	5.69	9.84	14	20.4	.1	7.8	22.4	114	109	.040	.35	
AUG 22...	9.62	6.20	14.2	29.2	23	47.2	E.1	10.7	19.5	173	173	1.10	1.5	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
DEC 11...	.070	5.45	.026	5.8	.05	.013	--	.043	.6	<.1	2.3	.6	<1.0	
FEB 14...	<.030	6.19	.010	6.4	.09	.004	<.020	.035	.8	<.1	1.3	.7	E1.6	
JUN 18...	.050	4.09	.024	4.4	.10	.019	<.020	.114	1.1	<.1	4.0	1.1	<1.0	
AUG 22...	1.10	4.72	.374	6.3	.06	.038	.033	.155	.4	<.1	2.6	.4	3.2	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)
DEC 11...	--	20	12
FEB 14...	--	20	9
JUN 18...	1.40	20	9
AUG 22...	1.30	20	7

DATE	TIME	SAMPLE TYPE	ARSENIC TOTAL (UG/L) AS AS (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L) AS BA (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE (01012)	BORON, TOTAL RECOV- ERABLE (UG/L) AS B (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, DIS- SOLVED (UG/L) AS CU (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	IRON, TOTAL RECOV- ERABLE (UG/L) AS FE (01045)
AUG 22...	0859	SPLITTER BLANK	--	--	--	--	--	--	<.2	--	--
22...	0900	FIELD BLANK	--	--	--	--	--	--	.4	--	--
22...	1020	ENVIRONMENTAL	<13	63.3	E.04	21	.09	<.8	--	1.3	800

DATE	LEAD, DIS- SOLVED (UG/L) AS PB (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN (01055)	MERCURY DIS- SOLVED (UG/L) AS HG (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)	NICKEL, DIS- SOLVED (UG/L) AS NI (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI (01067)	SELE- NIUM, TOTAL ERABLE (UG/L) AS SE (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L) AS AG (01077)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)
AUG 22...	--	--	--	--	--	<.06	--	--	--	<1	--
22...	<.08	--	--	<.01	--	.35	--	--	--	10	--
22...	--	<1	104	--	E.01	--	2	.4	<.05	--	6

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN 05...	0935	<20	<100	100	JUL 02...	0955	<20	<100	20
12...	0934	40	<100	360					
19...	0938	330	100	260					
26...	0933	<20	<100	20					

Remark codes used in this report:
< -- Less than
E -- Estimated value

COHANSEY RIVER BASIN

01413013 BARRETT RUN AT BRIDGETON, NJ

LOCATION.--Lat 39°26'46", long 75°14'52", Cumberland County, Hydrologic Unit 02040206, at bridge on West Avenue, 400 ft downstream of Mary Elmer Lake in Bridgeton, 1,300 ft upstream of Sunset Lake, and 2.2 mi northeast of Bowentown.

DRAINAGE AREA.--7.58 mi².

PERIOD OF RECORD.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
DEC 06...	0900	9.6	.078	.064	764	83	9.3	7.1	180	15.2	10.5	52	10.5	
FEB 14...	1000	10	.054	.043	774	91	11.8	7.4	165	-1.5	5.0	51	10.3	
MAY 23...	1000	44	--	--	766	98	9.5	--	128	15.5	17.0	42	9.03	
SEP 04...	1000	7.2	.082	.062	760	84	7.2	7.6	152	24.0	23.0	46	8.75	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
DEC 06...	6.37	3.29	6.49	18	18.1	<.1	7.4	18.2	98	94	.050	.26	.090	
FEB 14...	6.19	2.56	8.59	14	20.9	<.1	6.6	18.0	94	98	.030	.16	.040	
MAY 23...	4.78	3.82	4.53	18	11.6	E.1	1.1	13.4	85	69	.160	.48	.170	
SEP 04...	5.88	3.72	6.03	17	15.1	E.1	1.3	20.0	84	75	<.030	.31	<.030	
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570)	PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
DEC 06...	2.80	.010	3.1	.13	.004	--	.032	1.0	<.1	2.1	1.0	E1.5	--	
FEB 14...	3.73	.012	3.9	.14	.004	<.020	.028	.9	<.1	1.7	.8	2.8	--	
MAY 23...	2.24	.036	2.7	.23	.011	<.020	.153	1.4	<.1	3.4	1.4	2.4	29.1	
SEP 04...	.91	.013	1.2	.23	.013	<.020	.049	1.5	<.1	3.6	1.5	2.5	24.9	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01413013 BARRETT RUN AT BRIDGETON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
DEC	06...													
FEB	14...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL-WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL-METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	14...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)					
FEB	14...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2					

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	23...	0.020	1.11	<.005	.043	<.010	E1.58	<.005	.465	E.003	E.022	.127	.012

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

COHANSEY RIVER BASIN

01413013 BARRETT RUN AT BRIDGETON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 23...	<.004	.304	<.027	E.151	.639	.037	.009	<.022	E.01	<.011	.266	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 23...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN	05...	300	<100	70	JUL	02...	40	<100	30
	12...	80	<100	80					
	19...	20	100	10					
	26...	20	<100	<10					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

325

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Pike County, PA, Hydrologic Unit 02040104, at tollbridge (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.

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.-- Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 15...	1030	1470	.6	.042	.032	758	100	12.4	7.4	96	16.0	6.0	26	
FEB 20...	1030	2480	1.0	.050	.039	753	98	13.1	7.2	89	6.0	3.0	22	
JUN 19...	1030	6630	2.8	.127	.097	760	89	8.3	7.3	81	26.0	18.5	20	
AUG 07...	1100	2170	1.7	.061	.046	754	105	8.8	7.4	102	20.0	23.5	27	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 15...	7.67	1.70	.85	6.52	20	11.5	<.1	.9	6.9	56	49	<.030	.13	
FEB 20...	6.65	1.37	.69	6.12	12	10.9	<.1	2.4	8.2	52	45	<.030	.12	
JUN 19...	6.13	1.20	.63	6.21	14	9.70	<.1	2.4	6.8	40	42	<.030	.18	
AUG 07...	7.87	1.77	.85	7.69	19	12.6	<.1	1.2	7.5	71	51	<.030	.18	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 15...	.030	.24	<.003	.36	.05	E.003	--	.006	.4	<.1	2.0	.4	<1.0	
FEB 20...	<.030	.24	.004	.35	<.02	.006	<.020	.008	.3	<.1	1.8	.3	<1.0	
JUN 19...	.040	.10	<.003	.28	.04	.013	<.020	.026	.5	<.1	3.6	.5	<1.0	
AUG 07...	<.030	.16	<.003	.35	.06	.016	<.020	.023	.5	<.1	2.5	.5	<1.0	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEDED (MG/L) (00530)
NOV 15...	--	E10	2
FEB 20...	--	E7	2
JUN 19...	1.80	E9	<1
AUG 07...	1.00	E9	1

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY 08...	1025	<20	<100	20	JUN 05...	1037	40	<10	<100
15...	1030	110	100	110					
22...	1015	20	<100	<10					
29...	1020	1300	500	890					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ

LOCATION.--Lat 41°06'24", long 74°57'09", Sussex County, Hydrologic Unit 02040104, 1.0 mi upstream from Flatbrookville, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--64.0 mi².

PERIOD OF RECORD.--Water years 1923-24, 1956-57, 1959-80, 1993, 1995, 1997 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator , New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC SURE- (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
DEC 06...	1100	12	.5	.042	.032	754	102	12.2	8.1	263	13.0	7.0	100	
FEB 06...	1100	45	.6	.044	.033	760	99	14.4	7.8	198	2.0	.0	68	
JUN 19...	1045	88	1.2	--	--	762	108	10.5	7.9	175	22.0	16.5	63	
SEP 10...	1030	10	.4	.044	.034	750	109	10.0	8.2	289	25.0	18.5	120	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC 06...	28.3	7.27	.67	11.0	82	19.5	<.1	3.9	18.4	152	138	<.030	.11	
FEB 06...	19.1	5.04	.60	9.10	54	15.5	<.1	4.3	15.4	112	102	<.030	.13	
JUN 19...	18.6	4.11	.45	8.29	53	13.1	<.1	4.1	10.4	98	91	<.030	.13	
SEP 10...	33.3	8.34	.72	11.8	95	19.2	<.1	1.1	19.1	155	150	<.030	.12	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
DEC 06...	<.030	<.04	<.003	--	<.02	<.004	--	.004	.3	<.1	1.8	.3	E1.2	
FEB 06...	<.030	.09	.002	.22	<.02	<.004	<.020	E.002	.2	<.1	1.7	.2	<1.0	
JUN 19...	<.030	.04	<.003	.17	<.02	.010	<.020	.025	.2	<.1	3.3	.2	<1.0	
SEP 10...	<.030	<.04	<.003	--	.04	.004	.020	.008	<.1	<.1	1.7	<.1	<1.2	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC			
06...	--	<10	2
FEB			
06...	--	E10	<1
JUN			
19...	1.60	<10	5
SEP			
10...	1.00	E10	7

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
08...	0945	20	100	20	05...	0949	70	100	50
15...	0945	<20	<100	70					
22...	0930	<20	<100	30					
29...	0935	500	600	310					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ

LOCATION.--Lat 40°58'14", long 75°07'35", Warren County, Hydrologic Unit 02040104, at footbridge in Delaware Water Gap National Recreation Area 300 ft upstream from mouth and Delaware River, 0.6 mi northwest of Arrow Island, and 0.6 mi southeast of Delaware Water Gap Toll Bridge on Interstate 80.

DRAINAGE AREA.--3.56 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, fecal coliform, E.coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 07...	1000	.59	.6	.022	.017	755	89	10.5	6.7	40	16.5	8.0	14	
FEB 06...	1010	8.6	.6	.018	.014	764	103	14.7	5.5	31	3.0	1.0	11	
MAY 15...	1020	9.7	1.0	.024	.017	753	100	11.3	6.6	33	13.5	9.5	11	
AUG 05...	1340	.63	.4	.022	.017	747	98	8.8	7.4	40	27.0	19.5	14	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB AS (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 07...	3.61	1.27	.50	.99	9	1.41	<.1	4.7	7.2	30	25	<.030	E.07	
FEB 06...	2.77	1.04	.36	.74	5	1.30	<.1	4.1	8.0	26	21	<.030	<.10	
MAY 15...	2.81	1.01	.44	.76	5	1.17	<.1	4.2	8.3	19	22	<.030	E.06	
AUG 05...	3.64	1.31	.57	.96	8	1.43	<.1	5.5	7.0	29	26	<.030	E.07	
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC CORR. (UG/L) (32209)	
NOV 07...	.100	<.04	.004	.06	<.004	--	E.002	.2	<.1	1.1	.2	<1.0	--	
FEB 06...	<.030	E.02	.002	.04	<.004	<.020	<.004	.2	<.1	.8	.2	<1.0	--	
MAY 15...	<.030	<.04	<.003	<.02	E.002	<.020	.004	.7	<.1	1.1	.7	2.4	.300	
AUG 05...	<.030	.29	<.003	.05	.006	<.020	.007	.5	<.1	1.0	.4	E1.3	.100	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	BED MAT. FALL DIAM.		BED MAT. SIEVE DIAM.		% FINER THAN .004 MM (80157)		% FINER THAN .062 MM (80164)		BENZENE		BENZENE		BENZENE		BROMO-FORM		CARBON TETRA-CHLORIDE		
		TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	REC (UG/L)	REC (UG/L)	REC (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
FEB 06...	1010	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2		
DATE		CHLORO-DI-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CIS-1,2-DI-ETHYLENE TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYLENE UNFLTRD RECOVER (UG/L)	ETHER-ETHYL-WATER UNFLTRD RECOVER (UG/L)	ETHER-BUTYL-METHYL UNFLTRD RECOVER (UG/L)	ETHER-PENTYL-METHYL UNFLTRD RECOVER (UG/L)	ETHER-TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHER-BENZENE TOTAL (UG/L)	FREON-113 UNFLTRD REC (UG/L)	METHYL-TERT-BUTYL-ETHER WAT UNF REC (UG/L)					
FEB 06...		<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2		
DATE		CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	METHYL-PARA-XYLENE UNFLTRD REC (UG/L)	O-XYLENE WHOLE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-ETHYL-ENE TOTAL (UG/L)	TRI-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)								
FEB 06...		<.1	<.2	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2							

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR-WATER FLTRD REC (UG/L)		ALA-CHLOR-WATER, DISS, SOLVED (UG/L)		ALPHA-BHC DIS-SOLVED (UG/L)		ATRA-ZINE, WATER, DISS, REC (UG/L)		BEN-FLUR-ALIN WAT FLD (UG/L)		CAR-BARYL WATER FLTRD (UG/L)		CHLOR-PYRIFOS DIS-SOLVED (UG/L)		CYANA-ZINE, WATER, DISS, REC (UG/L)		DCPA-WATER FLTRD (UG/L)		DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L)		EPTC-WATER FLTRD (UG/L)	
		TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
MAY 15...	1020	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002										
DATE		LINDANE DIS-SOLVED (UG/L)	LIN-URON WATER FLTRD (UG/L)	METHYL-AZIN-PHOS WAT FLT (UG/L)	METO-LACHLOR WATER DISSOLV (UG/L)	METRI-BUZIN WATER DISSOLV (UG/L)	NAPROP-AMIDE WATER FLTRD (UG/L)	PENDI-METH-ALIN WAT FLT (UG/L)	PRO-METON, WATER, DISS, REC (UG/L)	PRO-PANIL WATER FLTRD (UG/L)	SI-MAZINE, WATER, DISS, REC (UG/L)	TEBU-THIURON WATER FLTRD (UG/L)	TER-BACILL WATER FLTRD (UG/L)										
MAY 15...		<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034									

Remark codes used in this report:
 < -- Less than

DELAWARE RIVER BASIN

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

	TRI- FLUR- ALIN WAT FLT 0.7 U DATE GF, REC (UG/L) (82661)
MAY 15...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0915	20	<100	120	07...	0915	<20	<100	30
17...	0915	<20	<100	50					
24...	0850	<20	<100	410					
31...	0905	<20	<100	70					

Remark codes used in this report:
< -- Less than

01443000 DELAWARE RIVER AT PORTLAND, PA

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

DRAINAGE AREA.--4,165 mi².

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 15...	1130	1540	.4	.039	.030	757	109	13.5	7.8	110	20.5	6.0	32	
FEB 06...	1250	4440	2.2	.066	.050	764	102	14.8	--	92	9.5	.5	23	
MAY 29...	0930	16400	18	.118	.090	760	99	9.4	7.7	89	22.0	17.5	23	
AUG 05...	1030	1860	.8	.063	.047	747	100	7.6	8.6	116	31.0	28.5	32	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 15...	9.51	1.98	.86	7.29	25	12.7	<.1	.8	8.5	60	57	.040	.12	
FEB 06...	7.07	1.40	.72	7.20	12	12.6	<.1	3.4	8.6	56	50	<.030	.12	
MAY 29...	7.01	1.43	.62	6.40	15	10.6	<.1	2.2	8.3	49	46	<.030	.20	
AUG 05...	9.44	1.95	.82	8.36	22	13.3	<.1	1.3	8.4	62	58	<.030	.21	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 15...	.040	.17	<.003	.29	.04	.008	--	.011	.3	<.1	1.8	.3	2.4	
FEB 06...	<.030	.41	.002	.53	<.02	.008	<.020	.015	.5	<.1	2.3	.5	<1.0	
MAY 29...	<.030	.12	<.003	.31	.44	<.05	<.020	.06	1.8	<.1	3.4	1.8	<1.0	
AUG 05...	<.030	.12	<.003	.33	.06	.025	<.020	.031	.4	<.1	2.4	.4	<1.0	

Remark codes used in this report:
 < -- Less than

DELAWARE RIVER BASIN

01443000 DELAWARE RIVER AT PORTLAND, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L) AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV 15...	--	E10	3
FEB 06...	--	E8	3
MAY 29...	5.30	E8	26
AUG 05...	1.60	20	1

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0935	80	<100	20	07...	0930	40	<100	140
17...	0950	<20	<100	30					
24...	0925	<20	<100	400					
31...	0930	40	<100	50					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01443250 PAULINS KILL AT WARBASSE JUNCTION ROAD, NEAR LAFAYETTE, NJ

LOCATION.--Lat 41°05'08", long 74°41'58", Sussex County, Hydrologic Unit 02040104, at bridge on Warbasse Junction Road (County Route 663) at Warbasse, 0.9 mi southwest of Lafayette, and 1.3 mi east of unnamed pond.

DRAINAGE AREA.--11.4 mi².

PERIOD OF RECORD.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
DEC 04...	1100	2.3	.163	.120	755	64	8.2	7.7	871	12.0	4.5	280	70.6	
FEB 14...	1100	2.6	.210	.152	760	82	11.8	7.7	862	-2.0	.5	240	66.1	
MAY 06...	1030	5.4	.372	.276	754	64	6.6	7.5	627	20.0	13.5	190	51.1	
SEP 04...	1030	1.7	.240	.175	745	32	2.8	7.5	740	26.0	21.0	210	56.1	
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
DEC 04...	25.1	5.75	59.9	207	115	.1	7.1	56.6	502	478	.070	.66	.080	
FEB 14...	18.1	3.84	70.7	150	132	E.1	5.1	57.0	478	457	<.030	.61	.080	
MAY 06...	14.0	2.40	50.4	128	89.2	E.1	3.4	39.6	362	334	.120	.88	.110	
SEP 04...	16.9	4.45	67.3	164	106	.2	6.9	33.7	417	402	.086	.77	.095	
DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570)	PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
DEC 04...	3.09	.022	3.8	.05	.058	--	.085	.8	<.1	5.7	.8	E1.1	--	
FEB 14...	2.88	.009	3.5	.07	.125	.075	.178	.8	<.1	7.5	.8	2.1	--	
MAY 06...	1.50	.021	2.4	.21	.052	.030	.094	1.9	<.1	10.6	1.9	2.2	4.60	
SEP 04...	2.64	.099	3.4	.14	.081	.057	.125	.9	<.1	8.3	.9	E1.1	14.4	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01443250 PAULINS KILL AT WARBASE JUNCTION ROAD, NEAR LAFAYETTE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (01020) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
DEC	04...													
FEB	14...	.2	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	14...	<.1	E.2	1.0	.1	.4	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.6
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)						
FEB	14...	<.2	<.2	<.1	<.1	.9	<.1	<.1	<.2	<.2				

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	06...	<.006	<.004	<.005	.011	<.010	<.041	<.005	<.018	<.003	E.006	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01443250 PAULINS KILL AT WARBASE JUNCTION ROAD, NEAR LAFAYETTE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 06...	<.004	<.035	<.027	<.050	E.005	<.006	<.007	<.022	E.01	<.011	<.005	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 06...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
08...	1045	400	<100	40	05...	1045	500	100	150
15...	1015	3000	200	180					
22...	1135	170	100	120					
29...	1025	5000	4700	3900					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01443500 PAULINS KILL AT BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'51", long 74°57'14", Warren County, Hydrologic Unit 02040105, 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.

PERIOD OF RECORD.--Water years 1921, 1925, 1957-60, 1962-63, 1976 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E.coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV														
14...	1100	26	1.7	.096	.072	761	96	12.5	8.3	600	7.0	4.0	220	
FEB														
21...	1100	43	2.6	.095	.071	748	101	12.2	8.3	591	10.0	6.5	190	
MAY														
28...	1045	157	4.2	.142	.106	757	101	9.5	8.1	423	24.0	18.0	150	
AUG														
29...	1000	26	5.6	.123	.092	758	71	6.5	8.3	515	21.0	19.5	200	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV														
14...	51.1	22.3	2.29	35.6	187	72.7	.1	1.0	29.2	324	327	.030	.28	
FEB														
21...	48.5	17.8	1.82	38.2	144	73.9	E.1	4.0	35.9	326	310	<.030	.27	
MAY														
28...	37.9	13.3	1.16	25.0	123	45.8	E.1	1.6	19.5	248	219	<.030	.29	
AUG														
29...	47.2	20.2	1.70	35.2	166	66.1	E.1	2.5	21.4	315	299	.033	.43	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV														
14...	.030	.07	<.003	.36	.08	.009	--	.022	.6	<.1	3.7	.6	E1.7	
FEB														
21...	<.030	.69	.008	.96	.08	.006	<.020	.022	.6	<.1	3.4	.6	<1.0	
MAY														
28...	<.030	.33	<.003	.62	.12	.011	<.020	.030	.9	<.1	4.5	.9	E1.6	
AUG														
29...	.045	1.25	<.003	1.7	.06	E.03	<.020	E.05	.6	<.1	5.1	.6	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

339

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG AS N) (00626)	NITRO-GEN,NH4 + ORG. (MG/KG AS P) (00668)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)			
NOV	14...		--	--	20	7									
FEB	21...		--	--	10	4									
MAY	28...		9.20	20	<1										
AUG	29...		6.40	20	15										
AUG	29...	1000 ENVIRONMENTAL	--	--	--	--	--	E1	19.9	<.06	27				
AUG	29...	1100 BED MATERIAL	7.30	210	3200	5.1	1.7	--	--	--	--	--			
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)
AUG	29...		<.04	<.8	2.2	260	<1	72.9	<.01	<1	<.4	<.05	7	--	--
AUG	29...		--	--	--	--	--	--	--	--	--	--	--	<1	.042
DATE	TIME	SAMPLE TYPE	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01043)	IRON, RECOV. SEDIMT, BED MA-TERIAL (UG/G) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G) (71921)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01068)	SELE-NIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01093)	4HCYPEN PHENAN THRENE WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU-ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU-ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)
AUG	29...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	29...		5.4	1.7	6	12000	6.6	180	<.01	3.6	<1	34	<50	<50	E2
DATE	TIME	SAMPLE TYPE	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA-CENE, 2-METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY-SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR-ANTHENE BED MAT DRY WGT REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)
AUG	29...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	29...		<50	E7	E13	E13	E24	E25	E21	E6	E20	E24	E10	E42	E22
DATE	TIME	SAMPLE TYPE	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPTHAL ENE, 236 TRIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPTHAL ENE, 2-ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948)	NAPHTH-ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	P-CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN-THRI-DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1-METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)
AUG	29...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	29...		<50	<50	E6	E3	E7	<50	E6	<5	<50	E13	E26	<50	E9

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN .004 MM (80157)	% FINER THAN .062 MM (80164)
AUG			
29...	--	--	--
29...	E35	1	2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0850	40	<100	110	07...	0815	220	600	80
17...	0835	140	200	100					
24...	0815	9000	2600	3100					
31...	0835	80	100	330					

Remark codes used in this report:
< -- Less than
E -- Estimated value

01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, NJ

LOCATION.--Lat 40°58'30", long 74°50'57", Warren County, Hydrologic Unit 02040105, at bridge on Dark Moon Road, 1.3 mi northeast of Johnsonburg, 0.4 mi northeast of CONRAIL railroad tunnel, and 0.5 mi northwest of Francis Lake.

DRAINAGE AREA.--5.10 mi².

PERIOD OF RECORD.--Water year 2001 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E.coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 15...	0930	.16	8.1	.014	.012	750	100	11.5	7.7	472	18.0	8.5	220	
FEB 14...	0950	.09	.5	.012	.008	755	97	13.6	8.0	488	1.0	1.0	230	
MAY 15...	1320	8.9	3.0	.157	.117	748	110	10.8	7.7	373	20.0	15.5	140	
AUG 08...	0930	.68	.8	.013	.010	751	105	10.5	7.7	515	25.0	14.5	250	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 15...	53.4	21.7	1.58	10.5	215	19.9	<.1	7.8	19.9	260	272	.040	E.07	
FEB 14...	54.7	22.5	1.29	10.1	205	22.0	E.1	7.1	20.9	272	270	<.030	E.06	
MAY 15...	36.4	12.7	1.29	17.0	119	33.1	<.1	3.4	19.1	215	196	<.030	.38	
AUG 08...	59.8	23.2	1.45	16.0	206	26.9	E.1	7.6	21.2	287	287	<.030	E.07	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 15...	.030	1.82	.004	--	.09	E.003	--	.021	.7	<.1	.8	.7	E1.0	
FEB 14...	<.030	1.76	<.003	--	<.02	E.002	<.020	E.003	.3	<.1	.7	.2	E1.6	
MAY 15...	<.030	.32	.003	.70	<.02	.020	<.020	.032	.7	<.1	5.2	.7	<1.0	
AUG 08...	<.030	1.70	.003	--	.03	E.003	<.020	.004	.4	<.1	.8	.4	E1.1	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

			CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED SUS- PENDED AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)																
DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)										
NOV																					
15...			--	10	15																
FEB																					
14...			--	E8	12																
MAY																					
15...			6.50	E8	4																
AUG																					
08...	0930	ENVIRONMENTAL	--	--	--	--	--	<2	7.1	<.06	11										
08...	0930	BED MATERIAL	7.30	650	5500	8.7	.2	--	--	--	--										
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)						
AUG	08...		<.04	<.8	E.5	30	<1	5.0	<.01	2	E.3	<.05	2	--	--						
08...			--	--	--	--	--	--	--	--	--	--	--	1	.082						
DATE	TIME	SAMPLE TYPE	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01043)	IRON, SEDIMT, BED MA- TERIAL (UG/G) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01068)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/G) (01148)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01093)	4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)						
AUG	08...		--	--	--	--	--	--	--	--	--	--	--	--	--						
08...			14	4.0	8	26000	12	550	<.01	10	<1	59	<50	<50	<50						
DATE	TIME	SAMPLE TYPE	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT WS, <2MM REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)						
AUG	08...		--	--	--	--	--	--	--	--	--	--	--	--	--						
08...			<50	<50	<50	<50	120	120	110	72	89	150	<50	290	86						
DATE	TIME	SAMPLE TYPE	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPHTAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPHTAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPHTAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPHTAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPHTAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)						
AUG	08...		--	--	--	--	--	--	--	--	--	--	--	--	--						
08...			<50	<50	<50	<50	<50	<50	<50	<5	<50	<50	240	<50	<50						

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM. % FINER	BED MAT. SIEVE DIAM. % FINER
		.004 MM (80157)	.062 MM (80164)
AUG			
08...	--	--	--
08...	280	5	14

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0830	<20	<100	20	07...	0800	<20	<100	60
17...	0815	170	100	120					
24...	0800	40	<100	250					
31...	0815	<20	<100	760					

Remark codes used in this report:
< -- Less than

DELAWARE RIVER BASIN

01445900 HONEY RUN NEAR HOPE, NJ

LOCATION.--Lat 40°53'33", long 74°58'42", Warren County, Hydrologic Unit 02040105, at bridge on County Route 519 1.0 mi east of Swayzes Mills, 1.4 mi southwest of Hope, and 1.6 mi downstream of Hope Pond.

DRAINAGE AREA.--10.2 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS (NTU) (61028)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS (CM) (50624)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)		
NOV 20...	1000	2.6	.120	.096	752	71	9.0	8.0	407	9.0	5.0	180	42.8	
FEB 19...	1015	1.7	.075	.057	758	95	13.6	8.0	402	2.0	.6	150	38.7	
MAY 21...	0930	1.4	.161	.121	757	88	10.1	7.8	350	12.0	9.0	140	34.8	
AUG 08...	1000	3.7	.163	.124	756	40	3.7	7.8	421	22.0	18.5	200	47.5	
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
NOV 20...	17.1	2.47	11.2	176	22.9	<.1	5.7	14.9	228	223	.040	.27	.085	
FEB 19...	12.8	1.36	16.7	110	35.8	<.1	1.9	36.2	220	210	<.030	.17	<.030	
MAY 21...	12.2	.78	17.1	112	30.0	E.1	4.1	19.4	219	186	<.030	.30	.030	
AUG 08...	20.0	1.84	15.1	185	25.0	E.1	12.3	8.5	253	241	<.030	.33	<.030	
DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,PAR TICULATE SUSP WAT FLT (MG/L AS N) (00602)	NITRO- GEN,PAR TICULATE SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 20...	E.04	<.003	--	.05	.024	--	.035	.4	<.1	4.7	.4	2.2	--	
FEB 19...	.07	.003	.24	.04	.005	<.020	.011	.3	<.1	2.9	.3	E1.3	--	
MAY 21...	.10	<.003	.40	<.02	.014	<.020	.021	.2	<.1	4.5	.2	E1.1	2.10	
AUG 08...	E.03	<.003	--	.09	.075	.051	.100	.5	<.1	4.7	.5	<1.0	5.00	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01445900 HONEY RUN NEAR HOPE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL											
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)											
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)
NOV	20...							E10			5		
FEB	19...							<13			4		
MAY	21...							10			<1		
AUG	08...							10			8		

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	19...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)
FEB	19...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED REC (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED REC (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED REC (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	21...	<.006	<.004	<.005	E.007	<.010	<.041	<.005	<.018	<.003	E.005	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01445900 HONEY RUN NEAR HOPE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 21...	<.004	<.035	<.027	<.050	E.004	<.006	<.007	<.022	<.01	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 21...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	1010	300	<100	500	07...	1020	170	600	200
17...	1022	230	600	380					
24...	1020	3000	17000	3300					
31...	1020	1400	1200	1450					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01446400 PEQUEST RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'45", long 75°04'44", Warren County, Hydrologic Unit 02040105, at bridge on County Route 619 in Belvidere, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--158 mi².

PERIOD OF RECORD.--Water years 1957, 1962, 1976-82, 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 07...	1300	31	1.3	.058	.045	755	133	15.4	8.7	558	19.0	8.5	250	
FEB 14...	1250	56	1.7	.095	.070	755	126	17.3	8.6	575	5.0	2.0	240	
MAY 29...	1130	293	49	.248	.191	760	103	9.7	8.0	415	24.0	18.0	170	
AUG 20...	0940	19	1.0	.075	.059	753	106	9.2	8.4	553	24.0	21.5	240	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 07...	54.8	27.4	2.30	22.1	227	37.8	<.1	4.4	27.0	330	319	.080	.29	
FEB 14...	54.8	25.1	1.86	23.3	197	41.1	E.1	4.9	41.6	338	317	.090	.67	
MAY 29...	41.0	16.7	2.55	14.8	141	29.9	.1	4.9	23.7	243	224	.040	.61	
AUG 20...	51.9	26.4	2.01	21.0	202	37.0	E.1	6.9	27.8	306	300	.050	.30	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 07...	.050	1.47	.012	1.8	.11	.19	--	.22	.5	<.1	2.4	.5	2.2	
FEB 14...	.050	1.34	.012	2.0	.07	.067	.037	.086	.8	<.1	4.7	.7	E1.8	
MAY 29...	.050	1.26	.023	1.9	.62	.11	.085	.26	6.0	<.1	6.6	5.9	3.0	
AUG 20...	<.030	1.28	.006	1.6	.04	.110	.087	.117	.4	<.1	2.6	.4	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01446400 PEQUEST RIVER AT BELVIDERE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)
NOV 07...	--	10	<1
FEB 14...	--	20	--
MAY 29...	12.8	10	46
AUG 20...	2.50	20	2

DATE	TIME	SAMPLE TYPE	ARSENIC TOTAL (UG/L) AS AS (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L) AS BA (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE (01012)	BORON, TOTAL RECOV- ERABLE (UG/L) AS B (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, DIS-SOLVED (UG/L) AS CU (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	IRON, TOTAL RECOV- ERABLE (UG/L) AS FE (01045)
AUG 20...	0939	FIELD BLANK	--	--	--	--	--	--	<.2	--	--
20...	0940	ENVIRONMENTAL	<2	15.1	<.06	18	E.02	<.8	--	1.2	30

DATE	LEAD, DIS-SOLVED (UG/L) AS PB (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN (01055)	MERCURY DIS-SOLVED (UG/L) AS HG (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)	NICKEL, DIS-SOLVED (UG/L) AS NI (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI (01067)	SELE- NIUM, TOTAL (UG/L) AS SE (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L) AS AG (01077)	ZINC, DIS-SOLVED (UG/L) AS ZN (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)
AUG 20...	E.08	--	--	<.01	--	<.06	--	--	--	1	--
20...	--	<1	9.8	--	<.01	--	1	<.4	<.05	--	4

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL 10...	0950	500	100	400	AUG 07...	1000	500	<100	160
17...	1000	800	600	230					
24...	1000	500	600	610					
31...	1000	230	400	360					

Remark codes used in this report:
< -- Less than
E -- Estimated value

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'32", long 75°11'20", revised, Warren County, Hydrologic Unit 02040105, at bridge on Riegelsville-Milford Road (County Route 627) 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 flow. Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV 13...	1050	87	1.9	.036	.028	775	82	10.7	8.2	466	15.0	5.0	180	
FEB 07...	0950	99	4.4	.042	.032	757	106	14.2	7.8	473	3.0	3.0	170	
MAY 28...	1000	196	7.0	.076	.057	764	108	10.1	8.0	378	24.0	18.5	120	
AUG 12...	0940	51	2.2	.039	.030	760	94	8.3	7.8	468	29.5	21.5	190	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 13...	38.4	21.1	2.04	23.3	152	45.8	<.1	5.7	22.4	256	262	.040	.35	
FEB 07...	36.5	18.6	1.87	27.9	125	55.6	<.1	8.2	24.6	268	259	<.030	.83	
MAY 28...	28.5	13.0	1.49	23.7	94	48.6	E.1	6.2	16.3	220	201	.040	.40	
AUG 12...	38.5	21.8	1.53	20.0	145	40.1	E.1	8.9	21.8	260	252	<.030	.38	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 13...	.090	2.61	.012	3.0	.09	.004	--	.012	.4	<.1	2.7	.4	3.0	
FEB 07...	<.030	2.48	.007	3.3	.09	.014	<.020	.034	.9	<.1	2.3	.9	<1.0	
MAY 28...	<.030	1.61	.008	2.0	.12	.018	<.020	.038	1.2	<.1	2.8	1.2	<1.1	
AUG 12...	<.030	2.72	.054	3.1	.06	.029	.027	.043	.5	<.1	2.1	.5	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV			
13...	--	20	4
FEB			
07...	--	30	4
MAY			
28...	1.50	20	5
AUG			
12...	1.80	20	6

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
10...	0915	130	100	190	07...	0925	300	<100	130
17...	0935	220	400	270					
24...	0915	230	16000	430					
31...	0910	130	100	230					

Remark codes used in this report:
< -- Less than

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'40", long 75°11'25", Warren County, Hydrologic Unit 02040105, at 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). 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.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
------	------	---	---	--	--	--	---	-----------------------------------	--	---	----------------------------------	------------------------------------	---

DEC	05...	1030	4100	1.8	--	--	767	90	10.5	7.7	187	15.0	9.0	60
FEB	26...	1045	4470	1.1	.046	.035	755	91	11.0	7.8	176	10.0	7.0	52
MAY	21...	0945	23900	6.8	.123	.093	766	94	10.4	7.4	114	11.0	11.0	33
SEP	05...	1000	E3000	1.9	.059	.045	760	81	7.0	8.0	210	23.0	22.5	69

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
------	---	---	--	---	---	--	---	---	--	---------------------------------------	---	---	---

DEC	05...	15.4	5.18	1.36	11.4	39	17.0	.1	3.1	17.2	106	99	.030	.38
FEB	26...	13.5	4.55	1.15	11.2	35	16.5	<.1	2.6	16.6	86	91	<.030	.15
MAY	21...	8.69	2.70	.75	7.63	21	11.3	E.1	3.3	10.4	76	63	<.030	.21
SEP	05...	17.8	6.06	1.63	10.2	49	19.5	E.1	3.1	17.1	110	109	<.030	.22

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
------	--	---	---	---	--	--	--	---------------------------------------	---	--	--	--	--

DEC	05...	.030	.96	.009	1.3	.07	.074	--	.089	.7	<.1	2.5	.7	<1.0
FEB	26...	<.030	.86	.006	1.0	.04	.056	.030	.066	.4	<.1	1.9	.4	E1.8
MAY	21...	<.030	1.37	<.003	1.6	.18	.021	.023	.049	1.6	<.1	3.4	1.6	<1.0
SEP	05...	<.030	.92	.006	1.1	<.02	.094	.074	.103	.3	<.1	2.5	.3	<1.0

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC 05...	--	20	4
FEB 26...	--	E10	18
MAY 21...	4.00	<10	11
SEP 05...	.600	20	6

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL 10...	0900	80	<100	10	AUG 07...	0920	80	<100	100
JUL 17...	0910	20	<100	30					
JUL 24...	0910	170	<100	80					
JUL 31...	0900	70	100	60					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01458570 NISHISAKAWICK CREEK NEAR FRENCHTOWN, NJ

LOCATION.--Lat 40°32'32", long 75°02'49", Hunterdon County, Hydrologic Unit 02040105, 1.3 mi north of Frenchtown, 2.1 mi upstream from Delaware River, and 3.1 mi southeast of Milford.

DRAINAGE AREA.--10.1 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 13...	1400	.96	.4	.047	.037	775	44	5.8	8.2	198	15.5	4.5	75	
FEB 07...	1230	4.7	.7	.035	.027	757	108	15.0	7.6	236	6.0	1.5	73	
MAY 28...	1250	10	2.0	.052	.039	764	122	11.6	8.7	178	25.0	18.0	59	
AUG 12...	1220	.93	3.2	.047	.035	759	108	9.4	7.8	212	31.0	22.0	73	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 13...	18.9	6.67	1.50	9.44	69	14.3	<.1	6.0	12.2	112	113	.030	.13	
FEB 07...	18.2	6.74	1.36	13.5	42	24.9	<.1	9.5	20.1	136	131	<.030	.10	
MAY 28...	14.7	5.32	1.62	9.14	41	14.1	E.1	8.0	16.6	114	103	<.030	.14	
AUG 12...	18.5	6.53	1.96	9.91	64	13.8	E.1	10.5	13.2	103	117	<.030	.12	
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570)	PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 13...	.060	.51	.004	.64	.03	.009	--	.012	.1	<.1	1.9	.1	E1.8	
FEB 07...	<.030	2.62	.002	2.7	.04	.018	<.020	.019	.2	<.1	1.3	.2	E1.6	
MAY 28...	<.030	2.08	.003	2.2	.04	.028	<.020	.033	.3	<.1	1.9	.3	2.0	
AUG 12...	<.030	1.03	.003	1.2	.03	.061	.057	.071	.3	<.1	2.1	.3	<1.0	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01458570 NISHISAKAWICK CREEK NEAR FRENCHTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV 13...	--	40	1
FEB 07...	--	40	<1
MAY 28...	2.80	30	1
AUG 12...	.900	50	5

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
09...	0935	40	<100	1200	06...	1012	1100	<100	250
16...	0938	110	100	210					
25...	0933	<20	<100	740					

Remark codes used in this report:
< -- Less than

01461000 DELAWARE RIVER AT LUMBERVILLE, PA

LOCATION.--Lat 40°24'27", long 75°02'16", Bucks County, Hydrologic Unit 02040105, at pedestrian bridge at Lumberville, 1.4 mi upstream from Lockatong Creek.

DRAINAGE AREA.--6,598 mi².

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 08...	1000	2700	1.1	.046	.035	764	--	--	8.1	232	9.0	11.0	77	
FEB 21...	1000	4660	1.3	.056	.042	754	95	11.5	7.8	164	13.5	6.5	52	
MAY 14...	1000	29000	73	.141	.110	758	87	9.1	7.7	146	14.0	13.0	46	
AUG 13...	0900	3050	1.5	.061	.045	762	92	7.4	8.1	213	23.5	26.5	78	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 08...	19.1	7.10	1.80	12.8	62	20.0	E.1	.4	17.9	128	120	.080	.25	
FEB 21...	13.1	4.55	1.18	11.3	35	16.9	E.1	3.0	16.7	94	92	.040	.17	
MAY 14...	12.1	3.83	1.56	8.06	32	12.0	E.1	4.4	13.6	96	79	.030	.32	
AUG 13...	19.0	7.40	1.70	14.0	55	20.1	E.1	3.1	19.4	134	--	<.030	<.10	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 08...	.030	.93	.003	1.2	.05	.068	--	.077	.3	<.1	2.5	.3	E1.8	
FEB 21...	.060	.92	.007	1.1	.03	.053	.027	.062	.4	<.1	2.2	.3	E1.2	
MAY 14...	.040	.84	.006	1.2	.08	.059	.031	.190	.9	<.1	3.9	.9	E1.5	
AUG 13...	.040	--	.008	--	.07	.092	.094	.120	.2	<.1	3.8	.2	E1.1	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01461000 DELAWARE RIVER AT LUMBERVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV 08...	--	20	<1
FEB 21...	--	E10	9
MAY 14...	4.30	10	79
AUG 13...	.500	<10	7

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					AUG				
09...	1028	20	<100	60	06...	1040	90	<100	50
16...	1010	40	<100	210					
25...	1000	70	<100	140					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

357

01461282 WICKECHEOKE CREEK NEAR SERGEANTSVILLE, NJ

LOCATION.--Lat 40°26'38", long 74°57'59", Hunterdon County, Hydrologic Unit 02040105, at Green Sergeants Covered Bridge on County Route 604, 1.0 mi downstream of confluence with Plum Brook, and 1.2 mi west of Sergeantsville.

DRAINAGE AREA.--22.3 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
DEC 04...	0930	.3	.040	.032	769	86	11.1	7.5	214	12.0	5.0	72	17.0	
FEB 13...	0930	1.4	.078	.058	756	98	14.0	7.5	244	3.0	.5	63	15.0	
JUN 20...	0950	15	.331	.259	768	94	9.3	7.5	121	22.0	16.5	35	8.56	
AUG 29...	0930	30	.130	.104	761	88	8.4	7.4	144	18.0	17.5	45	10.1	
DATE	TIME	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
DEC 04...	7.21	1.93	11.0	51	12.0	E.1	13.6	23.7	130	126	<.030	.12	<.030	
FEB 13...	6.16	2.40	17.9	32	34.4	E.1	8.8	24.6	134	131	<.030	.14	.030	
JUN 20...	3.40	2.59	7.57	28	8.01	E.1	7.5	12.4	81	70	.030	.51	<.030	
AUG 29...	4.68	2.15	8.90	36	9.20	<.1	11.5	11.5	84	88	--	.26	<.030	
DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570)	PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
DEC 04...	2.01	<.003	2.1	<.02	.032	--	.035	.2	<.1	1.4	.1	<1.0	--	
FEB 13...	.61	<.003	.75	.16	.011	<.020	.014	.7	<.1	2.7	.7	<1.0	--	
JUN 20...	.68	.003	1.2	.08	.048	<.020	.078	.5	<.1	8.3	.5	<1.0	2.30	
AUG 29...	1.73	<.003	2.0	.07	.099	.089	.140	.6	<.1	3.9	.6	2.9	3.40	

Remark codes used in this report:
< -- Less than

DELAWARE RIVER BASIN

01461282 WICKECHEOKE CREEK NEAR SERGEANTSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, SUS-PENDEDED AS B (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
DEC	04...													
FEB	13...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	13...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER UNFLTRD REC (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)					
FEB	13...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2					

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA-BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
JUN	20...	<.006	.035	<.005	.600	<.010	E.019	<.005	<.018	<.003	E.101	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01461282 WICKECHEOKE CREEK NEAR SERGEANTSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
JUN 20...	<.004	<.035	<.027	<.050	.222	<.006	E.007	<.022	E.01	<.011	.008	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 20...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL	09...	230	400	280	AUG	06...	500	<100	660
	16...	110	200	320		1107			
	25...	70	<100	350					

Remark codes used in this report:
< -- Less than
E -- Estimated value

01463500 DELAWARE RIVER AT TRENTON, NJ

LOCATION.--Lat 40°13'18", long 74°46'42", Mercer County, Hydrologic Unit 02040105, at Calhoun Street Bridge at Trenton, 0.5 mi upstream from Assumpink Creek, and at river mile 134.5.

DRAINAGE AREA.--6,780 mi².

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

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: October 1962 to current year. Recorded as once daily during 1979.
 DISSOLVED OXYGEN PERCENT SATURATION: October 2001 to September 2002.
 pH: June 1968 to current year. Recorded as once daily during 1979.
 SPECIFIC CONDUCTANCE: October 1963 to current year. Recorded as once daily during years 1964 to 1968, 1979.
 SUSPENDED SEDIMENT DISCHARGE: September 1949 to September 1981.
 WATER TEMPERATURE: October 1944 to current year. Recorded as once daily during years 1945 to 1953, 1962, 1964, 1979.
 TURBIDITY: November 2000 to current year.

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, NJ.
 November 1975 to November 1978: water withdrawn from river through PVC pipe to gage house outside Trenton Water Filtration Plant, Trenton, NJ.
 December 1979 to September 1986: water withdrawn from raw-water intake within Trenton Water Filtration Plant, Trenton, NJ.
 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, NJ.
 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.--Additional nutrient samples on Dec. 6 at 0911, Mar. 6 at 1041, June 17 at 1211, and Sep. 5 at 0931 were collected to fulfill the requirements of the Ambient Stream Monitoring Network. For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." 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, NJ. Beginning October, 1999, pH daily value tables reported maximum, minimum and median values. Continuous turbidity-record values less than 2 were below the instrument detection level. Missing continuous water-quality records are the result of instrument malfunction or interruption of flow through the filtration plant. The calibration of water-quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is re-calibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following periods were adjusted:
 DISSOLVED OXYGEN: Oct. 1-16, Feb. 15 to Mar. 26, May 16-22, June 19 to July 2, Aug. 1-14, Aug. 23 to Sep. 3.
 pH: July 2-22.
 TURBIDITY: Oct. 29 to Nov. 1, Feb. 15-28.

COOPERATION.--Samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (NAWQA) with cooperation from the Delaware River Basin Commission. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and dissolved hexavalent chromium on Dec. 6 at 0912, Mar. 6 at 1042, June 17 at 1212, and Sep. 5 at 0932; and fecal coliform, E. coli, and enterococcus bacteria collected synoptically during the summer months was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 11.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: Maximum, 20.0 mg/L, Feb. 11, 1989; minimum, 4.0 mg/L, Nov. 9, 1972, Sept. 9, 1995.
 DISSOLVED OXYGEN PERCENT SATURATION: Maximum, 151, Aug. 12, 2002; minimum, 67, July 13, 2002.
 pH: Maximum, 10.3 units, Aug. 9, 10, 1983; minimum 5.3 units, June 22, 1972.
 SPECIFIC CONDUCTANCE: Maximum, 468 microsiemens/cm, Jan. 11, 1999; minimum, 63 microsiemens/cm, July 7, 1984.
 WATER TEMPERATURE: Maximum, 34.0°C, June 18, 1957; minimum -0.6°C, on many days during winter months in water years 1954-57.
 TURBIDITY: Maximum, 460 ntu, May 19, 2000; minimum, <2.0 ntu, on many days in water years 2000-02.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 15.9 mg/L, Jan. 22, 23; minimum, 5.5 mg/L, July 13.
 DISSOLVED OXYGEN PERCENT SATURATION: Maximum, 151, Aug. 12; minimum, 67, July 13.
 pH: Maximum, 9.3 units, July 19; minimum, 6.6 units, May 10.
 SPECIFIC CONDUCTANCE: Maximum, 314 microsiemens/cm, Jan. 24; minimum, 100 microsiemens/cm, June 9.
 WATER TEMPERATURE: Maximum, 31.5°C, Aug. 4; minimum, 0.0°C, on several days during winter months.
 TURBIDITY: Maximum, 120 ntu, June 29; minimum, <2.0 ntu, on many days.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)
NOV											
01...	0830	ENVIRONMENTAL	2950	--	--	--	--	770	107	12.4	7.8
DEC											
06...	0910	ENVIRONMENTAL	3770	--	4.8	.070	.054	762	98	11.2	7.6
06...	0911	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--
06...	0912	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--
JAN											
09...	1330	ENVIRONMENTAL	2800	--	--	--	--	755	112	15.8	7.7
MAR											
06...	1040	ENVIRONMENTAL	6630	4.0	4.0	.063	.046	768	108	13.9	8.0
06...	1041	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--
06...	1042	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--
APR											
04...	0850	ENVIRONMENTAL	13000	--	--	--	--	767	100	11.4	7.1
MAY											
22...	1000	ENVIRONMENTAL	21300	11	--	--	--	770	102	11.2	6.9
22...	1001	SPLIT REPLICATE	--	--	--	--	--	--	--	--	7.1
JUN											
17...	1015	FIELD BLANK	--	--	--	--	--	--	--	--	--
17...	1210	ENVIRONMENTAL	17100	--	10	.117	.089	760	102	9.5	7.5
17...	1211	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--
17...	1212	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--
JUL											
10...	0930	ENVIRONMENTAL	3900	2.7	--	--	--	756	108	8.6	8.0
SEP											
05...	0930	ENVIRONMENTAL	3220	1.7	2.1	.057	.043	758	107	9.0	8.2
05...	0931	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--
05...	0932	ENVIRONMENTAL	--	--	--	--	--	--	--	--	--

DATE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-AIR (DEG C) (00020)	TEMPER-WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 HCO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV													
01...	229	11.5	9.5	76	18.7	7.04	1.73	13.1	--	57	69	22.9	E.1
DEC													
06...	183	16.5	9.5	59	15.0	5.22	1.40	11.1	41	40	48	17.7	<.1
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	228	5.5	1.0	--	--	--	--	--	--	45	54	22.4	--
MAR													
06...	190	--	5.0	57	14.7	4.81	1.23	11.9	37	35	43	19.6	E.1
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
04...	128	--	10.0	--	--	--	--	--	--	21	25	15.3	--
MAY													
22...	120	14.5	11.5	--	--	--	--	--	--	22	26	11.6	--
22...	123	--	--	--	--	--	--	--	--	21	25	11.6	--
JUN													
17...	--	--	--	--	.02	<.008	<.10	<.09	--	--	--	<.30	<.10
17...	144	--	19.0	42	11.2	3.41	1.00	8.68	30	--	--	14.4	E.08
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
10...	215	33.0	26.5	--	--	--	--	--	--	49	60	19.9	--
SEP													
05...	242	--	23.5	81	20.3	7.50	1.64	13.4	59	55	67	21.0	E.07
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)
NOV													
01...	.45	18.5	124	120	<.04	.21	--	.23	.74	<.008	.95	.97	--
DEC													
06...	2.26	15.8	102	96	E.03	.23	--	.36	.87	E.005	1.1	1.2	.04
06...	--	--	--	--	--	.27	--	--	.91	--	1.2	--	--
06...	--	--	--	--	<.030	--	<.030	--	--	.004	--	--	--
JAN													
09...	--	21.1	--	--	E.03	--	--	.29	1.36	.008	--	1.7	--
MAR													
06...	2.4	16.3	100	96	<.04	--	--	.27	.87	.010	--	1.1	.05
06...	--	--	--	--	--	.18	--	--	.82	--	1.0	--	--
06...	--	--	--	--	.065	--	<.030	--	--	.005	--	--	--
APR													
04...	--	12.5	--	--	<.04	--	--	.28	.60	E.004	--	.88	--
MAY													
22...	--	11.6	--	--	<.04	--	--	.36	.50	<.008	--	.86	--
22...	--	11.5	--	--	<.04	--	--	.27	.50	<.008	--	.77	--
JUN													
17...	<.2	<.1	<10	--	<.04	--	--	<.10	<.05	<.008	--	--	--
17...	3.9	11.7	71	75	<.04	--	--	.33	.60	E.004	--	.93	.09
17...	--	--	--	--	--	.22	--	--	.59	--	.81	--	--
17...	--	--	--	--	.045	--	<.030	--	--	.004	--	--	--
JUL													
10...	--	17.4	--	--	<.04	--	--	.29	.71	E.007	--	1.0	--
SEP													
05...	3.5	20.0	118	125	<.04	--	--	.25	1.06	.017	--	1.3	.08
05...	--	--	--	--	--	.22	--	--	1.11	--	1.3	--	--
05...	--	--	--	--	<.030	--	<.030	--	--	.006	--	--	--

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY CORR. (MG/L) (00310)	CHLORO- PHYLL A FLUORO- CHEM- METRIC METHOD CORR. (UG/L) (32209)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
NOV												
01...	.061	.04	.065	--	--	--	--	--	--	--	5.6	.7
DEC												
06...	.067	.05	.085	.5	<.1	2.9	.5	--	--	10	38.7	3.8
06...	.065	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	<1.0	--	--	--	--	--
JAN												
09...	--	.07	.087	--	--	--	--	--	--	--	13.6	1.8
MAR												
06...	--	.03	.060	.5	<.1	2.2	.5	--	--	<10	66.2	3.7
06...	.038	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	<1.8	--	--	--	--
APR												
04...	--	.02	.058	--	--	--	--	--	--	--	309	8.8
MAY												
22...	--	E.01	.049	--	--	--	--	--	--	--	633	11
22...	--	E.01	.049	--	--	--	--	--	--	--	--	12
JUN												
17...	--	<.02	<.004	--	--	--	--	--	--	--	--	--
17...	--	.03	.068	1.0	<.1	3.4	1.0	--	--	<10	586	13
17...	.040	--	--	--	--	--	--	--	--	--	--	--
17...	--	<.020	--	--	--	--	--	<1.0	1.20	--	--	--
JUL												
10...	--	.05	.079	--	--	--	--	--	--	--	35.8	3.4
SEP												
05...	--	.07	.108	.5	<.1	2.6	.5	--	--	10	18.3	2.1
05...	.098	--	--	--	--	--	--	--	--	--	--	--
05...	--	.085	--	--	--	--	--	<1.0	.800	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) (01032)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV													
01...	0830	--	--	--	20	--	--	--	--	--	--	--	20
DEC													
06...	0910	E1	22.3	E.03	20	18	.04	<.8	--	1.0	1.8	2.0	22
06...	0912	--	--	--	--	--	--	--	<5	--	--	--	--
MAR													
06...	1040	<2	21.5	E.06	20	14	.07	<.8	--	E.5	2.6	1.5	--
06...	1042	--	--	--	--	--	--	--	<5	--	--	--	--
JUN													
17...	1210	<2	27.2	E.04	10	11	.08	<.8	--	<.8	1.3	2.1	--
17...	1212	--	--	--	--	--	--	--	<5	--	--	--	--
SEP													
05...	0930	E1	26.4	<.06	20	23	.12	<.8	--	<.8	1.7	2.0	--
05...	0932	--	--	--	--	--	--	--	<5	--	--	--	--

DATE	TIME	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
NOV														
01...	--	--	--	--	5.9	--	--	--	--	--	--	--	--	--
DEC														
06...	100	.08	<1	8.6	19.6	<.01	<.01	.83	1	E.2	<.05	7	13	
06...	--	--	--	--	--	--	--	--	--	--	--	--	--	
MAR														
06...	110	.10	<1	--	23.7	<.01	<.01	.94	1	E.3	<.05	5	9	
06...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUN														
17...	340	.21	1	--	63.4	<.01	E.01	.85	1	<.4	<.05	6	16	
17...	--	--	--	--	--	--	--	--	--	--	--	--	--	
SEP														
05...	60	.12	<1	--	18.6	<.01	<.01	.58	2	.5	<.05	4	6	
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	

DATE	TIME	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34501)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)
DEC													
06...	0910	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2
MAR													
06...	1040	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2
JUN													
17...	1210	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2
SEP													
05...	0930	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

DATE	TIME	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- DI- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL METHYL WATER UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL WATER UNFLTRD RECOVER (UG/L) (50005)	BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER TOTAL (UG/L) (78032)
DEC														
06...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.3	
MAR														
06...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2	
JUN														
17...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.3	
SEP														
05...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.4	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
DEC 06...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2
MAR 06...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2
JUN 17...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2
SEP 05...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

FILTERED-WATER PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	SAMPLE TYPE	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DISS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR- BARYL FLTRD 0.7 U GF, REC (UG/L) (82680)	CHLOR- WATER 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)
NOV 01...	0830	ENVIRONMENTAL	<.004	<.002	<.005	.020	<.010	<.041	<.005	<.018	<.003
DEC 06...	0910	ENVIRONMENTAL	<.004	<.002	<.005	.014	<.010	<.041	<.005	<.018	<.003
JAN 09...	1230	FIELD BLANK	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003
MAR 09...	1330	ENVIRONMENTAL	<.006	<.004	<.005	.020	<.010	<.041	<.005	<.018	<.003
MAR 06...	1040	ENVIRONMENTAL	<.006	<.004	<.005	.027	<.010	<.041	<.005	<.018	<.003
APR 04...	0850	ENVIRONMENTAL	<.006	<.004	<.005	.010	<.010	<.041	<.005	<.018	<.003
MAY 22...	1000	ENVIRONMENTAL	<.008	<.004	<.005	.032	<.010	<.041	<.005	<.018	<.003
JUN 17...	1210	ENVIRONMENTAL	<.006	<.004	<.005	E.065	<.010	<.041	<.005	<.018	<.003
JUL 10...	0930	ENVIRONMENTAL	<.006	<.004	<.005	.034	<.010	<.041	<.005	<.018	<.003
SEP 05...	0930	ENVIRONMENTAL	<.006	<.004	<.005	.033	<.010	<.041	<.005	<.018	<.003

DATE	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
NOV 01...	E.020	<.005	<.002	<.004	<.035	<.027	<.050	E.005	<.006	<.007	<.010	<.01	<.011
DEC 06...	E.014	<.005	<.002	<.004	<.035	<.027	<.050	E.004	<.006	<.007	<.010	<.01	<.011
JAN 09...	<.006	<.005	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011
MAR 09...	E.018	E.004	<.002	<.004	<.035	<.027	<.050	E.005	<.006	<.007	<.022	M	<.011
MAR 06...	E.016	<.005	<.002	<.004	<.035	<.027	<.050	.014	<.006	<.007	<.022	E.01	<.011
APR 04...	E.005	<.005	<.002	<.004	<.035	<.027	<.050	E.006	<.006	<.007	<.022	M	<.011
MAY 22...	E.012	<.005	<.002	<.004	<.035	<.027	<.050	.015	<.006	<.007	<.022	<.01	<.011
JUN 17...	E.015	<.005	<.002	<.004	<.035	<.027	<.050	.018	<.006	<.007	<.022	M	<.011
JUL 10...	E.019	<.005	<.002	<.004	<.035	<.027	<.050	E.008	<.006	<.007	<.022	E.01	<.011
SEP 05...	E.037	.005	<.002	<.004	<.035	<.027	<.050	E.007	<.006	<.007	<.022	.02	<.011

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
NOV 01...	<.011	<.02	<.034
DEC 06...	<.011	<.02	<.034
JAN 09...	<.005	<.02	E.018
JAN 09...	<.005	<.02	<.034
MAR 06...	<.005	<.02	<.034
APR 04...	<.005	<.02	<.034
MAY 22...	.022	<.02	<.034
JUN 17...	.011	<.02	<.034
JUL 10...	.011	<.02	<.034
SEP 05...	.007	<.02	<.034

WHOLE-WATER PESTICIDE ANALYSES

DATE	TIME	ALDRIN, TOTAL (UG/L) (39330)	ALPHA BHC TOTAL (UG/L) (39337)	AROCLOR 1016/1242	AROCLOR 1221	AROCLOR 1232	AROCLOR 1248	AROCLOR 1254	AROCLOR 1260	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)	CHLOR-DANE CIS WATER WHOLE TOTAL (UG/L) (39062)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	CHLOR-DANE TRANS WATER WHOLE TOTAL (UG/L) (39065)
				PCB UNFLTRD (UG/L) (81648)	PCB TOTAL (UG/L) (39488)	PCB TOTAL (UG/L) (39492)	PCB TOTAL (UG/L) (39500)	PCB TOTAL (UG/L) (39504)	PCB TOTAL (UG/L) (39508)	CHLOR-IDE TOTAL (UG/L) (39338)	WATER WHOLE TOTAL (UG/L) (39062)	TECH-NICAL TOTAL (UG/L) (39350)	TRANS WATER WHOLE TOTAL (UG/L) (39065)
DEC 06...	0910	<.04	<.03	<.1	<1	<.1	<.1	<.1	<.1	<.03	<.1	<.1	<.1
MAR 06...	1040	<.04	<.03	<.1	<1	<.1	<.1	<.1	<.1	<.03	<.1	<.1	<.1
JUN 17...	1210	<.04	<.03	<.1	<1	<.1	<.1	<.1	<.1	<.03	<.1	<.1	<.1
SEP 05...	0930	<.04	<.03	<.1	<1	<.1	<.1	<.1	<.1	<.03	<.1	<.1	<.1

DATE	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (34259)	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 ALDEHYDE TOTAL (UG/L) (34366)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	LINDANE TOTAL (UG/L) (39340)	P,P' DDD, DDE, DDT, TOTAL (UG/L) (39310)	P,P' DDE, DDT, TOTAL (UG/L) (39320)	P,P' DDT, TOTAL (UG/L) (39300)
MAR 06...	<.09	<.02	<.1	<.04	<.6	<.2	<.06	<.8	<.03	<.03	<.1	<.04	<.1
JUN 17...	<.09	<.02	<.1	<.04	<.6	<.2	<.06	<.8	<.03	<.03	<.1	<.04	<.1
SEP 05...	<.09	<.02	<.1	<.04	<.6	<.2	<.06	<.8	<.03	<.03	<.1	<.04	<.1

DATE	TOX-APHENE, TOTAL (UG/L) (39400)
DEC 06...	<2
MAR 06...	<2
JUN 17...	<2
SEP 05...	<2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)
JUN					JUL				
05...	1045	20	<100	<10	02...	1200	<20	<100	10
12...	1035	80	<100	<10					
19...	1120	20	100	10					
25...	1040	20	<100	<10					

Remark codes used in this report:
 < -- Less than

OXYGEN DISSOLVED, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.0	9.7	10.3	14.1	11.1	12.6	12.4	9.6	10.9	14.9	14.2	14.5
2	11.6	9.9	10.6	14.1	11.4	12.7	12.0	9.9	10.9	15.3	14.3	14.8
3	11.5	9.5	10.4	13.0	10.8	11.8	12.5	10.2	11.3	15.6	15.0	15.2
4	11.3	9.2	10.1	13.7	10.7	12.1	12.7	10.7	11.6	15.6	14.8	15.2
5	11.2	9.0	10.0	13.4	10.9	12.1	12.5	10.9	11.5	15.5	14.8	15.1
6	10.6	8.8	9.5	13.7	10.9	12.3	12.6	10.7	11.5	15.2	14.6	14.8
7	11.2	9.0	10.0	14.1	11.6	12.8	12.3	10.4	11.2	14.8	14.3	14.5
8	11.8	9.5	10.6	14.4	11.6	12.9	11.6	10.3	11.0	15.4	14.5	14.9
9	12.1	10.1	11.0	14.0	11.4	12.7	12.5	10.6	11.4	15.2	14.7	14.9
10	12.4	10.4	11.3	14.2	11.6	12.8	13.1	11.2	12.1	15.3	14.5	14.8
11	12.4	10.4	11.2	14.2	11.8	12.9	---	---	---	14.7	14.0	14.3
12	12.1	9.8	10.9	14.3	11.9	13.0	---	---	---	14.8	13.7	14.1
13	12.0	9.7	10.8	14.6	12.4	13.6	12.6	11.8	12.1	14.3	13.4	13.9
14	11.6	9.3	10.3	15.0	12.7	13.8	12.0	11.2	11.6	14.8	13.5	14.1
15	11.7	9.0	10.3	14.8	12.3	13.6	13.0	11.0	11.9	14.9	13.7	14.2
16	11.7	9.3	10.5	14.5	12.2	13.3	13.7	11.7	12.6	15.1	13.7	14.3
17	11.8	9.5	10.6	14.5	12.0	13.2	12.9	12.1	12.4	14.8	13.7	14.2
18	12.6	10.1	11.2	14.6	12.3	13.4	12.6	11.5	12.0	15.0	13.6	14.2
19	12.8	10.5	11.6	14.3	12.3	13.3	13.2	11.6	12.3	14.5	13.7	14.1
20	12.9	10.6	11.6	13.7	11.9	12.8	12.8	11.9	12.3	15.7	14.0	14.7
21	12.8	10.4	11.6	14.7	12.2	13.2	12.9	12.1	12.5	15.6	14.4	14.9
22	12.8	10.3	11.4	15.2	12.9	13.9	13.4	12.4	12.9	15.9	14.4	15.1
23	12.5	9.9	11.1	15.2	13.0	14.0	13.6	12.6	13.1	15.2	14.3	14.7
24	12.5	9.8	11.1	14.3	12.6	13.4	13.4	12.6	13.0	14.5	13.8	14.1
25	11.9	9.3	10.5	13.9	11.8	12.7	13.7	12.7	13.1	14.5	13.1	13.8
26	11.9	9.4	10.7	13.6	10.9	12.1	13.7	12.7	13.2	14.9	12.9	13.9
27	12.2	10.1	11.1	13.6	10.8	12.2	13.8	12.6	13.2	15.2	13.4	14.2
28	13.2	10.5	11.8	13.6	10.9	12.1	14.0	13.1	13.5	15.3	13.3	14.2
29	13.7	11.2	12.4	11.8	10.3	10.8	14.2	13.4	13.8	15.1	13.2	14.1
30	13.9	11.4	12.6	11.8	9.6	10.6	14.4	13.4	13.9	13.9	12.8	13.5
31	13.0	11.2	12.2	---	---	---	14.8	14.1	14.3	13.2	12.5	12.8
MONTH	13.9	8.8	10.9	15.2	9.6	12.8	14.8	9.6	12.3	15.9	12.5	14.4

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN DIS. PERCENT, in % OF SATURATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	109	95	102	129	98	113	117	89	102	103	97	100
2	119	96	106	134	103	118	110	90	99	106	98	102
3	122	96	108	126	103	113	111	89	100	108	103	105
4	123	95	107	130	99	114	112	92	101	108	102	105
5	123	94	107	122	100	111	111	94	101	110	102	106
6	113	93	102	122	95	108	113	93	102	107	102	104
7	116	92	102	127	100	113	111	92	101	105	101	103
8	118	93	104	130	102	115	101	90	96	109	100	104
9	120	95	107	126	102	113	107	90	97	108	102	105
10	124	99	110	126	101	113	109	92	100	112	102	106
11	126	100	111	124	102	112	---	---	---	110	103	106
12	126	98	111	121	99	110	---	---	---	113	101	106
13	127	99	112	123	102	113	106	97	101	110	101	105
14	123	97	109	127	104	115	102	94	98	112	100	106
15	124	94	108	128	104	116	110	93	100	114	102	108
16	121	94	107	129	105	116	112	94	102	115	102	108
17	119	95	106	128	104	116	105	97	101	112	102	107
18	123	96	108	127	104	115	105	95	99	113	101	107
19	125	98	111	125	104	115	109	94	101	106	99	102
20	126	100	112	119	103	111	103	95	99	113	99	105
21	127	100	113	124	101	111	101	95	98	113	103	107
22	130	100	113	126	105	115	104	95	99	117	103	110
23	127	98	112	126	106	116	105	95	100	113	105	109
24	131	99	113	123	106	113	105	97	100	111	105	108
25	125	96	109	125	104	113	104	95	99	113	100	107
26	118	93	106	125	98	110	104	94	99	117	98	107
27	114	94	104	122	96	109	102	92	97	119	101	109
28	122	93	107	123	96	108	101	92	97	120	100	110
29	126	99	112	107	94	98	103	95	99	120	100	110
30	129	103	116	109	87	97	101	93	97	112	100	107
31	118	101	110	---	---	---	103	97	99	106	99	102
MONTH	131	92	109	134	87	112	117	89	99	120	97	106
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	105	98	100	124	98	111	106	100	103	105	103	104
2	103	96	99	120	99	110	108	100	104	103	99	101
3	103	96	100	112	100	106	106	100	103	103	98	100
4	101	95	98	114	97	105	110	99	104	105	98	102
5	101	93	96	116	98	107	108	101	105	106	96	102
6	103	95	99	116	100	107	111	103	107	103	97	101
7	104	97	99	121	101	110	115	104	109	101	94	98
8	107	95	101	123	102	112	114	106	110	103	86	97
9	108	97	102	124	102	112	114	106	110	95	89	91
10	108	98	103	121	98	108	114	103	108	101	85	94
11	107	97	101	121	95	107	116	103	109	101	90	95
12	106	93	99	115	96	106	110	103	107	95	88	91
13	102	95	98	106	98	102	115	102	108	---	---	---
14	104	95	99	125	94	110	114	101	107	---	---	---
15	103	96	99	127	104	115	115	98	106	---	---	---
16	107	97	101	114	103	109	106	95	100	---	---	---
17	106	97	101	113	100	106	102	91	96	104	100	101
18	107	95	101	109	98	105	103	93	98	100	93	98
19	111	97	104	117	99	109	103	88	96	102	97	100
20	112	97	105	110	106	107	95	87	91	103	100	102
21	116	98	106	110	104	107	96	87	91	104	100	102
22	115	94	106	110	102	106	99	92	95	105	99	102
23	120	91	105	114	104	108	110	96	102	106	98	102
24	121	100	110	112	104	108	116	101	107	106	98	101
25	122	97	109	112	102	107	107	102	104	106	94	100
26	124	100	111	106	102	104	114	100	107	103	94	98
27	115	94	103	109	101	105	118	105	111	106	94	100
28	120	93	106	108	103	105	111	102	106	110	95	102
29	---	---	---	107	103	105	102	99	101	110	95	101
30	---	---	---	108	105	106	105	102	103	98	92	94
31	---	---	---	106	102	104	---	---	---	95	92	94
MONTH	124	91	102	127	94	107	118	87	104	110	85	99

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN DIS. PERCENT, in % OF SATURATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	96	90	93	112	88	100	129	81	104	110	96	102
2	99	90	94	121	89	105	131	86	107	118	95	106
3	102	91	96	120	91	105	126	81	103	129	95	110
4	100	94	96	118	86	101	135	86	109	133	94	111
5	103	91	97	116	84	100	120	88	105	131	91	109
6	101	92	95	116	82	98	140	91	112	133	92	111
7	95	90	92	116	81	97	141	95	117	134	91	111
8	95	93	94	116	83	99	140	98	119	136	92	112
9	97	93	95	113	79	94	148	101	123	137	92	113
10	98	93	95	111	75	91	150	103	125	141	92	114
11	99	92	95	103	71	87	149	99	123	125	90	107
12	96	91	93	101	69	84	151	103	125	134	88	109
13	91	89	90	96	67	80	150	100	124	140	95	116
14	91	88	89	---	---	---	---	---	---	139	96	115
15	92	88	90	---	---	---	---	---	---	127	94	107
16	95	82	91	---	---	---	---	---	---	129	89	106
17	100	90	96	---	---	---	---	---	---	131	94	110
18	100	93	96	---	---	---	---	---	---	124	93	106
19	100	93	96	---	---	---	---	---	---	125	89	105
20	105	95	99	---	---	---	---	---	---	124	90	105
21	108	95	101	---	---	---	---	---	---	123	87	104
22	111	95	102	---	---	---	---	---	---	125	85	103
23	115	95	104	133	75	100	---	---	---	123	84	101
24	119	96	107	106	71	86	111	87	98	126	86	104
25	124	95	109	118	80	97	136	87	109	131	88	108
26	124	98	109	111	81	94	135	92	112	108	89	99
27	126	90	108	100	78	91	139	94	114	111	88	97
28	104	86	93	114	84	97	120	95	106	116	84	99
29	93	81	88	---	---	---	113	95	103	118	88	102
30	107	86	96	---	---	---	122	93	107	116	89	102
31	---	---	---	---	---	---	125	98	111	---	---	---
MONTH	126	81	97	133	67	95	151	81	112	141	84	107
YEAR	151	67	104									

PH, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	7.9	7.4	7.6	8.8	7.8	8.4	8.1	7.2	7.5	7.8	7.6	7.7
2	8.2	7.4	7.7	8.9	8.0	8.6	7.9	7.3	7.5	7.8	7.6	7.7
3	8.3	7.5	7.8	8.8	8.0	8.5	8.1	7.3	7.6	7.8	7.6	7.7
4	8.4	7.5	7.8	8.8	8.0	8.5	8.2	7.3	7.6	7.8	7.6	7.7
5	8.4	7.5	7.9	8.8	8.1	8.6	8.0	7.3	7.5	7.8	7.6	7.7
6	8.3	7.5	7.8	8.8	8.0	8.5	8.1	7.3	7.6	7.8	7.6	7.7
7	8.4	7.6	7.9	8.9	8.2	8.6	8.1	7.3	7.6	7.7	7.6	7.6
8	8.5	7.6	8.0	8.9	8.2	8.7	7.7	7.3	7.5	7.9	7.6	7.7
9	8.5	7.7	8.0	8.9	8.2	8.6	8.0	7.4	7.6	7.8	7.6	7.7
10	8.5	7.8	8.2	8.9	8.2	8.7	8.1	7.5	7.7	7.9	7.6	7.7
11	8.6	7.8	8.2	8.9	8.3	8.6	---	---	---	7.8	7.6	7.7
12	8.6	7.8	8.2	8.9	8.3	8.6	---	---	---	8.0	7.6	7.8
13	8.7	7.9	8.3	8.9	8.3	8.7	7.8	7.5	7.7	8.0	7.6	7.8
14	8.6	7.9	8.3	8.9	8.4	8.7	7.6	7.4	7.5	8.1	7.6	7.8
15	8.7	7.9	8.4	8.9	8.4	8.7	8.1	7.4	7.8	8.1	7.6	7.8
16	8.7	7.8	8.4	8.9	8.4	8.8	8.3	7.6	7.8	8.2	7.7	7.9
17	8.8	7.9	8.4	8.9	8.3	8.7	7.9	7.6	7.7	8.0	7.6	7.8
18	8.8	8.0	8.4	8.9	8.3	8.7	7.9	7.5	7.7	8.1	7.5	7.7
19	8.8	8.0	8.5	8.9	8.3	8.6	8.1	7.5	7.7	7.8	7.6	7.7
20	8.8	8.0	8.5	8.7	8.2	8.6	7.8	7.5	7.6	8.1	7.6	7.8
21	8.8	8.0	8.3	8.8	8.2	8.5	7.5	7.4	7.5	8.1	7.7	7.8
22	8.8	8.0	8.5	8.9	8.2	8.6	7.6	7.3	7.4	8.3	7.8	8.0
23	8.8	8.0	8.5	8.9	8.3	8.6	7.6	7.3	7.4	8.1	7.8	8.0
24	8.8	8.0	8.5	8.7	8.1	8.5	7.6	7.3	7.4	8.1	7.8	7.9
25	8.8	7.9	8.5	8.6	7.9	8.3	7.7	7.3	7.5	8.1	7.7	7.9
26	8.8	8.0	8.5	8.6	7.7	8.1	7.8	7.4	7.6	8.3	7.6	7.9
27	8.8	8.1	8.5	8.6	7.5	7.9	7.8	7.4	7.6	8.4	7.7	8.1
28	8.8	8.0	8.5	8.5	7.4	7.9	7.8	7.4	7.6	8.5	7.7	8.1
29	8.9	8.1	8.6	7.8	7.3	7.5	7.8	7.5	7.6	8.5	7.6	8.0
30	8.9	8.2	8.6	7.7	7.2	7.4	7.8	7.5	7.6	8.1	7.6	7.9
31	8.8	8.2	8.6	---	---	---	7.8	7.5	7.7	7.8	7.5	7.7
MAX	8.9	8.2	8.6	8.9	8.4	8.8	8.3	7.6	7.8	8.5	7.8	8.1
MIN	7.9	7.4	7.6	7.7	7.2	7.4	7.5	7.2	7.4	7.7	7.5	7.6

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	7.8	7.6	7.6	8.9	7.8	8.5	7.2	7.0	7.1	7.0	6.7	6.7
2	7.6	7.5	7.6	8.8	7.8	8.5	7.2	7.1	7.1	6.8	6.7	6.7
3	7.6	7.4	7.5	8.4	7.6	7.9	7.1	7.0	7.1	6.8	6.7	6.8
4	7.5	7.3	7.4	8.3	7.4	7.9	7.2	7.0	7.1	6.9	6.8	6.8
5	7.6	7.4	7.4	8.5	7.7	8.1	7.3	7.0	7.2	6.9	6.7	6.8
6	7.7	7.4	7.6	8.4	7.6	8.0	7.4	7.2	7.3	6.9	6.7	6.8
7	7.7	7.4	7.5	8.5	7.4	8.0	7.5	7.2	7.4	6.9	6.7	6.8
8	7.9	7.4	7.7	8.6	7.5	8.1	7.5	7.3	7.4	7.0	6.7	6.8
9	7.9	7.5	7.7	8.6	7.5	8.0	7.5	7.3	7.4	6.8	6.7	6.7
10	7.9	7.5	7.7	8.6	7.3	7.9	7.6	7.2	7.3	7.0	6.6	6.8
11	8.2	7.5	7.8	8.6	7.5	8.0	7.7	7.2	7.5	7.0	6.7	6.8
12	8.2	7.6	7.8	8.3	7.5	7.8	7.5	7.3	7.4	6.9	6.7	6.8
13	7.9	7.5	7.7	7.8	7.2	7.4	7.7	7.2	7.4	---	---	---
14	7.6	7.2	7.4	8.0	7.1	7.6	7.6	7.2	7.4	---	---	---
15	7.7	7.4	7.4	8.2	7.3	7.6	7.8	7.1	7.4	---	---	---
16	7.9	7.4	7.5	7.6	7.2	7.4	7.4	6.9	7.0	---	---	---
17	7.9	7.5	7.7	7.6	7.1	7.3	6.9	6.8	6.9	7.2	7.1	7.2
18	8.2	7.5	7.8	7.4	7.2	7.3	7.0	6.8	6.9	7.3	7.2	7.2
19	8.3	7.6	7.9	7.5	7.1	7.3	7.0	6.8	6.8	7.4	7.3	7.3
20	8.4	7.6	7.9	7.4	7.2	7.3	6.8	6.7	6.8	7.3	7.3	7.3
21	8.5	7.5	8.0	7.3	7.2	7.2	6.9	6.7	6.8	7.3	7.3	7.3
22	8.5	7.6	8.1	7.4	7.3	7.3	7.0	6.8	6.9	7.5	7.3	7.4
23	8.5	7.7	7.9	7.6	7.3	7.4	7.3	7.0	7.1	7.6	7.4	7.5
24	8.8	7.9	8.5	7.6	7.3	7.4	7.2	7.1	7.2	7.6	7.4	7.5
25	8.9	7.7	8.3	7.6	7.3	7.4	7.2	7.1	7.2	7.7	7.4	7.5
26	9.0	7.9	8.6	7.4	7.3	7.4	7.5	7.1	7.2	7.7	7.5	7.5
27	8.6	7.6	8.1	7.5	7.3	7.4	7.7	7.2	7.4	7.8	7.5	7.6
28	8.8	7.8	8.5	7.4	7.1	7.4	7.4	7.2	7.3	7.9	7.5	7.7
29	---	---	---	7.1	7.0	7.0	7.2	7.1	7.1	8.0	7.6	7.7
30	---	---	---	7.1	7.0	7.0	7.2	7.0	7.1	7.7	7.1	7.2
31	---	---	---	7.1	7.0	7.1	---	---	---	7.1	7.1	7.1
MAX	9.0	7.9	8.6	8.9	7.8	8.5	7.8	7.3	7.5	8.0	7.6	7.7
MIN	7.5	7.2	7.4	7.1	7.0	7.0	6.8	6.7	6.8	6.8	6.6	6.7
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	7.2	7.1	7.2	8.1	7.5	7.7	8.7	7.7	8.2	8.2	7.7	7.8
2	7.4	7.2	7.3	8.4	7.5	7.8	8.7	7.7	8.2	8.4	7.6	7.9
3	7.5	7.3	7.4	8.4	7.6	7.9	8.6	7.5	8.0	8.7	7.6	8.3
4	7.6	7.3	7.5	8.5	7.6	7.9	8.6	7.6	8.1	8.7	7.8	8.3
5	7.6	7.4	7.5	8.7	7.6	8.1	8.4	7.6	8.0	8.7	7.8	8.3
6	7.6	7.4	7.5	8.9	7.7	8.2	8.7	7.6	8.2	8.8	7.8	8.4
7	7.5	7.4	7.4	8.9	7.8	8.2	8.7	7.8	8.2	8.8	7.9	8.4
8	7.4	7.2	7.3	9.1	7.8	8.5	8.7	7.8	8.3	8.8	7.9	8.4
9	7.3	7.2	7.2	9.1	7.8	8.4	8.8	7.8	8.3	8.8	7.9	8.4
10	7.3	7.2	7.3	9.2	7.8	8.5	8.8	7.8	8.3	8.8	7.8	8.5
11	7.4	7.3	7.4	9.2	7.9	8.6	8.8	7.8	8.3	8.8	7.9	8.5
12	7.4	7.3	7.4	9.2	8.0	8.5	8.9	7.8	8.3	8.9	8.1	8.5
13	7.4	7.3	7.3	9.3	7.9	8.5	8.9	7.8	8.4	8.9	8.1	8.5
14	7.4	7.4	7.4	---	---	---	8.9	7.8	8.4	8.9	8.1	8.5
15	7.6	7.4	7.5	---	---	---	8.8	7.8	8.4	8.6	7.9	8.2
16	7.6	7.5	7.5	---	---	---	8.8	7.7	8.2	8.6	7.6	8.0
17	7.6	7.5	7.6	---	---	---	8.7	7.6	8.1	8.7	7.7	8.1
18	7.6	7.4	7.5	---	---	---	8.7	7.6	8.0	8.7	7.6	8.1
19	7.5	7.4	7.5	9.3	7.9	8.4	8.7	7.6	8.1	8.8	7.7	8.2
20	7.7	7.5	7.6	9.2	7.6	8.1	8.6	7.5	8.0	8.8	7.7	8.2
21	7.8	7.5	7.6	9.2	7.8	8.3	8.7	7.5	8.1	8.7	7.6	8.2
22	8.0	7.5	7.7	8.9	7.8	8.2	8.8	7.6	8.1	8.7	7.6	8.1
23	8.2	7.6	7.8	8.8	7.6	8.2	8.5	7.6	7.9	8.7	7.6	8.1
24	8.4	7.6	7.9	8.4	7.6	7.8	8.1	7.4	7.7	8.7	7.7	8.2
25	8.5	7.7	8.0	8.6	7.6	8.0	8.6	7.4	8.0	8.9	7.8	8.4
26	8.6	7.7	8.0	8.5	7.6	7.9	8.6	7.5	8.1	8.4	7.8	8.1
27	8.7	7.7	8.1	8.1	7.6	7.8	8.7	7.6	8.2	8.3	7.6	7.8
28	8.0	7.4	7.5	8.4	7.6	7.8	8.4	7.7	8.1	8.5	7.4	7.8
29	7.5	7.4	7.4	---	---	---	8.2	7.7	7.9	8.4	7.6	7.9
30	7.8	7.5	7.6	---	---	---	8.4	7.6	8.0	8.4	7.6	7.8
31	---	---	---	---	---	---	8.5	7.7	8.1	---	---	---
MAX	8.7	7.7	8.1	9.3	8.0	8.6	8.9	7.8	8.4	8.9	8.1	8.5
MIN	7.2	7.1	7.2	8.1	7.5	7.7	8.1	7.4	7.7	8.2	7.4	7.8
YEAR	MAX			MAXIMUM	9.3	MINIMUM	6.8					
	MIN			MAXIMUM	8.4	MINIMUM	6.6					
	MEDIAN			MAXIMUM	8.8	MINIMUM	6.7					

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	207	194	200	231	227	229	223	217	220	221	209	218
2	219	206	212	235	229	231	224	218	221	230	216	225
3	229	219	224	236	228	232	224	221	223	234	230	231
4	230	225	228	236	230	233	222	205	212	237	223	233
5	235	228	232	234	230	232	205	185	194	240	236	238
6	237	232	235	234	229	231	189	184	186	245	239	242
7	243	231	234	235	231	233	199	189	194	239	232	236
8	235	230	232	237	233	235	207	199	203	232	227	230
9	239	234	237	237	230	233	215	206	210	234	228	231
10	236	220	227	238	231	235	223	215	220	246	233	237
11	224	219	221	242	236	239	---	---	---	259	246	253
12	228	221	223	239	235	237	---	---	---	260	256	258
13	234	227	231	240	234	237	226	219	222	259	255	257
14	236	233	234	237	234	236	229	225	227	260	255	258
15	234	230	232	239	233	236	232	225	229	258	248	252
16	235	229	231	237	234	236	236	227	232	249	244	246
17	237	229	233	243	234	239	230	226	229	246	243	244
18	240	231	236	248	243	245	226	210	217	246	244	245
19	232	224	227	247	241	244	210	201	204	246	244	245
20	229	225	227	243	234	239	209	198	205	247	245	246
21	230	218	223	237	233	235	198	161	177	253	246	250
22	222	219	221	236	232	234	162	159	160	264	253	257
23	228	221	223	235	229	232	165	161	163	271	264	269
24	231	226	228	233	230	231	165	160	162	314	271	285
25	229	222	225	235	229	233	176	164	170	299	281	292
26	229	224	226	234	230	232	180	173	178	281	273	276
27	234	228	230	242	227	232	183	180	181	277	273	276
28	236	233	235	244	238	241	186	182	183	274	250	262
29	238	230	232	241	224	232	188	185	186	250	228	239
30	232	228	230	227	222	225	202	188	193	228	217	224
31	233	230	231	---	---	---	215	202	210	217	212	215
MONTH	243	194	228	248	222	235	236	159	200	314	209	247

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	215	211	213	193	188	190	132	128	130	133	121	124
2	212	172	192	195	190	192	131	129	131	126	121	123
3	172	160	167	198	189	192	132	129	130	139	125	134
4	160	145	150	209	197	201	136	129	132	138	130	133
5	154	146	148	211	194	203	145	136	141	136	131	133
6	165	154	161	194	183	188	147	142	145	138	136	137
7	172	165	168	184	177	181	155	142	148	141	138	139
8	180	172	176	189	179	181	156	154	155	147	140	144
9	181	175	177	200	184	187	156	154	155	151	146	150
10	181	176	179	190	186	188	161	156	158	159	150	155
11	186	180	183	193	190	191	160	156	158	159	153	156
12	190	185	188	196	192	194	164	158	160	156	152	154
13	195	147	180	192	179	184	164	160	162	---	---	---
14	147	135	139	181	177	179	167	161	163	---	---	---
15	146	139	143	181	176	178	173	166	168	---	---	---
16	156	146	151	179	176	178	182	161	171	---	---	---
17	164	156	160	180	177	178	164	146	155	115	107	110
18	167	164	165	181	177	179	148	145	146	125	112	118
19	169	165	167	188	179	185	150	146	148	136	124	131
20	172	167	169	191	183	187	154	149	152	128	112	118
21	176	170	173	196	176	183	157	152	155	119	113	114
22	183	176	179	203	196	201	164	154	159	124	115	119
23	189	183	185	203	192	198	168	163	166	130	122	125
24	189	184	187	195	179	188	170	165	167	135	130	133
25	188	177	183	180	175	177	168	162	164	140	135	139
26	180	172	177	177	174	176	167	162	164	144	140	143
27	183	179	180	180	175	177	172	166	169	152	142	147
28	189	183	186	184	147	174	170	160	165	159	151	156
29	---	---	---	147	129	133	169	159	164	161	156	159
30	---	---	---	132	128	130	169	133	153	158	105	127
31	---	---	---	133	130	132	---	---	---	108	101	103
MONTH	215	135	172	211	128	181	182	128	154	161	101	134

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	123	108	116	174	168	171	225	221	223	240	210	227
2	130	122	126	184	174	179	222	214	219	210	200	204
3	130	125	128	193	184	190	220	200	213	223	206	212
4	130	125	128	193	186	190	229	220	225	247	223	240
5	135	130	133	188	184	186	232	226	229	247	232	240
6	139	133	137	193	185	189	231	227	229	232	222	227
7	157	137	146	201	192	196	232	225	229	222	219	221
8	150	108	127	201	198	199	225	222	224	227	221	223
9	108	100	103	205	199	201	223	217	220	229	227	229
10	114	105	109	211	204	207	218	214	216	229	226	227
11	119	112	115	218	211	214	223	216	218	232	226	229
12	124	117	120	221	217	219	226	221	223	234	231	232
13	135	118	126	220	215	217	233	225	228	232	229	231
14	145	134	140	---	---	---	234	228	231	229	225	227
15	151	144	148	---	---	---	228	219	222	231	222	228
16	151	137	146	---	---	---	220	214	217	225	220	222
17	140	134	137	---	---	---	217	213	215	223	213	217
18	134	126	129	---	---	---	223	216	220	222	214	218
19	130	127	128	238	228	232	225	220	223	217	197	205
20	141	130	136	231	220	226	223	216	219	198	192	194
21	144	141	143	231	224	228	219	212	215	200	193	196
22	150	143	147	232	227	228	213	210	211	211	200	205
23	158	149	153	236	232	233	210	203	206	221	211	218
24	162	156	159	232	222	226	204	198	202	237	216	227
25	168	162	165	222	215	218	204	199	202	236	220	229
26	169	166	168	219	208	212	215	204	208	220	205	212
27	170	162	165	217	210	214	231	215	225	215	205	210
28	182	163	167	217	213	215	232	227	229	219	201	205
29	183	171	175	---	---	---	229	210	218	237	219	232
30	175	171	173	---	---	---	216	213	214	226	194	211
31	---	---	---	---	---	---	240	215	226	---	---	---
MONTH	183	100	140	238	168	208	240	198	219	247	192	220
YEAR	314	100	196									

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.0	14.5	14.5	11.5	9.5	10.5	12.5	12.0	12.0	0.5	0.0	0.0
2	16.5	14.0	15.0	13.5	11.0	12.0	12.0	10.0	11.0	0.5	0.0	0.0
3	18.5	15.5	17.0	13.5	13.0	13.5	10.0	9.0	9.5	0.5	0.0	0.0
4	19.5	17.0	18.0	13.0	12.0	12.5	9.5	8.5	9.0	0.5	0.0	0.5
5	19.5	17.5	18.5	12.5	10.0	11.5	10.0	9.0	9.5	1.5	0.0	1.0
6	19.0	18.0	18.5	10.0	9.0	9.5	10.5	9.5	10.0	1.5	0.5	1.0
7	18.0	15.5	16.5	10.5	9.0	10.0	11.0	10.0	10.5	1.5	1.0	1.0
8	15.5	14.0	14.5	11.0	9.5	10.5	10.5	8.5	9.5	1.0	0.0	0.5
9	15.0	12.5	14.0	11.0	10.0	10.5	8.5	7.5	8.0	1.0	0.5	1.0
10	15.0	13.0	14.0	10.0	9.0	9.5	7.5	6.5	7.0	2.5	1.0	1.5
11	16.5	14.0	15.0	9.5	8.5	9.0	---	---	---	3.5	2.5	2.5
12	17.0	15.0	16.0	8.5	7.5	8.0	---	---	---	4.0	3.0	3.5
13	18.0	16.0	17.0	8.0	7.0	7.5	7.5	7.0	7.5	4.5	3.0	3.5
14	18.0	17.0	17.5	8.0	6.5	7.5	8.5	7.5	8.0	4.0	2.5	3.5
15	18.5	17.0	17.5	9.5	7.5	8.5	8.5	7.0	8.0	4.0	3.0	3.5
16	17.5	15.5	16.5	10.0	8.5	9.5	7.0	6.0	6.5	4.0	3.0	3.5
17	16.0	14.0	15.5	10.0	9.0	9.5	6.5	6.0	6.5	4.0	3.0	3.5
18	14.5	13.0	13.5	9.5	8.0	9.0	7.5	6.5	7.0	3.5	3.0	3.5
19	14.0	12.0	13.0	9.5	8.0	9.0	7.0	6.0	6.5	3.0	1.0	2.0
20	14.5	12.5	13.5	9.5	8.5	9.0	6.5	5.5	6.0	2.0	0.5	1.5
21	15.0	13.0	14.0	8.5	7.0	7.5	5.5	4.5	5.0	2.0	1.5	1.5
22	16.0	14.0	15.0	7.5	6.0	7.0	4.5	3.5	4.0	3.0	1.5	2.5
23	16.0	14.5	15.5	7.5	6.0	7.0	4.0	3.5	4.0	3.5	2.5	2.5
24	17.5	15.5	16.5	9.0	7.5	8.0	5.0	4.0	4.5	4.5	3.5	4.0
25	17.5	16.0	17.0	11.0	9.0	10.0	4.0	3.5	3.5	5.0	4.0	4.5
26	16.0	14.0	15.0	11.5	10.5	11.0	3.5	3.0	3.0	5.0	3.5	4.5
27	14.0	11.5	12.5	11.0	9.5	10.0	3.0	2.0	2.5	5.0	3.5	4.0
28	11.5	10.0	11.0	11.0	10.0	10.5	2.0	1.0	1.5	5.0	3.5	4.5
29	11.5	9.5	10.5	11.0	11.0	11.0	2.0	1.5	1.5	5.5	4.0	4.5
30	12.0	10.5	11.5	12.0	11.0	11.5	1.5	0.0	0.5	6.0	5.0	5.5
31	11.5	10.5	10.5	---	---	---	0.5	0.0	0.0	6.0	5.5	5.5
MONTH	19.5	9.5	15.0	13.5	6.0	9.7	12.5	0.0	6.3	6.0	0.0	2.6

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TURBIDITY, FIELD, in (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	4.3	<2.0	<2.0	5.8	<2.0	2.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2	<2.0	<2.0	<2.0	3.7	<2.0	2.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
3	<2.0	<2.0	<2.0	5.1	<2.0	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4	<2.0	<2.0	<2.0	5.1	<2.0	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
5	<2.0	<2.0	<2.0	4.6	<2.0	2.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
6	<2.0	<2.0	<2.0	2.1	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0
7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.1	<2.0	<2.0	3.4	<2.0	<2.0
8	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
9	<2.0	<2.0	<2.0	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
11	<2.0	<2.0	<2.0	2.3	<2.0	<2.0	---	---	---	4.0	<2.0	<2.0
12	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	---	---	---	<2.0	<2.0	<2.0
13	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
14	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.7	<2.0	<2.0	<2.0	<2.0	<2.0
15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
16	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
17	2.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
18	3.1	<2.0	<2.0	<2.0	<2.0	<2.0	3.5	<2.0	<2.0	<2.0	<2.0	<2.0
19	2.4	<2.0	<2.0	<2.0	<2.0	<2.0	3.6	<2.0	2.3	<2.0	<2.0	<2.0
20	2.4	<2.0	<2.0	<2.0	<2.0	<2.0	16	2.2	5.0	<2.0	<2.0	<2.0
21	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	17	7.1	11	<2.0	<2.0	<2.0
22	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	10	6.4	7.9	<2.0	<2.0	<2.0
23	2.4	<2.0	<2.0	<2.0	<2.0	<2.0	10	6.2	7.6	<2.0	<2.0	<2.0
24	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	9.4	6.3	7.9	4.2	<2.0	<2.0
25	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	9.0	5.2	7.2	10	<2.0	6.3
26	2.9	<2.0	<2.0	<2.0	<2.0	<2.0	7.3	<2.0	2.9	10	2.5	5.0
27	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.1	<2.0	<2.0	3.8	2.3	2.6
28	2.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.6	<2.0	2.0
29	3.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.3	<2.0	<2.0
30	4.2	<2.0	2.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.7	<2.0	<2.0
31	3.8	<2.0	<2.0	---	---	---	<2.0	<2.0	<2.0	3.4	<2.0	<2.0
MONTH	4.3	<2.0	<2.0	5.8	<2.0	<2.0	17	<2.0	2.6	10	<2.0	<2.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	5.7	<2.0	2.3	<2.0	<2.0	<2.0	20	4.5	6.1	33	5.3	12
2	30	4.1	9.7	<2.0	<2.0	<2.0	9.1	4.4	5.8	32	3.0	6.0
3	13	4.2	6.0	8.2	<2.0	3.3	8.8	4.0	5.5	26	5.5	16
4	16	4.4	6.6	6.9	3.1	5.2	11	4.1	5.8	16	3.9	7.5
5	9.3	3.9	5.4	4.4	2.4	3.1	9.3	3.4	4.5	9.0	2.7	5.3
6	5.6	3.6	4.6	3.1	2.4	2.8	5.8	3.2	3.9	8.9	2.5	4.7
7	4.5	3.0	3.7	2.7	<2.0	2.3	5.2	2.8	3.6	7.1	2.3	3.2
8	3.6	2.6	3.0	2.5	<2.0	<2.0	3.7	<2.0	2.6	5.1	<2.0	3.5
9	3.3	2.2	2.7	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	7.3	<2.0	2.0
10	3.3	2.0	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	6.8	<2.0	2.8
11	3.3	2.1	2.7	2.0	<2.0	<2.0	3.5	<2.0	<2.0	4.8	<2.0	<2.0
12	3.0	2.3	2.8	2.4	<2.0	<2.0	<2.0	<2.0	<2.0	2.6	<2.0	<2.0
13	16	2.5	6.6	2.8	<2.0	2.3	3.1	<2.0	<2.0	---	---	---
14	10	5.7	7.2	3.1	<2.0	<2.0	2.7	<2.0	<2.0	---	---	---
15	15	10	13	<2.0	<2.0	<2.0	14	<2.0	<2.0	---	---	---
16	14	11	12	<2.0	<2.0	<2.0	26	<2.0	8.0	---	---	---
17	12	7.4	9.9	<2.0	<2.0	<2.0	37	3.5	11	12	3.0	6.6
18	7.6	6.3	6.9	<2.0	<2.0	<2.0	10	<2.0	3.9	18	<2.0	8.4
19	6.7	5.1	5.8	2.4	<2.0	<2.0	7.3	<2.0	2.7	16	6.8	10
20	5.6	4.2	4.5	28	<2.0	4.6	6.9	<2.0	<2.0	12	3.9	7.3
21	4.2	3.2	3.8	80	10	33	5.4	<2.0	<2.0	8.4	3.5	5.0
22	4.9	2.8	3.2	10	7.2	8.4	3.8	<2.0	<2.0	7.0	<2.0	3.5
23	4.5	2.4	2.7	14	6.7	8.4	5.6	<2.0	<2.0	6.6	<2.0	2.9
24	2.9	2.3	2.5	10	5.4	6.2	6.3	<2.0	<2.0	5.3	<2.0	3.4
25	3.3	<2.0	2.2	5.6	4.6	5.0	<2.0	<2.0	<2.0	5.4	<2.0	2.5
26	2.3	<2.0	<2.0	5.7	<2.0	2.7	<2.0	<2.0	<2.0	5.4	<2.0	2.4
27	2.1	<2.0	<2.0	3.7	<2.0	<2.0	2.2	<2.0	<2.0	4.0	<2.0	2.3
28	<2.0	<2.0	<2.0	33	3.5	9.8	2.7	<2.0	<2.0	3.8	<2.0	2.3
29	---	---	---	24	8.8	16	24	2.4	8.0	5.7	<2.0	2.5
30	---	---	---	23	11	16	38	9.6	22	33	5.7	12
31	---	---	---	11	6.5	8.1	---	---	---	36	18	29
MONTH	30	<2.0	4.9	80	<2.0	5.0	38	<2.0	3.7	36	<2.0	6.2

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TURBIDITY, FIELD, in (NTU), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	34	20	26	14	6.1	8.7	2.9	<2.0	<2.0	2.9	<2.0	<2.0
2	21	12	16	9.2	<2.0	4.3	4.0	<2.0	<2.0	3.3	<2.0	2.6
3	17	5.5	10	8.3	3.1	4.2	13	<2.0	3.4	2.8	<2.0	<2.0
4	11	4.7	6.8	4.5	<2.0	2.4	2.5	<2.0	<2.0	2.7	<2.0	<2.0
5	9.1	2.8	4.9	4.1	<2.0	2.7	3.6	<2.0	2.1	2.7	<2.0	<2.0
6	6.8	3.0	4.9	3.2	<2.0	<2.0	2.9	<2.0	<2.0	<2.0	<2.0	<2.0
7	47	3.0	15	3.2	<2.0	<2.0	8.3	<2.0	2.4	<2.0	<2.0	<2.0
8	40	17	27	3.6	<2.0	<2.0	8.2	<2.0	2.3	5.0	<2.0	<2.0
9	28	15	20	2.9	<2.0	<2.0	4.1	<2.0	2.1	<2.0	<2.0	<2.0
10	24	8.9	16	2.4	<2.0	<2.0	3.4	<2.0	<2.0	6.0	<2.0	<2.0
11	12	6.1	8.6	3.9	<2.0	<2.0	2.2	<2.0	<2.0	<2.0	<2.0	<2.0
12	13	4.9	8.3	3.4	<2.0	<2.0	3.1	<2.0	<2.0	<2.0	<2.0	<2.0
13	14	7.0	10	3.9	<2.0	<2.0	2.9	<2.0	<2.0	<2.0	<2.0	<2.0
14	14	4.8	7.9	---	---	---	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
15	14	6.0	9.0	---	---	---	3.0	<2.0	<2.0	<2.0	<2.0	<2.0
16	10	4.3	6.4	---	---	---	2.6	<2.0	<2.0	<2.0	<2.0	<2.0
17	36	3.6	7.6	---	---	---	4.0	<2.0	2.0	<2.0	<2.0	<2.0
18	36	2.5	6.1	---	---	---	6.0	<2.0	<2.0	<2.0	<2.0	<2.0
19	12	4.0	7.1	2.6	<2.0	<2.0	5.5	<2.0	<2.0	<2.0	<2.0	<2.0
20	12	4.6	7.4	13	<2.0	<2.0	3.1	<2.0	<2.0	<2.0	<2.0	<2.0
21	8.3	3.2	5.5	3.6	<2.0	<2.0	4.0	<2.0	<2.0	<2.0	<2.0	<2.0
22	6.1	<2.0	3.7	6.4	<2.0	<2.0	3.0	<2.0	<2.0	<2.0	<2.0	<2.0
23	5.0	2.6	3.6	4.6	<2.0	2.4	2.0	<2.0	<2.0	<2.0	<2.0	<2.0
24	4.7	<2.0	2.9	4.5	<2.0	2.5	2.3	<2.0	<2.0	<2.0	<2.0	<2.0
25	2.8	<2.0	<2.0	9.3	<2.0	4.0	2.9	<2.0	<2.0	<2.0	<2.0	<2.0
26	3.3	<2.0	2.2	5.4	<2.0	2.4	2.7	<2.0	<2.0	14	<2.0	<2.0
27	3.2	<2.0	<2.0	7.2	<2.0	3.0	5.8	<2.0	2.1	2.0	<2.0	<2.0
28	93	<2.0	28	5.4	<2.0	2.5	2.7	<2.0	<2.0	<2.0	<2.0	<2.0
29	120	17	39	---	---	---	2.6	<2.0	<2.0	<2.0	<2.0	<2.0
30	21	6.7	13	---	---	---	2.7	<2.0	<2.0	<2.0	<2.0	<2.0
31	---	---	---	---	---	---	2.8	<2.0	<2.0	---	---	---
MONTH	120	<2.0	11	14	<2.0	2.5	13	<2.0	<2.0	14	<2.0	<2.0
YEAR	120	<2.0	3.4									

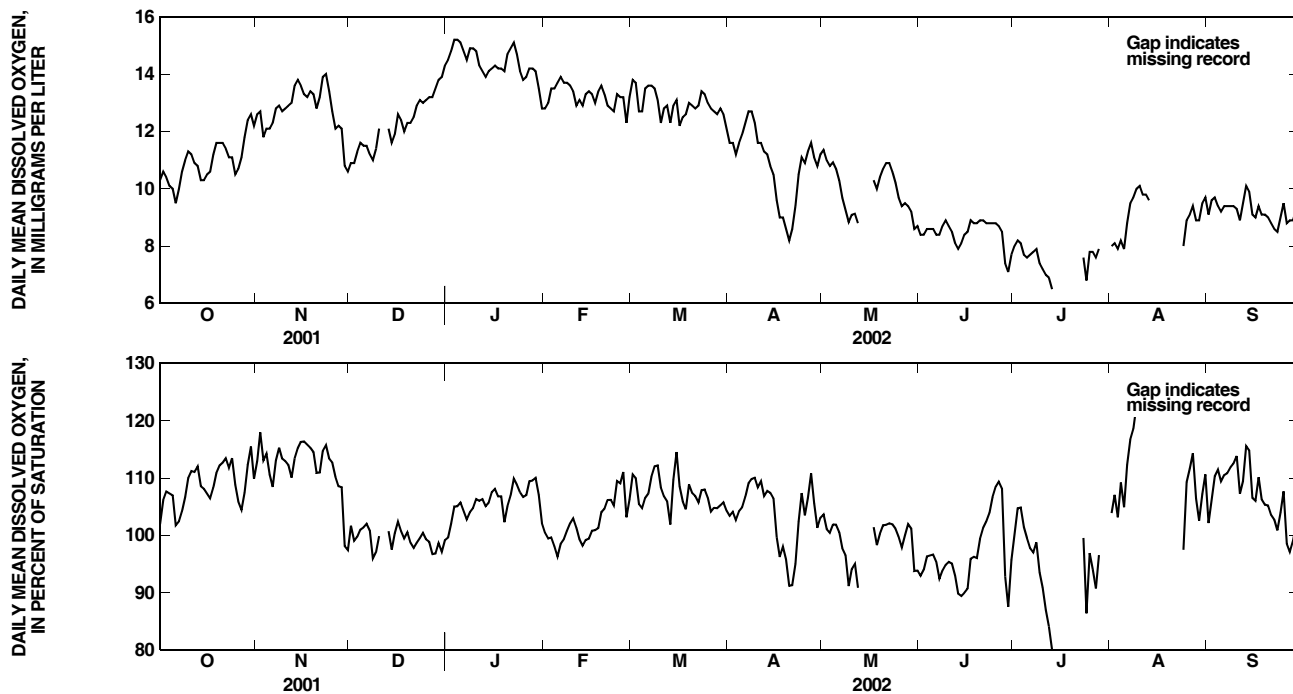


Figure 37. Physical characteristics and concentrations of constituents measured at 01463500 Delaware River at Trenton, water year 2002.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

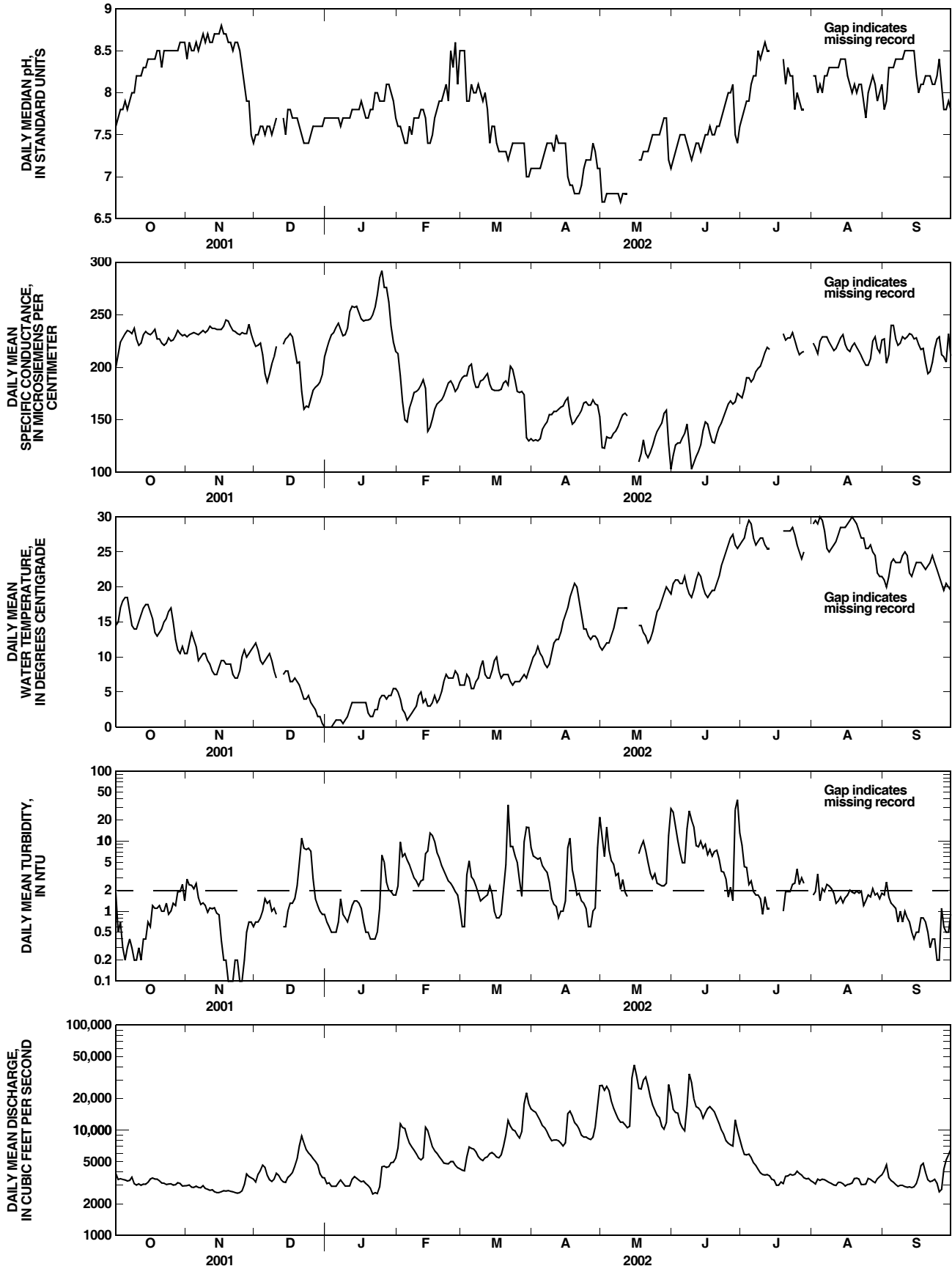
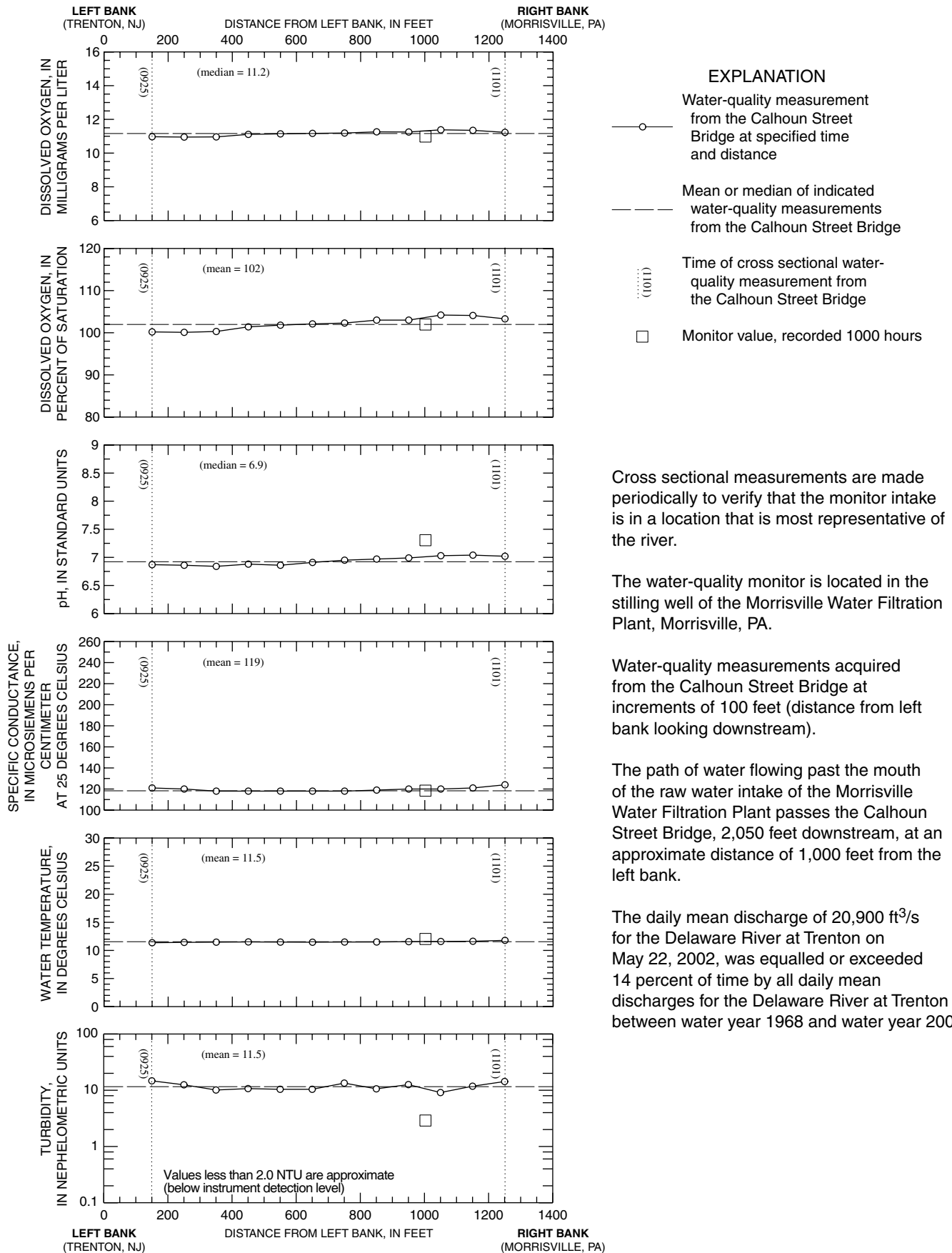


Figure 37. Physical characteristics and concentrations of constituents measured at 01463500 Delaware River at Trenton, water year 2002--continued. [--- instrument detection level; turbidity values less than 2.0 NTU are approximate]

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued



Cross sectional measurements are made periodically to verify that the monitor intake is in a location that is most representative of the river.

The water-quality monitor is located in the stilling well of the Morrisville Water Filtration Plant, Morrisville, PA.

Water-quality measurements acquired from the Calhoun Street Bridge at increments of 100 feet (distance from left bank looking downstream).

The path of water flowing past the mouth of the raw water intake of the Morrisville Water Filtration Plant passes the Calhoun Street Bridge, 2,050 feet downstream, at an approximate distance of 1,000 feet from the left bank.

The daily mean discharge of 20,900 ft³/s for the Delaware River at Trenton on May 22, 2002, was equalled or exceeded 14 percent of time by all daily mean discharges for the Delaware River at Trenton between water year 1968 and water year 2002.

Figure 38. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, May 22, 2002.

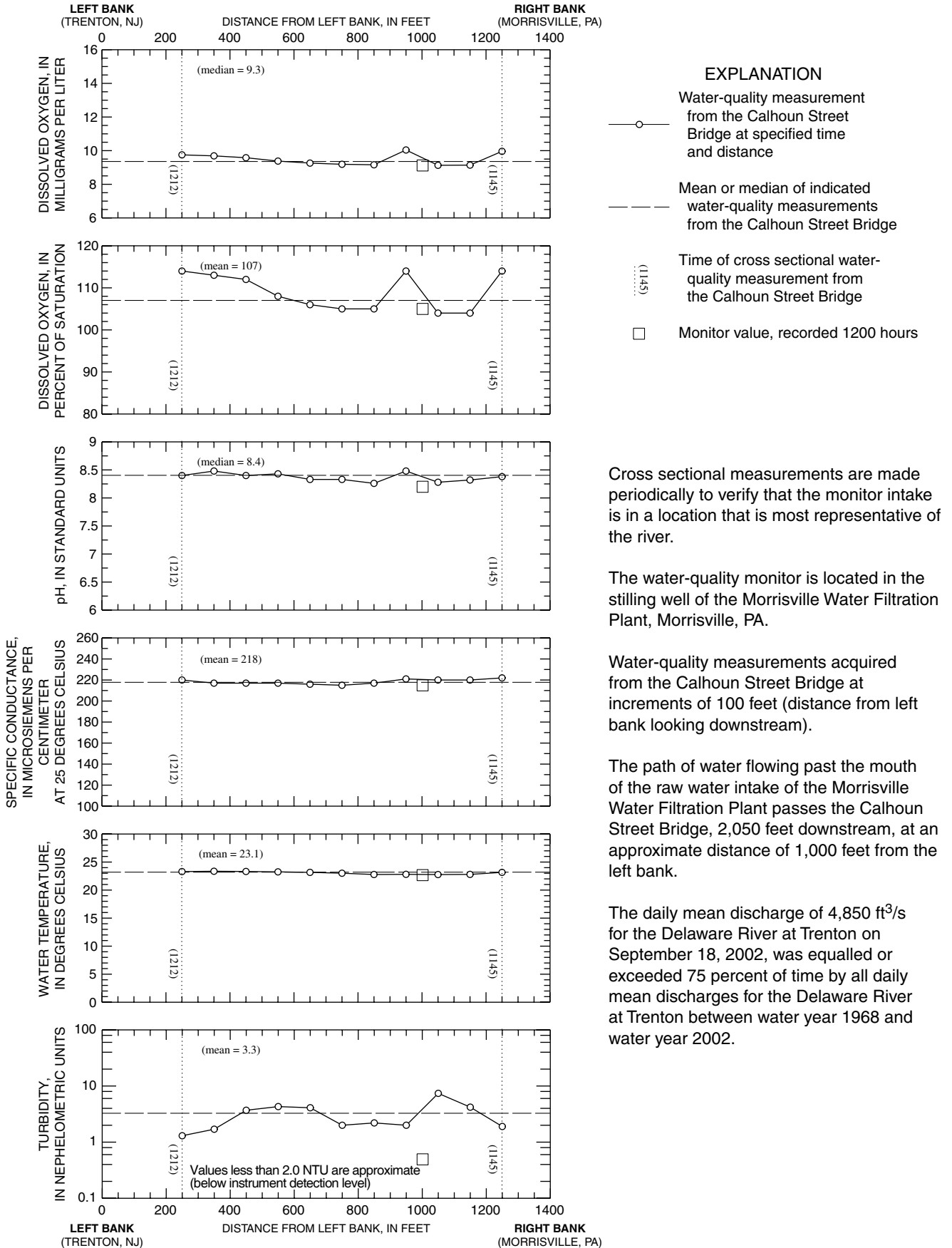


Figure 39. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, September 18, 2002.

01463850 MIRY RUN AT ROUTE 533, AT MERCERVILLE, NJ

LOCATION.--Lat 40°14'50", long 74°41'14", Mercer County, Hydrologic Unit 02040105, at bridge on County Route 533 (Quaker Bridge Road), 0.7 mi north of Mercerville, 2.1 mi upstream of Assunpink Creek, and 3.8 mi northwest of Robbinsville.

DRAINAGE AREA.--10.7 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT OF SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
NOV 26...	1030	ENVIRONMENTAL	.25	14	1.28	1.08	767	11	1.2	6.6	120
FEB 04...	0910	ENVIRONMENTAL	.50	17	.163	.129	754	73	9.8	6.2	298
MAY 07...	1230	ENVIRONMENTAL	.41	5.7	.186	.149	760	47	4.6	6.0	218
AUG 06...	0930	ENVIRONMENTAL	.06	4.2	.272	.202	759	21	1.8	6.5	125
06...	0930	SPLIT REPLICATE	--	4.2	--	--	--	--	--	--	--
06...	0931	CONCURRENT REPLICATE	--	4.2	--	--	--	--	--	--	--

DATE	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV 26...	15.0	13.5	31	7.94	2.63	9.90	5.41	26	13.1	<.1	2.4	6.7	140
FEB 04...	3.5	2.5	58	13.8	5.65	3.72	29.8	20	55.8	E.1	3.7	25.5	168
MAY 07...	26.0	16.5	48	11.0	4.87	2.89	17.9	21	33.5	E.1	4.2	18.7	115
AUG 06...	27.0	23.0	33	8.70	2.71	3.06	5.94	21	9.43	E.1	3.0	10.6	79
06...	--	--	34	9.20	2.70	3.60	5.80	29	10.0	.20	--	11.0	80
06...	--	--	34	9.20	2.70	3.60	5.80	28	10.0	.20	--	11.0	79

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS, ORTHO-TOTAL (MG/L AS P) (70507)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
NOV 26...	67	.030	.90	.050	--	E.03	.021	--	.71	.28	--	--	.42
FEB 04...	156	.090	.77	.170	--	1.33	.008	2.1	.18	.011	--	--	.092
MAY 07...	111	.150	.51	.170	--	1.15	.029	1.7	.07	.010	<.020	--	.054
AUG 06...	57	.710	1.1	.690	--	E.04	.011	--	.32	.045	.047	--	.184
06...	61	.760	.40	.770	1.6	<.050	<.025	--	--	<.050	.031	.05	.170
06...	60	.770	.73	.760	1.5	<.050	<.025	--	--	<.050	.026	.04	.180

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01463850 MIRY RUN AT ROUTE 533, AT MERCERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE		CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUOROMETRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)										
DATE	TIME	SAMPLE TYPE		ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM, TOTAL UNFLTRD (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)							
NOV	26...	4.0	<.1	52.8	4.0	>3.9	--	30	5										
FEB	04...	1.6	<.1	4.2	1.6	3.6	--	30	32										
MAY	07...	1.0	<.1	3.8	1.0	<1.0	3.70	30	3										
AUG	06...	2.7	<.1	7.5	2.7	3.0	7.60	30	4										
	06...	--	--	7.8	--	--	--	30	<10										
	06...	--	--	7.8	--	--	--	30	<10										
AUG	06...	0930	ENVIRONMENTAL	2	47.4	E.04	27	.04	<.8	3.4	1940	1							
				MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL RECOVERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)										
AUG	06...			309	E.01	3	E.3	<.05	17										

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLIFORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTEROCOCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLIFORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTEROCOCCI, ME MF, WATER (COL/100 ML) (31649)		
JUN	05...	0932	220	<100	170	JUL	02...	1015	2200	2800	1250
	12...	0930	1700	2300	1800						
	19...	1030	3000	600	1500						
	25...	0940	1100	500	800						

Remark codes used in this report:
 < -- Less than
 > -- Greater than
 E -- Estimated value

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ

LOCATION.--Lat 40°13'02", long 74°46'08", Mercer County, Hydrologic Unit 02040105, at bridge on Peace Street in Trenton, 0.3 mi northwest of Trent House, and 0.7 mi southeast of Trenton Filtration Plant.

DRAINAGE AREA.--91.4 mi².

PERIOD OF RECORD.--Water years 1963, 1976-78, 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
DEC 12...	1240	44	3.7	.113	.086	773	93	10.6	7.2	377	11.5	10.0	94
FEB 04...	1150	63	4.7	.113	.086	754	96	11.8	7.0	400	8.0	6.0	89
JUN 04...	1230	42	3.8	.112	.083	767	92	8.3	7.1	441	25.0	20.5	130
AUG 14...	1210	14	1.7	.094	.070	764	109	8.9	7.7	642	34.0	25.5	160
DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC 12...	21.7	9.61	5.40	30.7	45	52.3	.4	5.9	29.4	220	210	.030	.67
FEB 04...	21.0	8.77	4.36	36.9	39	66.0	.3	6.6	30.6	226	218	.040	.53
JUN 04...	23.7	16.5	5.10	31.5	77	54.0	.3	8.3	32.5	274	246	<.030	.54
AUG 14...	30.8	21.3	7.76	50.2	98	75.9	.6	9.4	45.2	367	349	.040	.59
DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 12...	.030	6.18	.024	6.8	.21	.98	--	1.07	1.0	<.1	4.5	1.0	E2.1
FEB 04...	.070	4.61	.018	5.1	.12	.54	--	.60	1.0	<.1	4.1	1.0	2.1
JUN 04...	<.030	5.75	.044	6.3	.09	.84	.777	.85	.9	<.1	4.3	.9	<1.0
AUG 14...	.170	9.77	.030	10	.11	1.78	1.77	1.76	.7	<.1	4.4	.7	<1.1

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A FLUORO-METRIC METHOD				RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED								
DATE		CORR. (UG/L) (32209)				BORON, DIS- SOLVED (UG/L) AS B) (01020)			PENDED (MG/L) (00530)					
DEC 12...		--				90			8					
FEB 04...		--				80			13					
JUN 04...		--				110			15					
AUG 14...		1.90				170			2					
DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	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)	
AUG	14...	E1	35.2	<.06	182	.08	E.5	9.8	160	<1	31.6	<.01	3	
DATE						SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)						
AUG 14...						.6	.07	18						
DATE	TIME	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHENE TOTAL (UG/L) (34501)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	
FEB	04...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301)	CHLORO- BROMO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	
FEB	04...	<.1	E.1	1.5	<.1	.5	<.2	<.2	<.2	<.1	<.2	<.1	<.1	.5
DATE				METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)			
FEB	04...			<.2	<.2	<.1	<.1	.2	<.1	<.1	<.2	<.2		

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	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)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
------	------	--	--	---	---	--	--	--	--	---	--	---	---

JUN
04... 1230 .013 <.004 <.005 .190 <.010 E.006 <.005 <.018 <.003 E.021 .014 <.002

DATE	TIME	LIN- URON WATER FLTRD DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
------	------	---	--	---	---	--	--	---	---	--	---	---	--

JUN
04... <.004 <.035 <.027 <.050 .161 <.006 <.007 <.022 .02 <.011 .086 E.02 <.034

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

JUN
04... <.009

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)		
JUN	05...	1030	900	110	230	JUL	02...	1300	1300	2200	720
	12...	1000	800	500	110						
	19...	1130	9000	5200	2700						
	25...	1052	3000	400	280						

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01464380 NORTH RUN AT COOKSTOWN, NJ

LOCATION.--Lat 40°02'58", long 74°33'47", Burlington County, Hydrologic Unit 02040201, at bridge on Main Street (County Route 528) in New Egypt, 0.1 mi south of intersection of Main Street, Cookstown-New Egypt Road, and Meany Road, and 1.0 mi upstream from Oakford Lake.

DRAINAGE AREA.--7.28 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
DEC	04...	0900	15	.077	.061	769	82	10.1	7.2	268	12.0	7.0	81	24.7
FEB	27...	1000	9.0	.068	.056	752	81	9.6	6.8	278	2.0	7.5	81	25.3
MAY	07...	0900	14	.108	.087	761	76	7.7	7.2	266	22.0	15.0	81	25.6
AUG	08...	0900	16	.094	.074	765	75	7.2	7.2	317	--	17.5	95	30.6

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	
DEC	04...	4.76	4.61	14.0	45	25.9	.2	13.4	33.9	166	149	.060	.26	.070
FEB	27...	4.35	3.51	14.1	36	28.7	.1	12.0	43.7	170	154	<.030	.17	.070
MAY	07...	4.28	3.92	13.1	44	25.2	.1	11.7	36.6	154	148	.070	.31	.110
AUG	08...	4.54	5.25	20.0	55	36.9	.2	13.5	34.7	195	180	.040	.24	.060

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY CORR. (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD (UG/L) (32209)	
DEC	04...	.10	.004	.36	.06	.007	--	.044	.9	<.1	2.5	.9	<1.0	--
FEB	27...	.15	.003	.32	.08	.004	<.020	.043	.7	<.1	1.8	.7	E1.3	--
MAY	07...	.22	.012	.52	.09	.009	<.020	.060	.9	<.1	2.9	.9	<1.0	2.80
AUG	08...	.28	.003	.52	.07	.010	.029	.061	.7	<.1	2.9	.7	E1.3	.500

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01464380 NORTH RUN AT COOKSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	RESIDUE TOTAL															
		1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)				
DEC	04...																
FEB	27...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2			
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-METHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)			
FEB	27...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	1.2			
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER REC (UG/L)	O-XYLENE WATER WHOLE (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)								
FEB	27...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2								

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	07...	<.006	.011	<.005	.014	<.010	E.024	<.005	<.018	.003	E.006	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01464380 NORTH RUN AT COOKSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	MAY 07...	<.004	<.035	<.027	<.050	.064	.008	<.007	<.022	E.01	<.011	<.005	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 07...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUL				
01...	1050	170	100	90	01...	1045	500	400	430
08...	1045	130	<100	50	08...	1050	500	300	1300
15...	1100	110	100	130	15...	1035	130	200	400
23...	1215	220	300	20					
30...	1208	230	<100	100					

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ

LOCATION.--Lat 40°10'02", long 74°40'40", Mercer County, Hydrologic Unit 02040201, at bridge on Groveville Road (Main Street) in Groveville, 1.2 mi upstream of Doctors Creek, and 2.2 mi northeast of Bordentown.

DRAINAGE AREA.--98.0 mi².

PERIOD OF RECORD.--Water year 1998 to current year.

REMARKS.--Site is at head of tide, infrequently affected, but sampled at low tide. Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC 12...	0930	65	7.9	.115	.091	773	92	11.5	7.4	181	8.5	6.5	57	
FEB 26...	1130	51	5.4	.093	.075	756	109	13.3	7.4	190	19.5	6.5	57	
JUN 12...	1310	59	9.6	.492	.393	757	85	7.3	7.1	141	29.0	22.5	42	
AUG 22...	1130	13	6.6	.170	.135	767	87	7.4	7.0	229	30.0	23.5	72	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC 12...	17.3	3.27	3.47	8.26	30	18.6	.2	9.1	22.7	112	103	<.030	.19	
FEB 26...	17.5	3.32	2.57	8.94	27	19.6	.2	8.4	26.8	108	105	<.030	.17	
JUN 12...	12.5	2.54	2.47	6.61	19	14.6	.1	8.7	17.2	98	79	.120	.43	
AUG 22...	22.0	4.06	4.08	11.0	41	22.4	.2	9.9	22.8	136	126	.130	.44	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
DEC 12...	.050	.46	.005	.65	.07	.034	--	.087	.7	<.1	3.9	.7	<1.0	
FEB 26...	<.030	.41	.008	.58	.08	.032	.030	.068	.7	<.1	2.3	.6	<1.0	
JUN 12...	.100	.52	.015	.96	.11	.058	.028	.164	1.0	<.1	8.6	1.0	E1.7	
AUG 22...	.140	1.03	.059	1.5	.07	.138	.131	.194	.4	<.1	4.4	.4	<1.0	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L) AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC 12...	--	20	2
FEB 26...	--	20	16
JUN 12...	1.20	20	19
AUG 22...	.800	30	1

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ETHANE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE UNFLTRD REC (UG/L) (34566)	BENZENE UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)
FEB 26...	1130	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (77093)	BROMO-DI-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL-TERT-BUTYL-ETHER WAT UNF REC (UG/L) (78032)
FEB 26...	<.1	<.2	<.1	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L) (34423)	METHYL-CHLORIDE UNFLTRD REC (UG/L) (85795)	META/PARA-XYLENE WATER UNFLTRD WHOLE (UG/L) (77135)	O-XYLENE WATER WHOLE (UG/L) (77128)	STYRENE TOTAL (UG/L) (34475)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34010)	TOLUENE TOTAL (UG/L) (39180)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34488)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (39175)	VINYL-CHLORIDE TOTAL (UG/L)
FEB 26...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
JUN 12...	1310	<.006	<.004	<.005	.110	<.010	E.013	<.005	<.018	.013	E.014	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 12...	<.004	<.035	<.027	<.050	.408	<.006	<.007	<.022	.02	<.011	.050	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 12...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN					JUL				
05...	1000	300	600	80	02...	1115	500	300	160
12...	1050	16000	6500	1170					
19...	1055	1300	500	820					
25...	1010	230	100	230					

Remark codes used in this report:
< -- Less than

DELAWARE RIVER BASIN

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.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 15...	1050	4.4	7.0	.079	.061	767	73	8.7	7.1	221	18.5	8.0	65
FEB 19...	1110	7.5	6.2	.066	.052	761	96	12.5	6.9	227	12.5	4.0	57
JUN 03...	1200	6.0	5.4	.128	.100	762	50	4.5	6.7	197	21.5	20.5	54
AUG 07...	1310	1.7	11	.157	.124	763	22	1.9	6.9	251	25.0	22.5	68
DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 15...	16.7	5.75	4.61	10.9	35	28.1	.2	9.0	20.9	122	122	.480	.77
FEB 19...	14.5	4.92	3.91	13.3	26	32.4	.2	9.2	24.9	124	123	.760	1.2
JUN 03...	13.4	4.93	3.58	10.9	24	25.2	.21	7.2	19.1	119	103	.460	.81
AUG 07...	17.6	5.78	4.58	15.4	46	29.8	.30	9.9	16.0	152	130	.840	1.4
DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 15...	.460	.97	.033	1.7	.14	.006	--	.049	.9	<.1	3.3	.9	2.8
FEB 19...	.690	.69	.020	1.9	.27	.013	<.020	.060	1.7	E.1	2.8	E1.7	2.8
JUN 03...	.490	.81	.039	1.6	.05	.021	<.020	.057	.4	<.1	3.8	.4	E1.1
AUG 07...	.740	.57	.053	1.9	.25	.026	.024	.127	1.6	<.1	5.1	1.6	E1.5

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01464515 DOCTORS CREEK AT ALLENTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)
NOV	15...						--	40	9						
FEB	19...						--	30	12						
JUN	03...						--	30	6						
AUG	07...						13.7	40	<1						

DATE	TIME	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
AUG	07...	<.4	<.05	5

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)		
JUL	10...	1005	2200	<100	6800	AUG	07...	0855	300	300	190
	17...	1051	80	200	320						
	24...	1000	460	<100	650						
	31...	1005	300	300	350						

Remark codes used in this report:
< -- Less than

DELAWARE RIVER BASIN

01464527 BLACKS CREEK AT CHESTERFIELD, NJ

LOCATION.--Lat 40°06'34", long 74°38'31", Burlington County, Hydrologic Unit 02040201, at bridge on Chesterfield-Georgetown Road, 0.4 mi south of Chesterfield, 2.2 mi north of Georgetown, and 2.4 mi upstream of Bacons Run.

DRAINAGE AREA.--8.91 mi².

PERIOD OF RECORD.--Water year 2001 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E.coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 28...	1050	7.5	15	.125	.096	764	86	9.5	7.0	221	15.0	11.0	78	
FEB 05...	1010	4.2	16	.128	.107	767	91	12.6	6.7	208	-1.5	2.0	62	
MAY 07...	0950	2.8	23	.213	.176	760	63	6.1	6.7	201	20.0	16.5	65	
AUG 22...	0930	.14	90	.026	.020	767	18	1.7	6.2	222	28.0	18.0	73	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 28...	22.9	5.11	6.66	6.46	54	23.3	.5	11.7	15.8	136	125	<.030	.25	
FEB 05...	17.3	4.51	4.28	8.97	31	23.3	.3	10.5	20.3	122	111	.100	.29	
MAY 07...	18.7	4.47	4.40	7.29	43	20.3	.3	8.7	17.5	124	109	.140	.65	
AUG 22...	22.2	4.15	3.88	7.46	41	23.1	.3	15.4	21.7	139	123	.130	.22	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
NOV 28...	.070	.11	.004	.35	.16	.011	--	.093	1.2	<.1	3.7	1.2	3.7	
FEB 05...	.090	.64	.013	.93	.21	.010	--	.088	1.3	<.1	2.6	1.3	<1.0	
MAY 07...	.130	.30	.040	.95	.21	.015	<.020	.143	1.4	<.1	4.5	1.4	<1.4	
AUG 22...	.110	.09	.003	.31	.14	E.003	<.020	.196	1.1	<.1	1.4	1.1	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

393

01464527 BLACKS CREEK AT CHESTERFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG AS N) (00626)	NITRO-GEN, NH4 + ORG. (MG/KG AS P) (00668)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)			
NOV	28...		--	--	30	9									
FEB	05...		--	--	20	7									
MAY	07...		4.70	30	6										
AUG	22...		--	--	20	13									
AUG	22...	ENVIRONMENTAL	--	--	--	--	--	--	<2	33.6	<.06	19			
AUG	22...	BED MATERIAL	7.00	1000	9700	7.6	.2	--	--	--	--	--			
DATE	TIME	SAMPLE TYPE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)
AUG	22...		<.04	<.8	E.5	8430	<1	534	<.01	2	<.4	<.05	2	--	--
AUG	22...		--	--	--	--	--	--	--	--	--	--	--	4	.162
DATE	TIME	SAMPLE TYPE	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) (01043)	IRON, SEDIMT, BED MA-TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	4HCYPEN PHENAN THRENE WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU-ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU-ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)
AUG	22...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	22...		36	.772	3	74000	8.8	460	.07	1.7	<1	80	E13	E9	E11
DATE	TIME	SAMPLE TYPE	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA-CENE, 2-METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ(A) ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZOZ FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO K FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY-SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR-ANTHENE BED MAT DRY WGT REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)
AUG	22...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	22...		E4	E14	E27	E33	62	62	E40	E22	E46	55	E17	110	E40
DATE	TIME	SAMPLE TYPE	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPTHAL ENE, 236 TRIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPTHAL ENE, 2-ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948)	NAPHTH-ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	P-CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN-THRI-DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1-METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)
AUG	22...		--	--	--	--	--	--	--	--	--	--	--	--	--
AUG	22...		<50	E5	E14	E7	E12	<50	<50	<5	<50	E34	120	<50	E26

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01464527 BLACKS CREEK AT CHESTERFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM. % FINER	BED MAT. SIEVE DIAM. % FINER
		.004 MM (80157)	.062 MM (80164)
AUG			
22...	--	--	--
22...	140	1	2

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					JUL				
01...	1010	300	100	760	15...	1100	300	<100	330
08...	1030	130	<100	440	22...	1050	140	100	270

Remark codes used in this report:
< -- Less than

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA

LOCATION.--Lat 40°13'45", long 75°07'12", Bucks County, Hydrologic Unit 02040201, at bridge on Valley Road, 1.1 mi east of Neshaminy, PA, 2.0 mi downstream from Park Creek, 3.0 mi downstream from Bradford Dam, and 6.8 mi upstream from confluence with Neshaminy Creek.

DRAINAGE AREA.--26.8 mi².

PERIOD OF RECORD.--November 1998 to current year.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELNAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction".

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (000061)	BARO-METRIC PRES-SURE (MM OF HG) (000025)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD) (00400)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT DIS-TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV													
01...	1120	2.8	764	79	9.3	7.6	879	19.5	8.4	172	210	122	84.9
DEC													
07...	0900	4.3	755	72	7.9	7.2	832	16.0	11.0	144	179	110	80.4
JAN													
09...	0910	9.8	752	99	14.0	7.6	622	1.0	.5	99	121	96.8	53.0
MAR													
07...	0850	11	762	99	12.8	7.6	567	--	4.5	97	119	82.9	47.5
APR													
04...	1230	15	767	178	18.7	8.8	517	--	13.5	107	126	72.0	46.0
MAY													
08...	1020	10	760	93	8.6	7.5	544	22.5	19.0	117	142	66.8	47.3
JUN													
13...	0920	16	753	77	6.8	7.6	497	19.5	21.0	105	128	51.7	43.2
JUL													
10...	1230	7.4	756	141	11.3	8.3	624	--	26.0	116	138	83.4	47.0
SEP													
05...	1330	3.9	758	105	9.0	7.9	449	--	22.5	97	118	46.2	41.9

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, DIS-SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
NOV								
01...	.61	<.04	1.85	.009	.17	.20	.0	.2
DEC								
07...	.85	E.02	3.77	.027	.16	.22	.04	3.7
JAN								
09...	.64	.07	1.57	.023	.06	.112	.17	6.4
MAR								
07...	.45	<.04	1.58	E.007	.03	.094	.24	8.1
APR								
04...	.46	<.04	.66	.012	.03	.069	.15	3.6
MAY								
08...	.57	<.04	.98	.028	.05	.119	.14	5.3
JUN								
13...	.41	E.03	1.50	.011	.09	.136	.42	9.8
JUL								
10...	.58	<.04	1.14	.014	.11	.157	.13	6.4
SEP								
05...	.50	<.04	1.00	E.005	.08	.137	.06	5.7

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD GF, REC (UG/L) (82673)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	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)
NOV 01...	1120	ENVIRONMENTAL	<.004	<.002	<.005	.019	<.010	<.041	<.005	<.018	<.003
DEC 07...	0900	ENVIRONMENTAL	<.004	<.002	<.005	.021	<.010	<.041	<.005	<.018	<.003
JAN 09...	0910	ENVIRONMENTAL	<.006	<.004	<.005	.015	<.010	E.005	<.005	<.018	<.003
MAR 07...	0850	ENVIRONMENTAL	<.006	<.004	<.005	.011	<.010	E.008	<.005	<.018	<.003
APR 04...	1230	ENVIRONMENTAL	<.006	<.004	<.005	.014	<.010	<.041	<.005	<.018	<.003
MAY 08...	1020	ENVIRONMENTAL	<.006	<.004	<.005	.032	<.010	E.003	<.005	<.018	<.003
08...	1021	SPLIT REPLICATE	<.006	<.004	<.005	.032	<.010	E.003	<.005	<.018	<.003
JUN 13...	0920	ENVIRONMENTAL	.016	<.004	<.005	.509	<.010	E.017	<.005	<.018	<.003
JUL 10...	1230	ENVIRONMENTAL	<.006	<.004	<.005	.168	<.010	E.006	<.005	<.018	<.003
SEP 05...	1330	ENVIRONMENTAL	<.006	<.004	<.005	.019	<.010	E.011	<.005	<.018	<.003

DATE	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-PHOS, WAT FLT GF, REC (UG/L) (82686)	METO-LACHLOR WATER, DISSOLV (UG/L) (39415)	METRI-BUZIN WATER, DISSOLV (UG/L) (82630)	NAPROP-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI-METH-ALIN WAT FLT GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-PANIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82679)
NOV 01...	E.018	<.005	<.002	<.004	<.035	<.027	<.050	E.004	<.006	<.007	<.010	<.01	<.011
DEC 07...	E.018	<.005	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.010	<.01	<.011
JAN 09...	E.009	<.005	<.006	<.004	<.035	<.027	<.050	E.006	<.006	<.007	<.022	.02	<.011
MAR 07...	E.007	E.004	<.002	<.004	<.035	<.027	<.050	E.008	<.006	<.007	<.022	<.02	<.011
APR 04...	E.007	.005	<.002	<.004	<.035	<.027	<.050	E.010	<.006	<.007	<.022	E.01	<.011
MAY 08...	E.018	.011	<.002	<.004	<.035	<.027	<.050	.013	<.006	<.007	<.022	.02	<.011
08...	E.018	.012	<.002	<.004	<.035	<.027	<.050	.013	<.006	<.007	<.022	.02	<.011
JUN 13...	E.038	.015	<.002	<.004	<.035	<.027	<.050	.132	<.006	<.007	<.022	.03	<.011
JUL 10...	E.035	.010	<.002	<.004	<.035	<.027	<.050	.038	<.006	<.007	<.022	.12	<.011
SEP 05...	E.021	.015	<.002	<.004	<.035	<.027	<.050	E.012	<.006	<.007	<.022	.10	<.011

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
NOV			
01...	<.011	<.02	<.034
DEC			
07...	<.011	<.02	<.034
JAN			
09...	<.005	<.02	<.034
MAR			
07...	<.005	<.02	<.034
APR			
04...	E.005	<.02	<.034
MAY			
08...	.008	<.02	<.034
08...	.007	<.02	<.034
JUN			
13...	.232	.02	<.034
JUL			
10...	.081	<.02	<.034
SEP			
05...	.006	<.02	<.034

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01465893 LITTLE CREEK AT CHAIRVILLE, NJ

LOCATION.--Lat 39°53'53", long 74°47'19", Burlington County, Hydrologic Unit 02040202, at bridge on State Route 70 in Chairville, 250 feet east of Skeet Road, and 4.7 mi upstream of Southwest Branch Rancocas Creek.

DRAINAGE AREA.--6.32 mi².

PERIOD OF RECORD.--Water year 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 27...	1220	2.5	1.5	.321	.247	768	90	10.4	4.9	108	16.0	9.5	12
FEB 20...	1220	2.2	1.2	.415	.314	761	101	12.9	4.0	104	15.0	5.0	12
JUN 17...	1000	8.5	1.6	1.12	.863	760	--	--	4.2	71	27.0	17.0	7
AUG 19...	1210	.67	2.8	.278	.221	748	86	6.9	6.5	95	32.0	25.5	8

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
NOV 27...	2.28	1.54	1.23	11.8	<1	19.2	<1	7.6	10.4	80	--	<.030	.30
FEB 20...	2.41	1.40	1.12	7.85	--	12.7	<1	6.8	15.1	68	--	<.030	.29
JUN 17...	1.56	.812	.67	6.07	--	9.56	E.1	5.9	8.1	67	--	.030	.63
AUG 19...	1.45	1.15	1.17	13.2	4	20.9	E.1	1.5	4.5	56	47	<.030	.34

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 27...	<.030	.19	<.003	.50	.07	.006	--	.013	.5	<.1	8.3	.5	E1.6
FEB 20...	.030	<.04	<.003	--	.03	.009	<.020	.013	.5	<.1	9.9	.4	<1.0
JUN 17...	.030	E.03	.003	--	.09	.021	<.020	.032	1.0	<.1	22.4	1.0	E1.3
AUG 19...	.030	.10	<.003	.44	.07	.017	.028	.035	.8	<.1	5.7	.8	<1.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01465893 LITTLE CREEK AT CHAIRVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV 27...	--	20	1
FEB 20...	--	20	9
JUN 17...	1.00	20	6
AUG 19...	3.00	20	4

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL 01...	1040	20	<100	520	JUL 15...	1100	20	<100	570
08...	0920	40	100	1600	22...	1320	80	<100	470
					22...	1353	80	<100	50

Remark codes used in this report:
< -- Less than

DELAWARE RIVER BASIN

01466100 MOUNT MISERY BROOK AT UPTON, NJ

LOCATION.--Lat 39°55'44", long 74°31'53", Burlington County, Hydrologic Unit 02040202, at bridge on State Route 70, 0.5 mi southwest of Upton, 1.1 mi downstream of confluence of North Branch, Middle Branch, and South Branch Mount Misery Brook, and 4.0 mi northeast of Four Mile Circle.

DRAINAGE AREA.--28.4 mi².

PERIOD OF RECORD.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL AS (MG/L) (00900)	CALCIUM DIS-SOLVED AS (MG/L) (00915)
------	------	---	--	--	--	---	-----------------------------------	--	---	----------------------------------	------------------------------------	-----------------------------------	--------------------------------------

NOV	29...	1100	.8	.078	.061	766	84	9.2	4.7	33	15.0	11.5	4	.72
FEB	07...	1030	.9	.048	.036	759	85	10.8	4.8	34	2.0	5.0	4	.72
JUN	27...	0945	1.6	.215	.169	757	82	7.4	4.6	33	28.0	20.0	3	.56
SEP	05...	1030	.8	.122	.092	762	83	7.8	4.4	57	25.0	18.5	6	1.01

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L) AS (MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) AS (K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L) AS (CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L) AS (SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS (N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS (N) (00623)	NITRO-GEN, TOTAL AMMONIA AS (MG/L) AS (N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS (N) (00631)
------	---	--	---	--	---	---	--	---------------------------------------	---	--	---	---

NOV	29...	.505	.60	1.97	<1	3.21	E.1	6.0	6.3	26	<.030	E.06	.090	E.03
FEB	07...	.520	.46	1.94	<1	3.07	<.1	6.1	6.3	26	.040	E.05	<.030	<.04
JUN	27...	.409	.42	1.86	<1	2.97	<.1	5.8	5.6	20	<.030	.10	.040	<.04
SEP	05...	.827	.47	2.26	--	3.47	<.1	7.3	12.1	24	<.030	.11	<.030	<.04

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS (N) (00613)	NITRO-GEN, PAR TICULATE SUSP (MG/L) AS (N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L) AS (P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS (P) (00671)	PHOS-PHORUS TOTAL (MG/L) AS (P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L) AS (C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L) AS (C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS (C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L) AS (C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY CORR. (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS (B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
------	---	--	--	--	---	---	---	--	--	--	--	---	--

NOV	29...	<.003	.04	<.004	--	.008	.6	<.1	1.7	.6	<1.0	--	<10	<1
FEB	07...	<.002	<.02	E.003	<.020	.006	.3	<.1	1.5	.3	E1.5	--	<10	2
JUN	27...	<.003	<.02	.004	<.020	.014	.8	<.1	4.4	.8	<1.0	.700	E9	5
SEP	05...	<.003	.04	.004	<.020	.010	.6	<.1	3.6	.6	<1.0	.500	E10	6

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102)
------	------	--	---	--	---	--	---	--	--	--	------------------------------	---------------------------------	---

FEB	07...	1030	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2
-----	-------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01466100 MOUNT MISERY BROOK AT UPTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM- TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER REC (UG/L) (78032)
FEB 07...	<.1	<.2	.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2

DATE	METHYL CHLO- RIDE TOTAL (UG/L) (34423)	METHA/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)
FEB 07...	<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	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)	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)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
JUN 27...	0945	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002

DATE	TIME	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
JUN 27...	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 27...	<.009

Remark codes used in this report:
< -- Less than

DELAWARE RIVER BASIN

01466100 MOUNT MISERY BROOK AT UPTON, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					JUL				
01...	1015	20	<100	110	15...	1030	20	<100	20
08...	0940	<20	<100	50	29...	0853	<20	100	20

Remark codes used in this report:

< -- Less than

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ

LOCATION.--Lat 39°53'06", long 74°30'20", Burlington County, Hydrologic Unit 02040202, 25 ft upstream from Butterworth Road Bridge in Lebanon State Forest, 3.4 mi upstream from confluence with Cooper Branch, and 7.0 mi southeast of Browns Mills.

DRAINAGE AREA.--2.35 mi².

PERIOD OF RECORD.--Water years 1963-96, 1998 to current year.

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 in Water-Data Report NJ-02-1. Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)
------	------	---	---	--	--	--	---	-----------------------------------	--	---	----------------------------------	------------------------------------	---

NOV	13...	1045	.86	.3	.086	.067	775	18	2.2	4.4	35	7.0	6.5	2
FEB	07...	1045	.84	.3	.084	.065	760	45	5.8	4.3	38	2.0	4.5	3
MAY	07...	1000	1.1	.3	.112	.085	760	35	3.8	4.3	39	23.0	12.0	3
SEP	03...	1015	E.95	.3	.253	.189	760	27	2.6	4.2	52	21.0	16.5	5

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
------	---	---	--	---	--	---	---	--	---	---	--	--	---

NOV	13...	.30	.392	.24	1.93	3.39	<.1	4.7	4.7	16	.030	<.10	.040	<.04
FEB	07...	.35	.480	.32	1.82	3.18	<.1	4.4	5.2	18	<.030	E.05	<.030	<.04
MAY	07...	.41	.546	.27	1.92	3.32	<.1	4.2	5.5	23	<.030	E.08	<.030	<.04
SEP	03...	.60	.818	.27	2.29	4.20	<.1	5.3	7.5	28	<.030	.16	<.030	<.04

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR-TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY CORR. (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L AS B) (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
------	---	--	--	--	---------------------------------------	---	--	--	--	--	--	---------------------------------------	--

NOV	13...	<.003	<.02	<.004	--	<.004	.2	<.1	2.0	.2	2.7	--	E8	2
FEB	07...	<.002	<.02	<.004	<.020	<.004	.2	<.1	2.0	.2	<1.0	--	<10	<1
MAY	07...	<.003	.07	<.004	<.020	<.004	.6	<.1	3.1	.6	<1.0	.00	E8	<1
SEP	03...	<.003	.02	<.004	<.020	E.003	.2	<.1	7.7	.2	<1.0	.200	20	3

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)
FEB	07...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2
DATE	TIME	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (34301)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER TOTAL (UG/L) (81577)	ETHER ETHYL-WATER UNFLTRD RECOVER TOTAL (UG/L) (81576)	ETHER TERT-BUTYL-METHYL UNFLTRD RECOVER TOTAL (UG/L) (50004)	ETHER TERT-PENTYL-METHYL UNFLTRD RECOVER TOTAL (UG/L) (50005)	BENZENE ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL-ETHER WAT UNF REC (UG/L) (78032)
FEB	07...	<.1	<.2	.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME		METHYL-CHLORIDE TOTAL (UG/L) (34423)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)		
FEB	07...		<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2		

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, SOLVED (UG/L) (46342)	ALPHA-BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	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)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	
MAY	07...	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003	<.006	<.005	<.002	
DATE	TIME	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL-AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	
MAY	07...	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034
DATE	TIME					TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)								
MAY	07...					<.009								

Remark codes used in this report:
 < -- Less than

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					JUL				
01...	1000	<20	<100	<10	15...	1015	40	<100	<10
08...	1000	<20	<100	<10	22...	1000	20	40	<100
					29...	0906	<20	<100	<10

Remark codes used in this report:
 < -- Less than

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ

LOCATION.--Lat 39°57'22", long 74°37'41", Burlington County, Hydrologic Unit 02040202, at bridge on Four Mile Road (County Route 646), 0.1 mi south of New Lisbon, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--77.9 mi².

PERIOD OF RECORD.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC 06...	0800	29	1.8	.090	.072	761	83	9.4	5.2	42	12.0	10.0	6	
FEB 27...	0800	29	2.6	.080	.062	751	86	9.9	4.9	48	3.0	8.5	6	
MAY 30...	0715	57	3.0	.364	.286	760	76	7.0	4.4	42	17.0	19.0	5	
SEP 10...	0715	23	2.6	.130	.102	747	85	7.9	4.6	52	15.0	18.0	6	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00610)
DEC 06...	1.17	.658	.86	3.94	<1	6.60	<.1	5.5	7.0	32	<.030	E.08	<.030	
FEB 27...	1.18	.688	1.01	4.08	<1	6.71	<.1	5.4	8.0	34	<.030	E.09	<.030	
MAY 30...	.93	.560	.87	3.49	<1	5.58	<.1	4.3	7.2	31	.030	.19	.050	
SEP 10...	1.14	.734	.83	4.53	<1	6.82	<.1	6.1	7.5	28	<.030	.13	<.030	
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)
DEC 06...	.09	<.003	--	.04	E.002	--	.020	.9	<.1	1.9	.9	E1.1	--	
FEB 27...	.05	<.003	--	.05	E.003	<.020	.032	1.0	<.1	2.1	1.0	2.2	--	
MAY 30...	.04	<.003	.23	.12	.011	<.020	.046	1.6	<.1	6.1	1.6	2.2	2.80	
SEP 10...	.06	<.003	.19	.12	E.002	.024	.038	1.6	<.1	3.0	1.6	<1.0	1.00	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	RESIDUE TOTAL	
	BORON, DIS-SOLVED (UG/L AS B) (01020)	AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
DEC 06...	E7	4
FEB 27...	E8	4
MAY 30...	<10	7
SEP 10...	E10	6

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC	E COLI, MTEC MF WATER	ENTERO-COCCI, ME MF, WATER	DATE	TIME	COLI-FORM, FECAL, EC	E COLI, MTEC MF WATER	ENTERO-COCCI, ME MF, WATER
		BROTH (MPN) (31615)	(COL/100 ML) (31633)	(COL/100 ML) (31649)			BROTH (MPN) (31615)	(COL/100 ML) (31633)	(COL/100 ML) (31649)
JUL 01...	0935	20	100	60	JUL 15...	0950	<20	<100	20
08...	1040	20	<100	<10	22...	1250	20	<100	10
					29...	0830	20	<100	20

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01467005 NORTH BRANCH RANCOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ

LOCATION.--Lat 39°59'31", long 74°46'58", Burlington County, Hydrologic Unit 02040202, at Iron Works Park footbridge, 0.3 mi north of Saint Andrews Cemetery in Mount Holly, and 0.1 mi downstream from Mill Dam.

DRAINAGE AREA.--140 mi².

PERIOD OF RECORD.--Water years 1998 to current year. Published as "at Pine Street" (station 01467006) 1998-99.

REMARKS.--Site is at head of tide; all samples collected at low tide. Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E.coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
NOV 27...	1000	78	7.6	.131	.102	768	91	10.2	6.7	202	13.5	10.5	34	
FEB 13...	1240	78	4.8	.118	.094	765	100	12.8	6.6	180	5.0	5.0	30	
JUN 04...	0850	67	12	.350	.279	767	92	8.3	5.9	162	26.5	20.5	21	
AUG 19...	0920	22	15	.285	.231	748	81	6.4	5.9	220	35.0	26.0	30	
DATE		CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 27...	10.5	1.78	3.27	21.7	16	16.4	E.1	6.7	47.4	124	119	.220	.47	
FEB 13...	8.74	1.90	2.34	18.5	10	19.6	E.1	7.2	35.5	108	102	.320	.53	
JUN 04...	6.19	1.40	1.84	18.5	7	19.6	E.1	5.4	29.3	95	88	.270	.56	
AUG 19...	9.09	1.79	3.37	24.3	14	26.8	.1	6.6	34.1	131	119	.300	.62	
DATE		NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	
NOV 27...	.210	.26	.044	.73	.13	.024	--	.21	1.3	<.1	3.6	1.3	E1.7	
FEB 13...	.320	.37	.008	.90	.04	.040	<.020	.185	.8	<.1	3.0	.8	<1.0	
JUN 04...	.320	.29	.012	.85	.25	.046	.041	.24	2.9	<.1	6.0	2.9	E1.1	
AUG 19...	.310	.87	.055	1.5	.14	.076	.073	.30	1.3	<.1	5.4	1.3	E1.4	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01467005 NORTH BRANCH RANCOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	PH SED BED MAT (STD UNITS) (70310)	TOT IN BOT MAT (MG/KG AS N) (00626)	NITRO-GEN,NH4 + ORG. (MG/KG AS P) (00668)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)			
NOV	27...		--	--	30	<1									
FEB	13...		--	--	30	10									
JUN	04...		4.00		30	20									
AUG	19...		5.30		50	6									
AUG	19...	0920 ENVIRONMENTAL	--	--	--	--	--	--	<2	27.7	E.04	52			
AUG	19...	0920 BED MATERIAL	6.20	260	31000	3.6	<.2	--	--	--	--	--			
AUG	19...	E.03	<.8	1.5	2900	2	44.6	<.01	1	<.4	E.03	8	--	--	
AUG	19...	--	--	--	--	--	--	--	--	--	--	2	.127		
AUG	19...	19	.453	3	18000	49	28	<.01	1.2	<1	44	<50	E4	E2	
AUG	19...	19	<50	E7	E13	E13	E15	E21	E16	E6	E19	E16	E9	E30	E20
AUG	19...	19	<50	<50	E6	E2	E5	<50	E14	<5	<50	E12	E14	E10	E9

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01467005 NORTH BRANCH RANOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	PYRENE, SED, BM WS,<2MM DW, REC (UG/KG) (49387)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
AUG			
19...	--	--	--
19...	E29	4	6

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUL					JUL				
01...	1105	1700	1100	380	15...	1125	500	600	130
08...	1100	800	600	110	22...	1300	170	<100	50

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

411

01467150 COOPER RIVER AT HADDONFIELD, NJ

LOCATION.--Lat 39°54'11", long 75°01'18", Camden County, Hydrologic Unit 02040202, at 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.

PERIOD OF RECORD.--Water years 1968-79, 1991 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1968 to September 1969.

WATER TEMPERATURE: March 1968 to August 1969, recorded once daily; October 1998 to September 2001, recorded hourly.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE OF (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV	07...	1000	7.6	22	.070	.056	762	81	9.5	7.7	230	13.5	8.5	66
FEB	06...	0900	8.0	16	.075	.062	768	90	12.6	7.3	360	7.5	2.0	65
MAY	09...	0900	9.7	27	.149	.114	762	75	7.0	7.0	222	13.0	18.5	57
AUG	07...	1000	4.3	35	.116	.088	764	65	5.6	7.2	234	20.5	23.0	64
DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV	07...	17.9	5.30	4.74	14.5	35	29.9	.2	14.0	25.9	144	134	.080	.23
FEB	06...	17.8	4.86	3.84	46.6	25	82.8	.2	12.2	30.7	226	216	.210	.43
MAY	09...	15.9	4.15	3.91	14.6	31	30.6	.20	11.3	22.8	125	124	.340	.69
AUG	07...	17.0	5.14	4.67	14.9	32	30.7	.22	13.7	24.7	155	131	.430	.69
DATE	TIME	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV	07...	.100	.13	<.003	.36	.13	.006	--	.115	1.2	<.1	3.0	1.2	1.5
FEB	06...	.210	.28	.011	.71	.06	E.003	<.020	.111	.9	<.1	2.1	.9	E1.8
MAY	09...	.310	.27	.023	.96	.21	.022	<.020	.26	2.1	<.1	4.5	2.1	E1.9
AUG	07...	.410	.18	.021	.88	.32	.013	<.020	.24	2.0	<.1	3.7	2.0	2.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO- PHYL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS- SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV 07...	--	50	3
FEB 06...	--	40	9
MAY 09...	11.1	30	20
AUG 07...	15.8	50	15

DATE	TIME	SAMPLE TYPE	ARSENIC TOTAL (UG/L) AS AS (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L) AS BA (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE (01012)	BORON, TOTAL RECOV- ERABLE (UG/L) AS B (01022)	CADMIUM WATER TOTAL UNFLTRD (UG/L) AS CD (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, DIS- SOLVED (UG/L) AS CU (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	IRON, TOTAL RECOV- ERABLE (UG/L) AS FE (01045)
AUG 07...	0930	FIELD BLANK	--	--	--	--	--	--	<.2	--	--
07...	1000	ENVIRONMENTAL	4	71.5	.09	50	.05	.9	--	1.7	4290

DATE	LEAD, DIS- SOLVED (UG/L) AS PB (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN (01055)	MERCURY DIS- SOLVED (UG/L) AS HG (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)	NICKEL, DIS- SOLVED (UG/L) AS NI (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI (01067)	SELE- NIUM, TOTAL (UG/L) AS SE (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L) AS AG (01077)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)
AUG 07...	<.08	--	--	<.01	--	<.06	--	--	--	<1	--
07...	--	4	95.6	--	<.01	--	4	E.3	<.05	--	11

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY 29...	0920	300	300	190	JUN 12...	1010	500	100	240
JUN 05...	1020	230	300	150	19...	0950	1700	100	320
					26...	0950	500	900	890

Remark codes used in this report:
< -- Less than
E -- Estimated value

01467155 NORTH BRANCH COOPER RIVER AT KRESSON, NJ

LOCATION.--Lat 39°51'35", long 74°55'46", Camden County, Hydrologic Unit 02040202, at bridge on Kresson Road, 0.5 mi northwest of Kresson, 0.5 mi northwest of Kresson Lake, and 2.3 mi south of Marlton.

DRAINAGE AREA.--1.04 mi².

PERIOD OF RECORD.--Water year 1998, 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)		
NOV 14...	1000	2.3	.351	.274	772	40	5.3	6.8	176	10.0	4.0	59	19.1	
FEB 13...	1000	2.8	.316	.241	764	81	11.1	6.5	173	1.5	2.5	55	18.7	
MAY 21...	0900	3.9	.623	.480	768	77	9.2	6.9	120	11.0	8.0	44	15.3	
SEP 04...	0930	1.0	.416	.312	757	52	4.7	6.1	319	29.5	20.0	140	47.6	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
NOV 14...	2.65	1.41	8.71	27	15.2	<.1	10.9	28.6	120	103	.030	.38	.040	
FEB 13...	1.91	.98	7.88	16	13.2	<.1	9.1	35.7	116	98	<.030	.33	<.030	
MAY 21...	1.51	1.02	5.63	32	9.20	E.1	9.0	8.6	106	70	.030	.61	.040	
SEP 04...	4.24	1.44	8.22	10	12.3	<.1	11.1	117	246	208	.048	.55	.058	
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PAR TICULATE SUSP SOLVED (MG/L AS P) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 14...	E.02	<.003	--	<.02	.021	--	.033	.3	<.1	9.2	.3	E1.2	--	
FEB 13...	.21	<.003	.55	.02	.012	<.020	.020	.4	<.1	8.5	.4	--	--	
MAY 21...	.05	.003	.66	.07	.033	.025	.044	1.0	<.1	14.0	.9	<1.0	.300	
SEP 04...	<.04	<.003	--	.07	.018	.021	.026	.4	<.1	12.1	.4	<1.0	.100	

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01467155 NORTH BRANCH COOPER RIVER AT KRESSON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED (MG/L) (01020) (00530)												
DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	
NOV	14...													
FEB	13...													
MAY	21...													
SEP	04...													
SEP	04...	<2	106	E.03	37	.49	<.8	2.9	710	<1	114	E.01	5	
		SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)												
		SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)												
		ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)												
SEP	04...					.4	E.04	94						
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)	
FEB	13...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	BROMO-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)
FEB	13...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	E.1
DATE	TIME	METHYL-CHLORIDE TOTAL (UG/L) (34423)	METHYL-PARA-CHLORIDE WATER UNFLTRD REC (UG/L) (85795)	META/PARA-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL-CHLORIDE TOTAL (UG/L) (39175)				
FEB	13...		<.2	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.2			

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01467155 NORTH BRANCH COOPER RIVER AT KRESSON, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLT GF, REC (UG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	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)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	
MAY 21...	0900	<.006	<.004	<.005	E.005	<.010	E.004	<.005	<.018	E.002	E.002	<.005	<.002	
DATE	TIME	LINDANE DIS- SOLVED (UG/L) (39341)	FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (39532)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, FLTRD 0.7 U REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, FLTRD 0.7 U REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
MAY 21...		<.004	<.035	<.027	<.050	E.005	<.006	<.007	<.022	<.01	<.011	<.005	<.02	<.034

TRI-
FLUR-
ALIN
WAT FLT
0.7 U
GF, REC
(UG/L)
(82661)

MAY
21... <.009

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY 29...	0950	500	100	160	JUN 12...	1045	170	<100	440
JUN 05...	1100	110	100	530	JUN 19...	1015	500	100	230
					JUN 26...	1025	220	100	320

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ

LOCATION.--Lat 39°50'04", long 75°04'02", Camden County, Hydrologic Unit 02040206, at bridge on Chews Landing-Clementon Road (County Route 683), 0.7 mi south of Glendora, 1.8 mi upstream of South Branch Big Timber Creek, and 2.5 mi north of Blackwood.

DRAINAGE AREA.--18.8 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Site is tide-affected; all samples collected at low tide. Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
DEC 17...	1110	18	20	.104	.086	763	91	11.1	6.8	168	9.5	7.0	48	
FEB 13...	0940	19	9.8	.099	.081	763	92	12.2	6.6	207	5.5	3.5	50	
JUN 13...	1250	47	24	.220	.181	760	59	5.2	6.7	170	22.0	21.0	48	
AUG 07...	0940	51	13	.197	.166	764	58	5.2	6.9	188	23.5	21.0	52	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
DEC 17...	14.4	3.03	3.24	9.50	29	16.3	.2	10.2	19.7	92	97	.160	.27	
FEB 13...	14.9	3.00	2.87	15.9	26	28.8	.2	9.5	22.8	120	117	.060	.20	
JUN 13...	14.2	2.92	3.02	9.26	31	17.1	.26	9.5	17.2	106	94	.180	.36	
AUG 07...	15.2	3.37	3.29	11.4	36	19.4	.22	9.9	15.8	129	102	<.030	.26	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULATE SUSP SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	
DEC 17...	.090	.48	.005	.75	.31	.013	--	.24	2.6	<.1	1.7	2.6	<1.0	
FEB 13...	.050	.67	.008	.87	.06	.015	<.020	.116	.9	<.1	1.9	.9	E1.0	
JUN 13...	.170	.33	.016	.70	.21	.045	.032	.33	2.3	<.1	3.5	2.3	E1.6	
AUG 07...	<.030	.37	.009	.63	.16	.055	.039	.21	1.3	<.1	3.7	1.3	<1.0	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A		RESIDUE TOTAL	
		FLUORO-METRIC METHOD		BORON, DIS-SOLVED	
DATE		CORR. (UG/L) (32209)		(UG/L) AS B (01020)	
				DEG. C, SUS-PENDE (MG/L) (00530)	
DEC 17...		--	240	20	
FEB 13...		--	230	12	
JUN 13...		2.40	200	30	
AUG 07...		1.50	270	1	

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	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)
AUG	07...	E1	63.4	<.06	260	E.03	<.8	.9	2760	1	76.7	<.01	2

DATE		SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
AUG 07...		E.3	<.05	10

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/100 ML) (31649)		
MAY	29...	0850	110	<100	280	JUN	12...	0930	800	400	120
JUN	19...	0920	300	900	300	JUN	19...	0920	300	900	300
JUN	05...	0940	300	1000	770	JUN	26...	0925	800	500	2700

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

SCHUYLKILL RIVER BASIN

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA

LOCATION.--Lat 40°09'05", long 75°36'06", Chester County, PA, Hydrologic Unit 02040203, on right bank 70 ft downstream from two-span county bridge on French Creek Road, 4.5 mi northwest of Phoenixville, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--59.1 mi².

PERIOD OF RECORD.--October 1968 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1998 to April 1999, June 1999 to August 1999, June 2000 to September 2001.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELRAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-Control Data" in the "Introduction."

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
NOV	07...	ENVIRONMENTAL	16	758	112	13.1	7.8	173	17.0	8.3	51
DEC	06...	ENVIRONMENTAL	13	759	106	12.3	7.7	185	20.5	9.2	49
JAN	17...	ENVIRONMENTAL	25	754	100	13.5	7.6	181	9.0	2.6	38
MAR	05...	ENVIRONMENTAL	38	765	109	15.2	7.5	159	9.0	2.0	30
APR	11...	ENVIRONMENTAL	31	769	108	12.1	7.7	176	18.0	10.8	43
MAY	15...	ENVIRONMENTAL	112	757	102	10.9	7.4	129	19.0	12.2	27
	15...	0931 SPLIT REPLICATE	--	--	--	--	--	--	--	--	28
JUN	11...	ENVIRONMENTAL	25	755	109	9.8	7.7	173	27.5	20.2	42
JUL	11...	ENVIRONMENTAL	13	759	101	9.2	8.0	177	22.0	19.8	47
SEP	03...	1049 FIELD BLANK	--	--	--	--	--	--	--	--	--
	03...	ENVIRONMENTAL	19	757	103	9.5	7.8	193	28.5	18.8	45

DATE	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	
NOV	07...	62	12.4	12.1	.18	<.04	.39	<.008	<.02	.014	--	<1.0
DEC	06...	59	12.3	13.3	.25	<.04	.94	<.008	<.02	.016	.13	3.6
JAN	17...	46	16.6	16.0	.22	<.04	1.54	<.008	<.02	.018	--	<1.0
MAR	05...	37	14.6	15.5	.37	<.04	1.11	E.005	E.01	.041	.33	3.2
APR	11...	52	14.0	13.7	.23	<.04	1.02	.006	E.01	.023	--	--
MAY	15...	33	9.38	12.0	.60	E.03	.92	E.006	E.02	.084	4.5	15
	15...	34	9.12	11.9	.61	E.03	.91	E.006	.02	.084	--	14
JUN	11...	51	13.6	12.3	.33	E.02	1.14	E.007	.03	.051	.26	3.8
JUL	11...	57	12.6	11.6	.22	<.04	.58	<.008	E.01	.034	.11	3.0
SEP	03...	--	--	--	--	--	--	--	--	--	--	--
	03...	55	13.2	20.4	.31	<.04	.68	<.008	.02	.043	.25	4.9

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	ACETO-	ALA-	ALPHA	ATRA-	BEN-	CAR-	CHLOR-	CYANA-	DCPA		
			CHLOR, WATER, FLTRD REC (UG/L) (49260)	CHLOR, WATER, DISS, REC, (UG/L) (46342)	BHC DIS- SOLVED (UG/L) (34253)	ZINE, WATER, DISS, REC (UG/L) (39632)	FLUR- ALIN WAT FLD GF, REC (UG/L) (82673)	BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	PYRIFOS DIS- SOLVED (UG/L) (38933)	ZINE, WATER, DISS, REC (UG/L) (04041)	WATER FLTRD 0.7 U GF, REC (UG/L) (82682)		
NOV													
07...	1050	ENVIRONMENTAL	<.004	<.002	<.005	E.006	<.010	<.041	<.005	<.018	<.003		
DEC													
06...	1030	ENVIRONMENTAL	<.004	<.002	<.005	E.006	<.010	<.041	<.005	<.018	<.003		
JAN													
17...	1010	ENVIRONMENTAL	<.006	<.004	<.005	.010	<.010	<.041	<.005	<.018	<.003		
MAR													
05...	1030	ENVIRONMENTAL	<.006	<.004	<.005	.010	<.010	<.041	<.005	<.018	<.003		
APR													
11...	0900	ENVIRONMENTAL	<.004	<.002	<.005	.012	<.010	<.041	<.005	<.018	<.003		
MAY													
15...	0930	ENVIRONMENTAL	<.006	<.004	<.005	1.33	<.010	<.041	<.005	<.018	<.003		
JUN													
11...	1000	ENVIRONMENTAL	<.006	.005	<.005	.284	<.010	<.041	<.005	<.018	<.003		
JUL													
11...	1010	ENVIRONMENTAL	<.006	<.004	<.005	.034	<.010	<.041	<.005	<.018	<.003		
SEP													
03...	1049	FIELD BLANK	<.006	<.004	<.005	<.007	<.010	<.041	<.005	<.018	<.003		
03...	1050	ENVIRONMENTAL	<.006	<.004	<.005	.013	<.010	<.041	<.005	<.018	<.003		
DATE		DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
NOV													
07...	E.022	<.005	<.002	<.004	<.035	<.027	<.050	E.004	<.006	<.007	<.010	<.01	<.011
DEC													
06...	E.007	<.005	<.002	<.004	<.035	<.027	<.050	E.003	<.006	<.007	<.010	<.01	<.011
JAN													
17...	E.018	<.005	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011
MAR													
05...	E.015	<.005	<.002	<.004	<.035	<.027	<.050	E.004	<.006	<.007	<.022	<.01	<.011
APR													
11...	E.009	<.005	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.010	<.01	<.011
MAY													
15...	E.060	<.005	<.002	<.004	<.035	<.027	<.050	.159	<.006	<.007	<.022	<.01	<.011
JUN													
11...	E.055	<.005	<.002	<.004	<.035	<.027	<.050	.034	<.006	<.007	<.022	<.01	<.011
JUL													
11...	E.031	<.005	<.002	<.004	<.035	<.027	<.050	E.005	<.006	<.007	<.022	<.01	<.011
SEP													
03...	<.006	<.005	<.002	<.004	<.035	<.027	<.050	<.013	<.006	<.007	<.022	<.01	<.011
03...	E.018	<.005	<.002	<.004	<.035	<.027	<.050	E.005	<.006	<.007	<.022	E.01	<.011

Remark codes used in this report:

< -- Less than

E -- Estimated value

SCHUYLKILL RIVER BASIN

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
NOV			
07...	E.006	<.02	<.034
DEC			
06...	E.005	<.02	<.034
JAN			
17...	.053	<.02	<.034
MAR			
05...	.011	<.02	<.034
APR			
11...	.296	<.02	<.034
MAY			
15...	.022	<.02	<.034
JUN			
11...	.302	<.02	<.040
JUL			
11...	.055	<.02	<.034
SEP			
03...	<.005	<.02	<.034
03...	.020	<.02	<.034

Remark codes used in this report:

< -- Less than
E -- Estimated value

DELAWARE RIVER BASIN

421

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA

LOCATION.--Lat 39°58'04", long 75°11'20", Philadelphia County, PA, Hydrologic Unit 02040203, upstream from Fairmount 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 1998, revised, 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.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1998 to April 1999, July 1999 to September 1999.

WATER TEMPERATURE: September 1998 to September 2001.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (NAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-AIR (DEG C) (00020)	TEMPER-WATER (DEG C) (00010)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
NOV											
13...	1130	ENVIRONMENTAL	519	773	95	10.9	7.9	607	14.5	9.8	106
DEC											
12...	1150	ENVIRONMENTAL	986	770	96	11.1	7.9	491	12.3	9.0	95
JAN											
15...	1140	ENVIRONMENTAL	1120	762	101	13.3	7.8	558	8.0	3.8	78
FEB											
04...	1200	ENVIRONMENTAL	1490	752	108	13.5	7.9	482	5.0	5.4	71
MAR											
07...	1130	ENVIRONMENTAL	1230	766	109	13.3	7.8	432	20.2	7.0	72
APR											
08...	1050	ENVIRONMENTAL	1570	772	109	12.2	7.8	374	12.0	11.0	59
MAY											
16...	1209	FIELD BLANK	--	--	--	--	--	--	--	--	--
16...	1210	ENVIRONMENTAL	4520	755	104	10.3	7.5	266	--	15.4	53
JUN											
13...	1130	ENVIRONMENTAL	1410	756	90	7.3	7.6	389	29.0	25.2	--
13...	1131	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
JUL											
08...	1050	ENVIRONMENTAL	648	764	84	6.6	7.8	458	31.0	27.6	81
SEP											
05...	1140	ENVIRONMENTAL	519	761	90	7.7	7.8	535	27.0	23.2	81

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
NOV											
13...	130	66.5	78.6	.73	.14	4.32	.057	.51	.55	1.4	1.0
DEC											
12...	117	49.3	68.4	.59	.12	3.80	.075	.41	.45	96.6	36
JAN											
15...	95	83.2	51.4	.68	.18	3.17	.084	.24	.28	9.7	3.2
FEB											
04...	87	63.3	48.5	.67	.23	3.78	.122	.26	.31	8.9	2.2
MAR											
07...	89	46.7	47.6	.81	.09	2.77	.061	.23	.27	21.9	6.6
APR											
08...	72	38.8	44.5	.47	.16	2.97	.052	.22	.25	15.3	3.6
MAY											
16...	--	<.30	<.1	<.10	<.04	<.05	<.008	<.02	<.004	--	--
16...	64	19.3	30.9	.68	.12	2.06	.035	.10	.172	255	21
JUN											
13...	--	32.5	48.9	.62	.13	3.10	.065	.27	.31	47.2	12
13...	--	--	--	--	--	--	--	--	--	--	--
JUL											
08...	98	41.8	56.4	.55	.10	3.31	.055	.33	.37	5.8	3.3
SEP											
05...	99	55.2	75.2	.49	.09	3.23	.043	.45	.47	4.3	3.1

Remark codes used in this report:
 < -- Less than

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	ACETO-	ALA-	ALPHA	ATRA-	BEN-	CAR-	CHLOR-	CYANA-	DCPA		
			CHLOR, WATER, FLTRD REC (UG/L) (49260)	CHLOR, WATER, DISS, REC, (UG/L) (46342)	BHC DIS- SOLVED (UG/L) (34253)	ZINE, WATER, DISS, REC (UG/L) (39632)	FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	PYRIFOS DIS- SOLVED (UG/L) (38933)	ZINE, WATER, DISS, REC (UG/L) (04041)	WATER FLTRD 0.7 U GF, REC (UG/L) (82682)		
NOV													
13...	1130	ENVIRONMENTAL	<.004	<.002	<.005	.037	<.010	<.041	<.005	<.018	<.003		
DEC													
12...	1150	ENVIRONMENTAL	<.004	<.002	<.005	.035	<.010	<.041	<.005	<.018	<.003		
JAN													
15...	1140	ENVIRONMENTAL	<.006	<.004	<.005	.025	<.010	<.041	<.005	<.018	<.003		
FEB													
04...	1200	ENVIRONMENTAL	<.006	<.004	<.005	.041	<.010	E.006	<.005	<.018	<.003		
MAR													
07...	1130	ENVIRONMENTAL	<.006	<.004	<.005	.026	<.010	<.041	<.005	<.018	<.003		
APR													
08...	1050	ENVIRONMENTAL	<.006	<.004	<.005	.021	<.010	E.004	<.005	<.018	<.003		
MAY													
16...	1210	ENVIRONMENTAL	.046	.017	<.005	.556	<.010	E.033	E.005	.019	<.003		
JUN													
13...	1130	ENVIRONMENTAL	.035	<.015	<.005	.557	<.010	E.008	<.005	<.018	<.003		
13...	1131	SPLIT REPLICATE	.034	<.015	<.005	.563	<.010	E.007	<.005	<.018	<.003		
JUL													
08...	1050	ENVIRONMENTAL	.024	<.004	<.005	.341	<.010	<.041	<.005	E.006	<.003		
SEP													
05...	1140	ENVIRONMENTAL	<.006	<.004	<.005	.092	<.010	E.007	<.005	<.018	<.003		
DATE		DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER SENCOR 0.7 U DISSOLV (UG/L) (39415)	METRI- BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, FLTRD 0.7 U GF, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
NOV													
13...	E.033	<.005	<.002	<.004	<.035	<.027	<.050	E.011	<.006	<.007	<.010	<.01	<.011
DEC													
12...	E.025	.006	<.002	<.004	<.035	<.027	<.050	.014	<.006	<.007	<.010	.02	<.011
JAN													
15...	E.020	<.005	<.002	<.004	<.035	<.027	<.050	E.012	<.006	<.007	<.022	E.01	<.011
FEB													
04...	E.045	<.005	<.002	<.004	<.035	<.027	<.050	.021	<.006	<.007	<.022	.02	<.011
MAR													
07...	E.026	E.004	<.002	<.004	<.035	<.027	<.050	E.012	<.006	<.007	<.022	<.02	<.011
APR													
08...	E.013	<.005	<.002	<.004	<.035	<.027	<.050	.014	<.006	<.007	<.022	E.01	<.011
MAY													
16...	E.045	.011	<.002	<.004	<.035	<.027	<.050	.165	<.006	<.007	E.018	.04	<.011
JUN													
13...	E.068	.009	<.002	<.004	<.035	<.027	<.050	.170	<.006	<.007	<.022	.04	<.011
13...	E.061	.009	<.002	<.004	<.035	<.027	<.050	.172	<.006	<.007	<.022	.04	<.011
JUL													
08...	E.078	E.004	<.002	<.004	<.035	<.027	<.050	.094	<.006	<.007	<.022	.03	<.011
SEP													
05...	E.041	.009	<.002	<.004	<.035	<.027	<.050	.024	<.006	<.007	<.022	.06	<.011

Remark codes used in this report:

< -- Less than
E -- Estimated value

DELAWARE RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
NOV			
13...	.015	E.02	<.034
DEC			
12...	.015	<.02	<.034
JAN			
15...	.007	<.02	<.034
FEB			
04...	.015	E.01	<.034
MAR			
07...	.007	<.02	<.034
APR			
08...	.010	<.02	<.034
MAY			
16...	.042	E.01	<.034
JUN			
13...	.037	E.01	<.034
13...	.036	E.01	<.034
JUL			
08...	.052	<.02	<.034
SEP			
05...	.026	.02	<.034

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

DELAWARE RIVER BASIN

01475090 EDWARDS RUN AT JEFFERSON, NJ

LOCATION.--Lat 39°44'48", long 75°11'43", Gloucester County, Hydrologic Unit 02040206, at bridge on Pitman-Jefferson Road, 1.0 mi southeast of Jefferson, 1.6 mi northeast of Mullica Hill, and 1.3 mi upstream of confluence with Myers Creek.

DRAINAGE AREA.--2.92 mi².

PERIOD OF RECORD.--Water year 2001 to August 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
NOV	27...	1100	3.8	.123	.094	764	91	10.6	7.2	193	12.5	9.0	63	17.0
FEB	20...	1000	4.4	.072	.056	764	90	11.7	7.3	191	7.5	4.5	65	17.9
JUN	20...	0900	13	.332	.266	770	71	6.8	7.0	213	21.0	18.0	61	16.4
AUG	27...	1000	5.0	.158	.123	762	63	5.7	7.2	224	22.5	20.0	72	20.3
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	
NOV	27...	4.98	6.34	8.09	30	19.3	.2	12.2	31.4	134	121	.030	.29	<.030
FEB	20...	4.90	4.86	6.64	20	18.5	.2	11.1	34.8	118	118	.100	.25	.090
JUN	20...	4.92	11.8	8.30	36	16.5	.2	10.5	22.5	138	120	1.80	3.0	1.90
AUG	27...	5.05	7.60	9.22	38	19.8	.3	13.0	31.2	148	137	.150	.55	.190
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (00602)	NITRO- GEN, PHOS- PHORUS DIS- SOLVED (MG/L AS P) (49570)	PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00666)	ORTH- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	BORON, DIS- SOLVED (UG/L AS B) (01020)
NOV	27...	.67	<.003	.96	.12	.026	--	.088	.7	<.1	4.0	.7	3.1	30
FEB	20...	1.56	.009	1.8	.06	.023	.022	.065	.5	<.1	2.1	.5	EL.6	10
JUN	20...	.93	.037	3.9	.41	.26	.219	.44	2.8	.5	10.8	2.3	3.9	40
AUG	27...	1.63	.031	2.2	.38	.08	.083	.19	3.1	<.1	5.1	3.1	<1.0	40

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01475090 EDWARDS RUN AT JEFFERSON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL AT 105 DEG. C, SUS-PENDEDED (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
NOV	27...													
FEB	20...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE RECOVER (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	20...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	E.1
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)					
FEB	20...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2					

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L)	CAR-BARYL WATER FLTRD 0.7 U (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U (UG/L)
JUN	20...	<.006	<.004	E.004	.022	<.010	E.120	<.005	<.018	<.003	E.009	.061	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01475090 EDWARDS RUN AT JEFFERSON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
	JUN 20...	<.004	<.035	<.027	E.043	.055	<.006	<.007	<.022	<.01	<.011	.008	<.02

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 20...	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY 29...	0930	1100	500	220	JUN 05...	0930	500	300	870
					JUN 12...	0950	5000	1100	1300
					JUN 26...	1025	230	100	1200

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

427

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

LOCATION.--Lat 39°44'26", long 75°15'34", Gloucester County, Hydrologic Unit 02040202, at bridge on County Route 607 on Gibbstown-Harrisonville Road (Tomlin Station Road), 1.8 mi west of Mullica Hill, and 2.8 mi east of Swedesboro.

DRAINAGE AREA.--26.9 mi².

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

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

WATER TEMPERATURE: May 1966 to September 1973, daily maximum-minimum; October 1998 to October 2001, recorded hourly.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, total ammonia + organic nitrogen in bed sediment, total phosphorus in bed sediment, fecal coliform, E.coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726)	BARO-METRIC PRES-SURE OF (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	
NOV 20...	1000	16	7.1	.109	.090	763	76	8.7	7.3	267	12.0	9.5	75	
FEB 21...	1000	17	4.3	.072	.058	757	88	10.1	7.0	241	16.0	9.0	70	
MAY 21...	0930	17	5.6	.147	.117	770	74	8.1	7.4	220	14.0	11.5	65	
AUG 12...	1000	4.9	6.2	.108	.084	765	59	5.3	7.4	375	28.5	21.0	85	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 20...	23.8	3.77	4.61	14.3	56	27.0	.3	12.4	25.0	160	151	.590	.87	
FEB 21...	21.7	3.79	3.88	12.7	37	23.5	.2	8.3	30.5	134	134	.370	.59	
MAY 21...	19.9	3.68	3.62	11.9	37	20.2	.2	9.3	23.7	139	119	.390	.77	
AUG 12...	27.1	4.06	6.21	36.0	74	44.4	.4	13.5	20.0	223	205	2.20	2.6	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NIIRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
NOV 20...	.560	1.09	.046	2.0	.08	.097	--	.180	.6	<.1	3.1	.6	2.0	
FEB 21...	.370	1.46	.023	2.0	.11	.057	.033	.116	.7	<.1	2.2	.7	E1.2	
MAY 21...	.460	.93	.043	1.7	.04	.084	.071	.140	.7	<.1	3.5	.7	E1.8	
AUG 12...	2.20	1.29	.155	3.9	.02	.21	.213	.34	.2	<.1	3.9	.2	3.4	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		CHLORO-PHYLL A FLUORO-METRIC METHOD			RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED											
DATE	TIME	SAMPLE TYPE	CORR. (UG/L) (32209)	(UG/L) (01020)	BORON, DIS- SOLVED (UG/L) AS B (01020)	PHOS- PHORUS TOTAL IN BOT. MATERIAL (MG/KG) AS P (00668)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG) AS C (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG) AS C (00686)	ARSENIC TOTAL (UG/L) AS AS (01002)	BARIUM, RECOV- ERABLE (UG/L) AS BA (01007)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE (01012)	BORON, RECOV- ERABLE (UG/L) AS B (01022)				
NOV	20...		--	60												
FEB	21...		--	50												
MAY	21...		.800	50												
AUG	12...		.300	180												
AUG	12...	0900	FIELD BLANK	--	--	--	--	--	--	--	--	--				
	12...	1000	ENVIRONMENTAL	--	--	--	--	E2	46.2	<.06	159	--				
	12...	1000	BED MATERIAL	6.80	110	10000	2.2	<.2	--	--	--	--				
DATE	TIME	SAMPLE TYPE	UNFLTRD TOTAL (UG/L) AS CD (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, DIS- SOLVED (UG/L) AS CU (01040)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	IRON, TOTAL RECOV- ERABLE (UG/L) AS FE (01045)	LEAD, DIS- SOLVED (UG/L) AS PB (01049)	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 (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)	NICKEL, DIS- SOLVED (UG/L) AS NI (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI (01067)	SELE- NIUM, TOTAL (UG/L) AS SE (01147)	
AUG	12...		--	--	<.2	--	--	<.08	--	40.2	<.01	--	<.06	--	4	E.3
	12...		.05	<.8	--	1.7	830	--	<1	--	--	--	--	--	--	--
	12...		--	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	TIME	SAMPLE TYPE	SILVER, TOTAL RECOV- ERABLE (UG/L) AS AG (01077)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G) AS AS (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS CD (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS CO (01038)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS CU (01043)	IRON, FM BOT- TOM MA- SEDIMT, TERIAL (UG/G) AS FE (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS PB (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS HG (71921)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS NI (01068)	
AUG	12...		--	<1	--	--	--	--	--	--	--	--	--	--	--	--
	12...		<.05	--	13	--	--	--	--	--	--	--	--	--	--	--
	12...		--	--	--	2	.270	33	3.2	3	27000	6.3	140	<.01	4.8	--
DATE	TIME	SAMPLE TYPE	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS ZN (01093)	4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411)	9H-FLU- ORENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398)	9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434)	BENZ (A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436)	BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408)	
AUG	12...		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12...		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12...		<1	64	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397)	CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461)	FLUOR- ANTHENE BED MAT WS <2MM REC (UG/KG) (49466)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403)	NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404)	NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405)	NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406)	NAPHTHAL ENE, 2- ETHYL- SED, BM WS <2MM DW REC (UG/KG) (49948)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<5

DATE	P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451)	PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
AUG							
12...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
12...	<50	<50	<50	<50	<50	.3	.8

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)
MAY					JUN				
29...	0955	40	100	100	12...	1005	110	100	220
JUN					19...	1020	16000	4700	1700
05...	0940	500	200	120	19...	1035	300	100	170
					26...	1040	110	<100	210

Remark codes used in this report:
< -- Less than

DELAWARE RIVER BASIN

01482500 SALEM RIVER AT WOODSTOWN, NJ

LOCATION.--Lat 39°38'36", long 75°19'52", Salem County, Hydrologic Unit 02040206, downstream from Memorial Lake Dam at Woodstown, 0.2 mi upstream from small brook, and 0.3 mi downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi².

PERIOD OF RECORD.--Water years 1973 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	UV ABSORB-ANCE 254 NM, WTR FLT (/CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (/CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
DEC 11...	1240	7.7	9.6	.137	.106	767	97	11.4	7.3	267	10.5	8.5	91	
FEB 14...	1340	5.8	12	.124	.096	770	105	13.4	6.9	283	4.5	5.5	93	
JUN 12...	0940	3.3	21	.323	.251	757	94	7.6	7.4	255	27.0	26.0	86	
AUG 26...	1050	.85	40	.282	.207	762	101	8.1	7.5	293	28.5	26.5	99	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)
DEC 11...	19.5	10.4	6.19	7.90	44	26.7	E.1	2.7	34.6	168	140	.130	.60	
FEB 14...	20.0	10.4	6.13	10.1	32	29.2	E.1	3.6	42.4	158	153	.180	.68	
JUN 12...	19.2	9.13	8.01	8.34	48	24.1	.1	3.7	26.2	156	129	.120	.98	
AUG 26...	24.6	9.16	8.26	10.6	60	31.8	.2	1.8	23.6	148	147	.258	1.3	
DATE		NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694)	CARBON, INOR-GANIC, ORGANIC PARTIC. (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)
DEC 11...	.150	1.13	.035	1.7	.24	.032	--	.118	1.5	<.1	4.0	1.5	2.5	
FEB 14...	.200	2.64	.060	3.3	.23	.029	<.020	.114	1.6	.1	4.3	1.5	3.7	
JUN 12...	.120	.26	.055	1.2	1.00	.084	.027	.29	5.6	<.1	9.1	5.6	2.9	
AUG 26...	.257	.08	.015	1.3	1.40	.049	<.020	.32	7.5	<.1	11.3	7.5	4.5	

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)	BORON, DIS-SOLVED (UG/L) AS B (01020)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DEC			
11...	--	20	7
FEB			
14...	--	20	12
JUN			
12...	121	30	33
AUG			
26...	171	30	32

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI-FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO-COCCI, ME MF, WATER (COL/ 100 ML) (31649)
JUN					JUL				
05...	1000	40	<100	70	02...	0900	80	400	240
12...	1000	110	200	70					
19...	1015	500	900	150					
26...	1030	270	<100	90					

Remark codes used in this report:
< -- Less than

DELAWARE RIVER BASIN

01482530 MAJOR RUN AT SHARPTOWN, NJ

LOCATION.--Lat 39°38'56", long 75°22'29", Salem County, Hydrologic Unit 02040206, at bridge on Pointers-Swedeseboro Road (County Route 620), 0.7 mi southwest of Sharptown, 0.4 mi upstream from mouth, and 2.6 mi west of Woodstown.

DRAINAGE AREA.--3.04 mi².

PERIOD OF RECORD.--Water year 2001 to September 2002.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	TUR- BID- ITY WATER (NTU) (61028)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 29...	0800	17	.122	.090	765	53	5.5	7.4	463	12.0	13.5	160	55.6
FEB 21...	0800	19	.120	.106	755	43	4.8	7.0	350	10.0	10.0	100	35.5
MAY 29...	0715	10	.151	.113	764	45	4.0	7.4	459	--	21.5	120	42.8
SEP 05...	0900	21	.170	.130	765	59	5.2	7.3	507	23.0	21.5	130	44.9
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00610)
NOV 29...	4.41	6.53	24.1	118	54.8	.3	14.2	25.8	278	257	.040	.40	.060
FEB 21...	2.97	3.90	16.1	65	36.2	.4	15.6	24.0	188	177	.210	.35	.230
MAY 29...	3.64	5.71	38.8	95	67.0	.3	8.7	18.6	262	245	.270	.84	.260
SEP 05...	4.35	7.28	44.0	53	78.2	.3	6.2	62.9	309	281	.072	.49	.068
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP SOLVED (MG/L AS N) (49570)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209)
NOV 29...	.12	<.003	.51	.21	.018	--	.128	1.3	<.1	5.5	1.3	3.1	--
FEB 21...	.81	.010	1.2	.12	.018	<.020	.29	.9	<.1	2.0	.8	<1.0	--
MAY 29...	.36	.039	1.2	.33	.055	<.020	.175	1.9	<.1	5.6	1.9	2.8	33.3
SEP 05...	.25	.003	.74	.80	.053	.033	.28	4.7	<.1	6.0	4.7	3.9	92.0

Remark codes used in this report:
< -- Less than

01482530 MAJOR RUN AT SHARPTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

		RESIDUE TOTAL												
		BORON, AT 105 DEG. C, DIS-SOLVED SUS-PENDEDED AS B) (MG/L) (00530)												
DATE	TIME	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-ETHYL-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PROPANE TOTAL (UG/L)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CARBON TETRA-CHLORIDE TOTAL (UG/L)	
NOV	29...													
FEB	21...	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	
DATE	TIME	CHLORO-BENZENE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	BROMO-DI-METHANE TOTAL (UG/L)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L)	ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L)	ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L)
FEB	21...	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2	<.1	<.1	<.2
DATE	TIME	METHYL-CHLORIDE UNFLTRD REC (UG/L)	METHYL-PARA-XYLENE WATER UNFLTRD REC (UG/L)	O-XYLENE WATER WHOLE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORIDE TOTAL (UG/L)					
FEB	21...	<.2	<.2	<.1	<.1	<.1	<.1	<.2	<.2					

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

DATE	TIME	ACETO-CHLOR, WATER FLTRD REC (UG/L)	ALA-CHLOR, WATER DISS, REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)
MAY	29...	.007	<.004	<.005	1.36	<.010	<.041	.007	E.012	<.003	E.110	<.005	<.002

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

DELAWARE RIVER BASIN

01482530 MAJOR RUN AT SHARPTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 29...	<.004	<.035	<.050	1.80	<.006	<.007	<.022	E.01	<.011	.029	<.02	<.034	<.009

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)	DATE	TIME	COLI- FORM, FECAL, EC BROTH (MPN) (31615)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649)		
JUN	05...	0915	3000	1500	390	JUL	02...	0815	2200	1700	1200
	12...	0930	1300	1100	1100						
	19...	0930	1400	800	520						
	26...	0915	>16000	1400	3000						

Remark codes used in this report:
 < -- Less than
 > -- Greater than
 E -- Estimated value

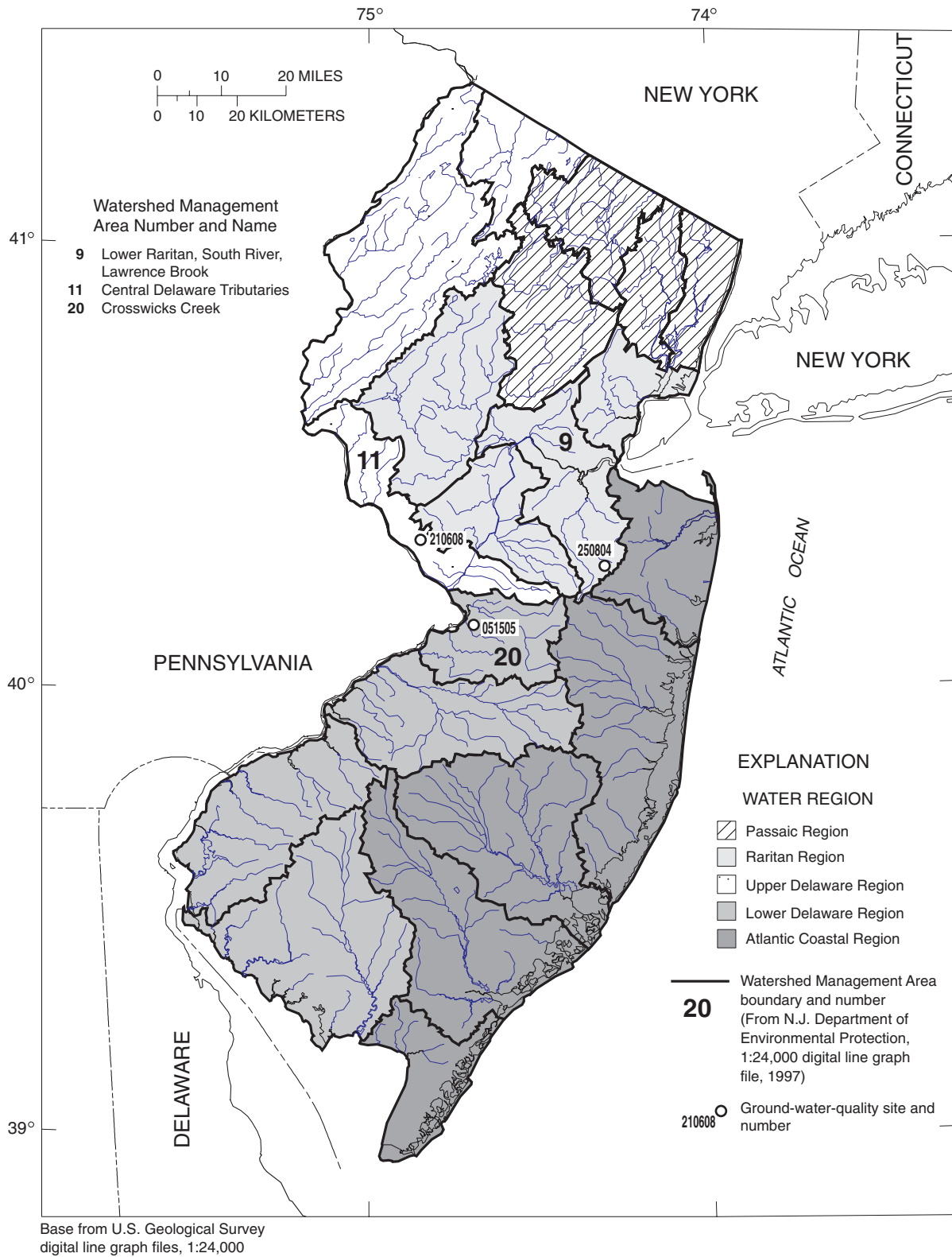


Figure 40. Location of sites in the Ambient Ground-Water-Quality Network, water year 2002.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 9

STATION IDENTIFICATION NUMBER	NJ-WRD WELL NUMBER	LOCAL IDENTIFIER	LATITUDE (NAD1983)	LONGITUDE (NAD1983)	ALTITUDE OF LAND SURFACE (NGVD1929) (FT.)	DEPTH OF WELL (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
401606074183501	250804	NJDEP MW117	401606.1	0741835.0	135	39.3	34.3 - 39.3	211RDBK

Aquifer units:
211RDBK - Red Bank Sand

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local identifier	Station number	Date	Time	PUMP OR FLOW PERIOD TO SAM-PLING (MIN) (72004)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT OF SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)		
NJDEP MW117	401606074183501	09-26-02	1010	40	10	765	12	1.3	7.5	355	
Local identifier	Date	HARD-NESS TOTAL (MG/L AS CACO3) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	
NJDEP MW117	09-26-02	14.0	150	57.2	1.92	1.72	8.36	73	88	9.84	.19
Local identifier	Date	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
NJDEP MW117	09-26-02	6.8	83.2	222	214	<.04	.71	E.02	<.008	.06	.8
Local identifier	Date	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	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)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NJDEP MW117	09-26-02	3	.12	1.8	19	<.06	16	.04	<.8	.8	899
Local identifier	Date	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	THAL-LIUM, DIS-SOLVED (UG/L AS TL) (01057)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)
NJDEP MW117	09-26-02	<.08	79.8	<.01	1.02	<.3	<1	<.04	3	<.1	<.1
Local identifier	Date	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102)
NJDEP MW117	09-26-02	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- ifier	Date	CHLORO-	CHLORO-	CIS-1,2	BROMO-	DI-	DI-ISO-	ETHER	ETHER	ETHER	
		BENZENE	BROMO-	ETHENE	DI-	CHLORO-	PROPYL-	ETHER	TERT-	TERT-	
		TOTAL	METHANE	FORM	CHLORO-	DI-	FLUORO-	WATER,	UNFLTRD	UNFLTRD	UNFLTRD
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
		(34301)	(32105)	(32106)	(77093)	(32101)	(34668)	(81577)	(81576)	(50004)	(50005)
NJDEP MW117	09-26-02	<.1	<.2	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.2
Local ident- ifier	Date	ETHYL-	FREON-	METHYL	METHYL	PARA-	O-	TETRA-	TRI-		
		BENZENE	113	TERT-	ENE	XYLENE	XYLENE	CHLORO-	CHLORO-		
		UNFLTRD	WATER	BUTYL	CHLO-	WATER	WATER	ETHYL-	ETHYL-		
		WAT UNF	ETHER	RIDE	WATER	WHOLE	STYRENE	ENE	TOLUENE		
		REC	REC	REC	REC	REC	REC	REC	REC		
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)		
		(34371)	(77652)	(78032)	(34423)	(85795)	(77135)	(77128)	(34475)	(34010)	(39180)
NJDEP MW117	09-26-02	<.1	<.1	<.2	<.2	<.2	<.1	<.1	<.1	<.1	<.1
Local ident- ifier	Date	TRI-	VINYL	ALPHA	ALPHA	BETA,	GROSS	2,6-DI-	ACETO-	ALA-	ALPHA
		CHLORO-	CHLO-	COUNT,	RADIO.	2 SIGMA	BETA,	ETHYL	CHLOR,	CHLOR,	BHC
		FLUORO-	CHLO-	WAT DIS	DISS	DISS,	SOLVED	WAT FLT	WATER	WATER,	DIS-
		METHANE	RIDE	AS	AS	AS	(PCI/L	0.7 U	FLTRD	DISS,	DISS,
		TOTAL	TOTAL	TH-230	TH-230	CS-137	AS	GF, REC	REC	REC,	SOLVED
		(UG/L)	(UG/L)	(PCI/L)	(PCI/L)	(PCI/L)	CS-137)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
		(34488)	(39175)	(75987)	(04126)	(75989)	(03515)	(82660)	(49260)	(46342)	(34253)
NJDEP MW117	09-26-02	<.2	<.2	1.0	1	1.5	4	<.006	<.006	<.004	<.005
Local ident- ifier	Date	ATRA-	BEN-	BUTYL-	CAR-	CARBO-	CHLOR-	CYANA-	DCPA	DEETHYL	
		ZINE,	FLUR-	ATE,	BARYL	FURAN	DIS-	ZINE,	WATER	WATER,	ATRA-
		WATER,	ALIN	WATER,	WATER	WATER	PYRIFOS	WATER,	FLTRD	CHLOR,	
		DISS,	0.7 U	DISS,	0.7 U	0.7 U	DIS-	0.7 U	0.7 U	WATER,	
		REC	GF, REC	REC	GF, REC	GF, REC	SOLVED	REC	GF, REC	DISS,	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	REC	
		(39632)	(82673)	(04028)	(82680)	(82674)	(38933)	(04041)	(82682)	(04040)	(39572)
NJDEP MW117	09-26-02	<.007	<.010	<.002	<.041	<.020	<.005	<.018	<.003	<.006	<.005
Local ident- ifier	Date	DI-	DISUL-	EPTC	ETHAL-	ETHO-	FONOFO	LINDANE	LIN-	METHYL	
		ELDRIN	FOTON	WATER	FLUR-	PROP	WATER	WATER	FLTRD	URON	AZIN-
		DIS-	WATER	FLTRD	ALIN	FLTRD	WATER	DIS-	WATER	PHOS	
		SOLVED	0.7 U	0.7 U	0.7 U	0.7 U	DISS	0.7 U	0.7 U	THION,	
		GF, REC	GF, REC	GF, REC	GF, REC	GF, REC	REC	SOLVED	GF, REC	DIS-	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	SOLVED	
		(39381)	(82677)	(82668)	(82663)	(82672)	(04095)	(39341)	(82666)	(39532)	(82686)
NJDEP MW117	09-26-02	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050
Local ident- ifier	Date	METHYL	METO-	METRI-	MOL-	NAPROP-	PARA-	PEB-	PENDI-	PER-	
		PARA-	THION	BUZIN	INATE	AMIDE	THION,	WATER	ULATE	METH-	METHRIN
		WAT FLT	LACHLOR	SENCOR	FLTRD	FLTRD	P,P'	FILTRD	WAT FLT	WAT FLT	
		0.7 U	WATER	WATER	0.7 U	0.7 U	DDE	0.7 U	0.7 U	0.7 U	
		GF, REC	DISSOLV	DISSOLV	GF, REC	GF, REC	DISSOLV	SOLVED	GF, REC	GF, REC	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
		(82667)	(39415)	(82630)	(82671)	(82684)	(34653)	(39542)	(82669)	(82683)	(82687)
NJDEP MW117	09-26-02	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006

Remark codes used in this report:
 < -- Less than

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, FLTRD DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, FLTRD DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, FLTRD DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)
NJDEP MW117	09-26-02	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02
				Local ident- i- fier	Date	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)				
				NJDEP MW117	09-26-02	<.005	<.002				

Remark codes used in this report:
< -- Less than

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 11

STATION IDENTIFICATION NUMBER	NJ-WRD WELL NUMBER	LOCAL IDENTIFIER	LATITUDE (NAD1983)	LONGITUDE (NAD1983)	ALTITUDE OF LAND SURFACE (NGVD1929) (FT.)	DEPTH OF WELL (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
401942074510101	210608	NJDEP MW76	401942	0745101	218	35	25 - 35	231LCKG

Aquifer units:
231LCKG - Lockatong Formation

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local identifier	Station number	Date	Time	Sample type	Medium code	FLOW RATE (G/M) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TURBIDITY FIELD WATER UNFLTRD (NTU) (61028)	BAROMETRIC PRES-SURE OF (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
NJDEP MW76	401942074510101	05-20-02	1400	STANDPIPE BLANK		--	--	--	--	--
		05-20-02	1405	PUMP BLANK		--	--	--	--	--
		05-20-02	1410	EQUIPMENT BLANK		--	--	--	--	--
		05-23-02	1020	ENVIRONMENTAL		.25	50	1.6	764	4

Local identifier	Date	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPECIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT IT FIELD (MG/L AS CACO3) (39086)
NJDEP MW76	05-20-02	--	--	--	--	--	E.01	--	--	--	--
	05-20-02	--	--	--	--	--	.03	--	--	--	--
	05-20-02	--	--	--	--	--	.05	<.008	--	<.09	--
	05-23-02	.4	7.9	466	14.0	200	59.7	12.6	9.95	16.1	146

Local identifier	Date	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	<.13	--	--	--	--	--	--
	05-23-02	178	12.6	.18	14.7	74.0	307	292	<.04	E.06	1.02

Local identifier	Date	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	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)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	<.04
	05-20-02	--	--	--	--	--	--	--	--	--	.20
	05-20-02	--	--	--	<1	<.05	<.2	<1	<.06	<7	.07
	05-23-02	.460	E.01	.5	8	5.25	4.0	16	<.06	36	.09

Local identifier	Date	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	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)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	THAL-LIUM, DIS-SOLVED (UG/L AS TL) (01057)
NJDEP MW76	05-20-02	--	--	--	<.08	<.1	--	.08	--	--	--
	05-20-02	--	--	--	.21	<.1	--	.43	--	--	--
	05-20-02	<.8	<.2	<10	.13	.1	<.01	.07	<.3	<1	<.04
	05-23-02	<.8	16.8	<10	#.17	49.8	<.01	<.06	1.6	<1	.34

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 # -- Value unreliable because equipment blank equals 0.13

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local identifier	Date	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYLENE TOTAL (UG/L) (34501)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	<1	--	--	--	--	--	--	--	--	--
	05-23-02	4	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1

Local identifier	Date	BENZENE TOTAL (UG/L) (34030)	BROMO-FORM TOTAL (UG/L) (32104)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	CIS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (77093)	BROMO-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-23-02	<.1	<.2	<.2	<.1	<.2	<.1	<.1	<.1	<.2	<.2

Local identifier	Date	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT-BUTYL METHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	FRON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL ENE CHLO-RIDE TOTAL (UG/L) (34423)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	STYRENE TOTAL (UG/L) (77128)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--
	05-23-02	<.2	<.1	<.2	<.1	<.1	<.2	<.2	<.2	<.1

Local identifier	Date	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE TOTAL (UG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	ALPHA RADIO. 2 SIGMA DISS AS TH-230 (PCI/L) (04126)	BETA, 2 SIGMA WATER, DISS, AS (PCI/L) (75989)	GROSS BETA, DIS-SOLVED (PCI/L) (03515)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-23-02	<.1	<.1	<.1	<.2	<.2	4.3	9	4.1	10	<.006

Local identifier	Date	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	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)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-23-02	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018

Remark codes used in this report:
 < -- Less than

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	DEETHYL				DISUL-	EPTC	ETHAL-	ETHO-	FONOFOS	LINDANE
		DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)		
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-23-02	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004

Local ident- i- fier	Date	LIN-	METHYL	METHYL		METRI-	MOL-	NAPROP-			
		URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630)	INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-23-02	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010

Local ident- i- fier	Date	PEB-	PENDI-	PER-	PHORATE	PRO-	PRON-	PROPA-	PRO-	PRO-	SI-
		ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	METON, WATER, DISS, REC (UG/L) (04037)	AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	MAZINE, WATER, DISS, REC (UG/L) (04035)
NJDEP MW76	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-20-02	--	--	--	--	--	--	--	--	--	--
	05-23-02	<.004	<.022	<.006	<.011	<.01	<.004	<.010	<.011	<.02	<.005

Local ident- i- fier	Date	TEBU-	TER-	TER-	THIO-	TRIAL-
		THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
NJDEP MW76	05-20-02	--	--	--	--	--
	05-20-02	--	--	--	--	--
	05-20-02	--	--	--	--	--
	05-23-02	<.02	<.034	<.02	<.005	<.002

Remark codes used in this report:
< -- Less than

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 20

STATION IDENTIFICATION NUMBER	NJ-WRD WELL NUMBER	LOCAL IDENTIFIER	LATITUDE (NAD1983)	LONGITUDE (NAD1983)	ALTITUDE OF LAND SURFACE (NGVD1929) (FT.)	DEPTH OF WELL (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
400811074414101	051505	NJDEP MW121	400811	0744141	74	53.8	48.8 - 53.8	211EGLS

Aquifer units:
211EGLS - Englishtown Formation

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local identifier	Station number	Date	Time	Sample type	Medium code	FLOW RATE (G/M) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TURBIDITY FIELD UNFLTRD OF WATER (NTU) (61028)	BAROMETRIC PRESURE OF WATER (MM HG) (00025)	PH WATER FIELD STANDARDS (00400)
NJDEP MW121	400811074414101	09-26-02	1629	AMBIENT BLANK		--	--	--	--	--
		09-26-02	1630	ENVIRONMENTAL		.25	130	13	765	6.3

Local identifier	Date	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM DIS-SOLVED (MG/L AS K) (00935)	SODIUM DIS-SOLVED (MG/L AS NA) (00930)	ALKALINITY WAT TOT IT FIELD (MG/L AS CACO3) (39086)	BICARBONATE DIS IT FIELD (MG/L AS HCO3) (00453)	CHLORIDE DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE DIS-SOLVED (MG/L AS F) (00950)
NJDEP MW121	09-26-02	--	--	--	--	--	--	--	--	--	--
	09-26-02	15.5	49	14.2	3.37	2.35	8.02	66	81	6.03	.12

Local identifier	Date	SILICA DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOSPHATE DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	ALUMINUM, DIS-SOLVED (MG/L AS AL) (01106)
NJDEP MW121	09-26-02	--	--	--	--	--	--	--	--	--	--
	09-26-02	16.5	14.3	118	<.04	<.10	.33	.057	.02	1.0	2

Local identifier	Date	ANTIMONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NJDEP MW121	09-26-02	--	--	--	--	--	--	--	--	--	--
	09-26-02	.12	.9	49	<.06	14	.07	<.8	.6	15800	<.08

Local identifier	Date	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	THALLIUM, DIS-SOLVED (UG/L AS TL) (01057)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)
NJDEP MW121	09-26-02	--	--	--	--	--	--	--	<.1	<.1	<.1
	09-26-02	183	<.01	3.55	<.3	<1	<.04	16	<.1	<.1	<.1

Remark codes used in this report:
< -- Less than

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local identifier	Date	1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-PROPANE	TRANS-1,2-DI-CHLORO-ETHENE	BENZENE 1,3-DI-CHLORO-WATER	BENZENE 1,4-DI-CHLORO-WATER	BENZENE O-DI-CHLORO-WATER	BENZENE TOTAL	BROMO-FORM TOTAL	CARBON TETRA-CHLORIDE TOTAL	CHLORO-BENZENE TOTAL
		(UG/L) (32103)	(UG/L) (34541)	(UG/L) (34546)	(UG/L) (34566)	(UG/L) (34571)	(UG/L) (34536)				
NJDEP MW121	09-26-02 09-26-02	<.2 <.2	<.1 <.1	<.1 <.1	<.1 <.1	<.1 <.1	<.1 <.1	<.1 <.1	<.2 <.2	<.2 <.2	<.1 <.1
Local identifier	Date	CHLORO-DI-BROMO-METHANE	CHLORO-FORM	CIS-1,2-DI-CHLORO-ETHENE	BROMO-DI-CHLORO-METHANE	DI-CHLORO-DI-FLUORO-METHANE	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER	ETHER ETHYL WATER, UNFLTRD RECOVER	ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER	ETHYL-BENZENE TOTAL
		(UG/L) (32105)	(UG/L) (32106)	(UG/L) (77093)	(UG/L) (32101)	(UG/L) (34668)	(UG/L) (81577)	(UG/L) (81576)	(UG/L) (50004)	(UG/L) (50005)	(UG/L) (34371)
NJDEP MW121	09-26-02 09-26-02	<.2 <.2	<.1 <.1	<.1 <.1	<.1 <.1	<.2 <.2	<.2 <.2	<.2 <.2	<.1 <.1	<.2 <.2	<.1 <.1
Local identifier	Date	FREON-113 WATER UNFLTRD REC	METHYL TERT-BUTYL ETHER WAT UNF REC	METHYL EN E CHLO-RIDE TOTAL	META/PARA-XYLENE WATER UNFLTRD REC	O-XYLENE WATER WHOLE TOTAL	STYRENE	TETRA-CHLORO-ETHYL-ENE TOTAL	TOLUENE TOTAL	TRI-CHLORO-ETHYL-ENE TOTAL	TRI-CHLORO-FLUORO-METHANE TOTAL
		(UG/L) (77652)	(UG/L) (78032)	(UG/L) (34423)	(UG/L) (85795)	(UG/L) (77135)	(UG/L) (77128)	(UG/L) (34475)	(UG/L) (34010)	(UG/L) (39180)	(UG/L) (34488)
NJDEP MW121	09-26-02 09-26-02	<.1 <.1	<.2 .5	<.2 <.2	<.2 <.2	<.1 <.1	<.1 <.1	<.1 <.1	<.1 <.1	<.1 <.1	<.2 <.2
Local identifier	Date	VINYL CHLORIDE TOTAL	ALPHA COUNT, 2 SIGMA WAT DIS AS	ALPHA RADIO. WATER DISS AS	BETA, 2 SIGMA WATER, DISS, AS	GROSS BETA, DIS-SOLVED (PCI/L) AS	2,6-DI-ETHYL ANILINE WAT FLT GF, REC	ACETO-CHLOR, WATER, FLTRD REC	ALA-CHLOR, WATER, DISS, REC	ALPHA BHC DIS-SOLVED	ATRA-ZINE, WATER, DISS, REC
		(UG/L) (39175)	(PCI/L) (75987)	(PCI/L) (04126)	(PCI/L) (75989)	(PCI/L) (03515)	(UG/L) (82660)	(UG/L) (49260)	(UG/L) (46342)	(UG/L) (34253)	(UG/L) (39632)
NJDEP MW121	09-26-02 09-26-02	<.2 <.2	-- .61	-- .824	-- 1.2	-- 3	-- <.006	-- <.006	-- <.004	-- <.005	-- <.007
Local identifier	Date	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC	BUTYL-ATE, WATER, DISS, REC	CAR-BARYL WATER FLTRD 0.7 U GF, REC	CARBO-FURAN WATER FLTRD 0.7 U GF, REC	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	CYANA-ZINE, WATER, DISS, REC	DCPA WATER, FLTRD 0.7 U GF, REC	DEETHYL ATRA-ZINE, WATER, DISS, REC	DI-AZINON, DIS-SOLVED	DI-ELDRIN DIS-SOLVED
		(UG/L) (82673)	(UG/L) (04028)	(UG/L) (82680)	(UG/L) (82674)	(UG/L) (38933)	(UG/L) (04041)	(UG/L) (82682)	(UG/L) (04040)	(UG/L) (39572)	(UG/L) (39381)
NJDEP MW121	09-26-02 09-26-02	-- <.010	-- <.002	-- <.041	-- <.020	-- <.005	-- <.018	-- <.003	-- <.006	-- <.005	-- <.005
Local identifier	Date	DISUL-FOTON WATER FLTRD 0.7 U GF, REC	EPTC WATER FLTRD 0.7 U GF, REC	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC	ETHO-PROP WATER FLTRD 0.7 U GF, REC	FONOFOS WATER DISS REC	LINDANE DIS-SOLVED (UG/L)	LIN-URON WATER, FLTRD 0.7 U GF, REC	MALA-THION, DIS-SOLVED	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC	METHYL PARA-THION WAT FLT 0.7 U GF, REC
		(UG/L) (82677)	(UG/L) (82668)	(UG/L) (82663)	(UG/L) (82672)	(UG/L) (04095)	(UG/L) (39341)	(UG/L) (82666)	(UG/L) (39532)	(UG/L) (82686)	(UG/L) (82667)
NJDEP MW121	09-26-02 09-26-02	-- <.02	-- <.002	-- <.009	-- <.005	-- <.003	-- <.004	-- <.035	-- <.027	-- <.050	-- <.006

Remark codes used in this report:
< -- Less than

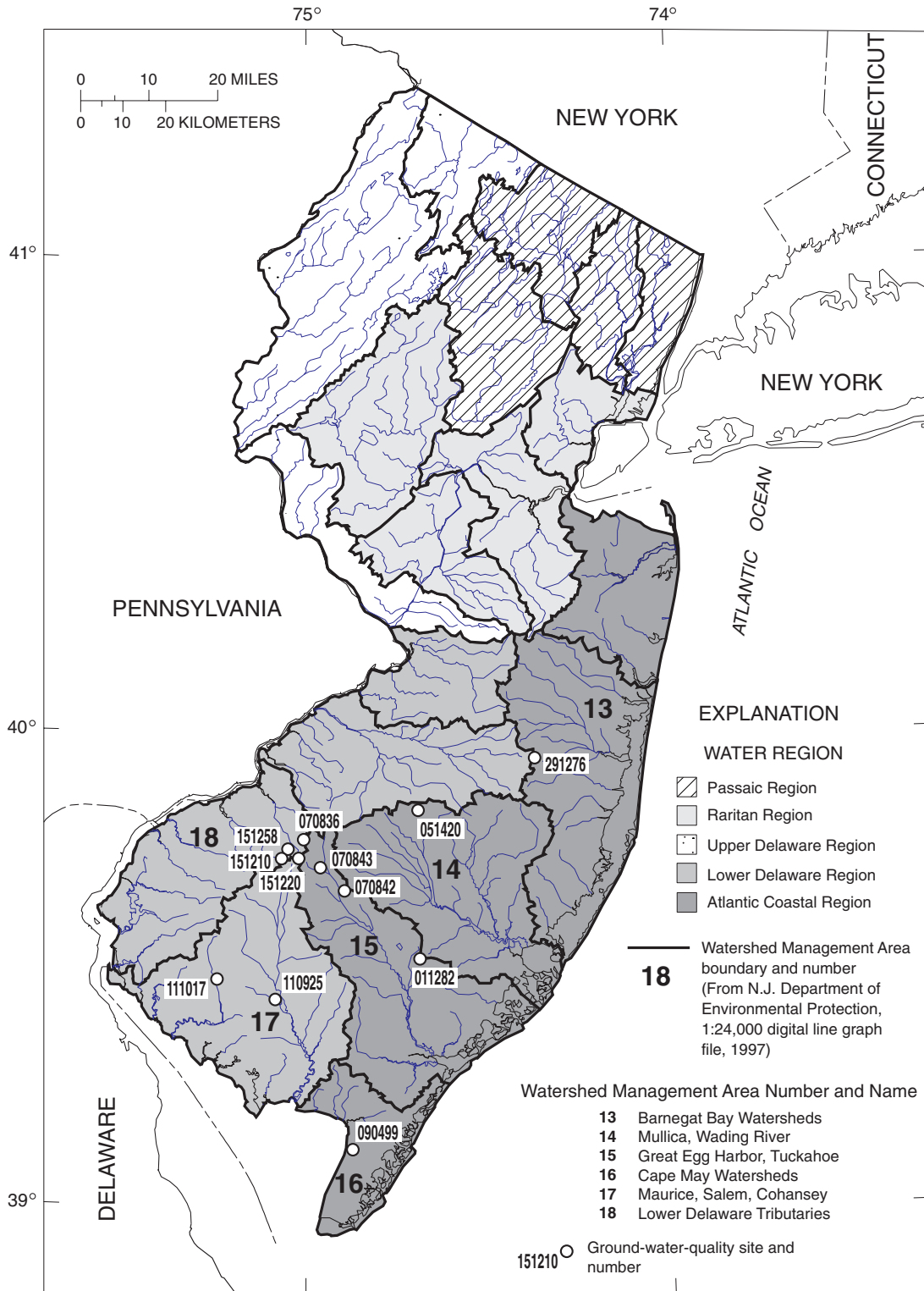
WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	METO-	METRI-	MOL-	NAPROP-	P,P' DDE	PARA-	PEB-	PENDI-	PER-	PHORATE
		LACHLOR WATER	SENCOR WATER	INATE WATER	AMIDE WATER		THION, DIS-	ULATE WATER	METH- ALIN	METHRIN CIS	FLTRD
		DISSOLV (UG/L) (39415)	DISSOLV (UG/L) (82630)	GF, REC (UG/L) (82671)	GF, REC (UG/L) (82684)	DISSOLV (UG/L) (34653)	SOLVED (UG/L) (39542)	GF, REC (UG/L) (82669)	GF, REC (UG/L) (82683)	GF, REC (UG/L) (82687)	GF, REC (UG/L) (82664)
NJDEP MW121	09-26-02	--	--	--	--	--	--	--	--	--	--
	09-26-02	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011
Local ident- i- fier	Date	PRO-	PRON-	PROPA-	PRO-	PRO-	SI-	TEBU-	TER-	TER-	THIO-
		METON, WATER, DISS, REC	AMIDE WATER FLTRD 0.7 U GF, REC	CHLOR, WATER, DISS, REC	PANIL WATER FLTRD 0.7 U GF, REC	PARGITE WATER FLTRD 0.7 U GF, REC	MAZINE, WATER, DISS, REC	THIURON WATER FLTRD 0.7 U GF, REC	BACIL WATER FLTRD 0.7 U GF, REC	BUFOS WATER FLTRD 0.7 U GF, REC	BENCARB WATER FLTRD 0.7 U GF, REC
		(UG/L) (04037)	(UG/L) (82676)	(UG/L) (04024)	(UG/L) (82679)	(UG/L) (82685)	(UG/L) (04035)	(UG/L) (82670)	(UG/L) (82665)	(UG/L) (82675)	(UG/L) (82681)
NJDEP MW121	09-26-02	--	--	--	--	--	--	--	--	--	--
	09-26-02	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005
			Local ident- i- fier	Date	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)						
			NJDEP MW121	09-26-02	--						
				09-26-02	<.002						

Remark codes used in this report:
< -- Less than



Base from U.S. Geological Survey digital line graph files, 1:24,000

Figure 41. Location of sites in the Long Island-New Jersey National Water-Quality Assessment Program, ground-water low-intensity-phase synoptic study, water year 2002.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK

STATION IDENTIFICATION NUMBER	NJ-WRD WELL NUMBER	LOCAL IDENTIFIER	LATITUDE (NAD1983)	LONGITUDE (NAD1983)	ALTITUDE OF LAND SURFACE (NGVD1929) (FT.)	DEPTH OF WELL (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
394342075040301	151210	USGS NU02	394342.6	0750400.6	142	19.5	17.5 - 19.5	121CCKD
394340075012701	151220	USGS NU08	394338.9	0750126.3	155	30.5	28.5 - 30.5	121CCKD
394604075003601	070836	USGS NU11	394604.5	0750033.5	165	37	30 - 37	121CCKD
394233074574401	070843	USGS NU16	394232.4	0745742.4	125	22	20 - 22	121CCKD
394446075031001	151258	USGS NU29	394442.9	0750307.4	120	19	17 - 19	121CCKD
392558075051901	110925	USGS UND02	392544.9	0750507.7	50	26	24 - 26	121CCKD
393940074534201	070842	USGS UND09	393939.3	0745341.5	100	14	12 - 14	121CCKD
394939074414701	051420	SUSCP11 AGEMIAN DOM	394939.4	0744142.2	95	102	92 - 102	121CCKD
395618074223501	291276	SUSCP13 PENA DOM	395619.3	0742231.6	165	118	108 - 118	121CCKD
393050074412501	011282	SUSCP22 GRIECO DOM	393050.5	0744123.9	60	104	94 - 104	121CCKD
390643074522501	090499	SUSCP23 MATTHEWS DOM	390643.0	0745225.2	10	38	33 - 38	121CCKD
392820075144301	111017	SUSCP24 ERIANNE DOM	392820.2	0751441.2	80	68	58 - 68	121CCKD

Aquifer unit:
121CCKD - Kirkwood-Cohansey

REMARKS.--Samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020 and pesticides with schedule 2001 (listed in their entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs and pesticides identified by the analyses in one or more samples are listed in the following table. For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-Control Data" in the "Introduction".

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local identifier	Station number	Date	Time	Sample Type	TURBIDITY (SEVERITY) (01350)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)
GLOUCESTER COUNTY									
USGS NU02	394342075040301	06-27-02	1658	EQUIPMENT BLANK	--	--	--	--	--
		06-27-02	1659	SOURCE SOLUTION BLANK	--	--	--	--	--
		07-01-02	1200	ENVIRONMENTAL	--	--	4.8	166	--
USGS NU08	394340075012701	07-11-02	1500	ENVIRONMENTAL	--	7.5	4.6	56	16.6
CAMDEN COUNTY									
USGS NU11	394604075003601	07-11-02	1000	ENVIRONMENTAL	--	9.0	5.2	135	15.4
		07-11-02	1001	SEQUENTIAL REPLICATE	--	--	--	--	--
		07-11-02	1002	SPLIT SPIKE	--	--	--	--	--
		07-11-02	1003	CONCURRENT SPIKE	--	--	--	--	--
		07-11-02	1005	FIELD BLANK	--	--	--	--	--
USGS NU16	394233074574401	07-01-02	1800	ENVIRONMENTAL	--	--	5.4	201	--
GLOUCESTER COUNTY									
USGS NU29	394446075031001	07-15-02	1300	ENVIRONMENTAL	--	.3	6.1	102	18.2
CUMBERLAND COUNTY									
USGS UND02	392558075051901	07-10-02	1800	ENVIRONMENTAL	--	.2	5.6	51	14.0
CAMDEN COUNTY									
USGS UND09	393940074534201	07-09-02	1300	ENVIRONMENTAL	--	1.3	4.5	51	15.5
BURLINGTON COUNTY									
SUSCP11 AGEMIAN DOM	394939074414701	08-06-02	1500	ENVIRONMENTAL	<1	4.2	5.4	309	13.3
OCEAN COUNTY									
SUSCP13 PENA DOM	395618074223501	08-06-02	1200	ENVIRONMENTAL	<1	1.1	4.8	31	13.5
ATLANTIC COUNTY									
SUSCP22 GRIECO DOM	393050074412501	07-18-02	1300	ENVIRONMENTAL	1	6.6	4.7	92	13.4
		07-18-02	1305	FIELD BLANK	--	--	--	--	--
		07-18-02	1307	SEQUENTIAL REPLICATE	--	--	--	--	--
CAPE MAY COUNTY									
SUSCP23 MATTHEWS DOM	390643074522501	08-07-02	1000	ENVIRONMENTAL	<1	3.0	--	345	13.5
CUMBERLAND COUNTY									
SUSCP24 ERIANNE DOM	392820075144301	08-08-02	0910	ENVIRONMENTAL	--	--	--	--	--
		08-08-02	1000	ENVIRONMENTAL	<1	.4	5.9	217	15.7

Remark codes used in this report:
< -- Less than

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
GLOUCESTER COUNTY											
USGS NU02	06-27-02	--	--	--	--	--	--	--	--	--	--
	06-27-02	--	--	--	--	--	--	--	--	--	--
	07-01-02	6.81	2.15	2.57	15.0	1	<.03	19.5	<.10	4.40	21.5
USGS NU08	07-11-02	.12	.911	.60	5.81	1	<.03	9.31	<.10	6.15	E.1
CAMDEN COUNTY											
USGS NU11	07-11-02	6.68	1.93	3.17	10.5	8	E.02	18.0	<.10	5.61	11.7
	07-11-02	6.75	1.95	3.44	10.6	--	E.03	17.6	<.10	5.63	11.7
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	E.01	<.008	<.10	E.06	--	<.03	<.30	<.10	<.13	<.1
USGS NU16	07-01-02	13.3	4.36	2.75	12.1	10	E.03	27.4	<.10	3.14	18.2
GLOUCESTER COUNTY											
USGS NU29	07-15-02	5.37	1.33	1.90	12.3	30	<.03	4.62	<.10	2.70	7.0
CUMBERLAND COUNTY											
USGS UND02	07-10-02	.68	.523	.41	1.78	10	.12	3.32	<.10	5.31	7.2
CAMDEN COUNTY											
USGS UND09	07-09-02	.23	.242	.19	1.69	--	<.03	3.32	E.07	4.57	15.1
BURLINGTON COUNTY											
SUSCP11 AGEMIAN DO	08-06-02	34.0	6.98	5.68	3.49	8	.04	20.2	<.10	7.05	43.2
OCEAN COUNTY											
SUSCP13 PENA DOM	08-06-02	.50	.518	.35	2.68	2	.04	5.57	<.10	5.17	1.1
ATLANTIC COUNTY											
SUSCP22 GRIECO DOM	07-18-02	3.55	1.77	.74	7.63	2	.12	20.0	<.10	7.49	1.2
	07-18-02	--	--	--	--	--	--	--	--	--	--
	07-18-02	--	--	--	--	--	--	--	--	--	--
CAPE MAY COUNTY											
SUSCP23 MATTHEWS D	08-07-02	28.8	3.47	5.05	23.0	32	.06	41.3	<.10	12.0	29.6
CUMBERLAND COUNTY											
SUSCP24 ERIANNE DO	08-08-02	.03	E.005	.94	66.2	--	.03	21.1	<.10	5.11	10.1
	08-08-02	6.79	6.09	6.67	19.9	26	.07	34.1	<.10	5.29	11.3

Remark codes used in this report:

< -- Less than

E -- Estimated value

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N) (00623)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L) AS P) (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L) AS C) (00681)	ALUM- INUM, DIS- SOLVED (UG/L) AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L) AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L) AS AS) (01000)
GLOUCESTER COUNTY											
USGS NU02	06-27-02	--	<.04	<.10	<.05	<.008	<.02	--	<1	<.05	<.2
	06-27-02	--	<.04	<.10	<.05	<.008	<.02	--	<1	<.05	<.2
	07-01-02	89	<.04	E.06	3.58	<.008	<.02	.7	125	E.02	E.1
USGS NU08	07-11-02	29	<.04	<.10	.85	<.008	<.02	.5	--	--	--
CAMDEN COUNTY											
USGS NU11	07-11-02	78	<.04	E.06	3.01	<.008	<.02	.4	18	<.05	E.1
	07-11-02	76	<.04	<.10	3.02	<.008	<.02	.5	18	<.05	<.2
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	<10	<.04	<.10	<.05	<.008	<.02	<.3	<1	<.05	<.2
USGS NU16	07-01-02	98	<.04	E.05	1.11	<.008	<.02	.8	19	<.05	<.2
GLOUCESTER COUNTY											
USGS NU29	07-15-02	46	.13	.34	.05	<.008	E.01	5.7	73	.20	1.2
CUMBERLAND COUNTY											
USGS UND02	07-10-02	30	.08	.11	.06	<.008	.03	2.3	61	E.03	.7
CAMDEN COUNTY											
USGS UND09	07-09-02	21	<.04	<.10	<.05	<.008	<.02	1.0	1550	E.03	<.2
BURLINGTON COUNTY											
SUSCP11 AGEMIAN DO	08-06-02	236	<.04	E.07	13.3	<.008	<.02	--	1	<.05	E.1
OCEAN COUNTY											
SUSCP13 PENA DOM	08-06-02	16	<.04	<.10	<.05	<.008	<.02	--	47	<.05	<.2
ATLANTIC COUNTY											
SUSCP22 GRIECO DOM	07-18-02	49	<.04	<.10	.70	<.008	<.02	<.3	62	<.05	<.2
	07-18-02	--	--	--	--	--	--	--	--	--	--
	07-18-02	--	--	--	--	--	--	--	--	--	--
CAPE MAY COUNTY											
SUSCP23 MATTHEWS D	08-07-02	224	.49	.57	7.04	.011	<.02	--	42	<.05	E.1
CUMBERLAND COUNTY											
SUSCP24 ERIANNE DO	08-08-02	184	--	--	--	--	--	--	--	--	--
	08-08-02	128	.12	.20	2.97	<.008	<.02	--	<1	E.02	.4

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	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)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)
GLOUCESTER COUNTY											
USGS NU02	06-27-02	<1	<.06	<7	<.04	<.8	<.02	E.2	--	<.08	<.3
	06-27-02	<1	<.06	<7	<.04	<.8	<.02	E.2	--	<.08	<.3
	07-01-02	72	.21	40	E.03	<.8	2.57	1.0	<10	.25	.6
USGS NU08	07-11-02	--	--	--	--	--	--	--	<10	--	--
CAMDEN COUNTY											
USGS NU11	07-11-02	17	<.06	37	<.04	<.8	.18	E.2	<10	<.08	<.3
	07-11-02	17	E.04	39	<.04	<.8	.18	E.2	E6	<.08	<.3
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	<1	<.06	<7	<.04	<.8	<.02	E.1	<10	<.08	E.2
USGS NU16	07-01-02	62	<.06	19	.08	<.8	.74	.4	<10	<.08	E.3
GLOUCESTER COUNTY											
USGS NU29	07-15-02	27	<.06	60	<.04	2.2	.08	1.4	1150	E.05	<.3
CUMBERLAND COUNTY											
USGS UND02	07-10-02	3	<.06	15	<.04	<.8	.16	<.2	7500	E.04	<.3
CAMDEN COUNTY											
USGS UND09	07-09-02	43	.19	16	.17	E.4	1.41	1.1	<10	.09	E.2
BURLINGTON COUNTY											
SUSCP11 AGEMIAN DO	08-06-02	36	<.06	17	<.04	<.8	.09	3.0	<10	.23	E.3
OCEAN COUNTY											
SUSCP13 PENA DOM	08-06-02	9	<.06	8	<.04	<.8	.60	2.6	<10	.20	E.3
ATLANTIC COUNTY											
SUSCP22 GRIECO DOM	07-18-02	47	<.06	E6	.07	<.8	.53	2.6	22	.54	.5
	07-18-02	--	--	--	--	--	--	--	--	--	--
	07-18-02	--	--	--	--	--	--	--	--	--	--
CAPE MAY COUNTY											
SUSCP23 MATTHEWS D	08-07-02	48	.10	38	.21	<.8	.91	.9	24	<.08	2.1
CUMBERLAND COUNTY											
SUSCP24 ERIANNE DO	08-08-02	--	--	--	--	--	--	--	<10	--	--
	08-08-02	29	<.06	37	<.04	<.8	.18	.5	745	<.08	<.3

Remark codes used in this report:

< -- Less than
E -- Estimated value

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
GLOUCESTER COUNTY											
USGS NU02	06-27-02	.3	--	--	<.2	.12	<.3	<.08	<.04	<.2	<1
	06-27-02	.1	--	--	<.2	<.06	<.3	<.08	<.04	<.2	<1
	07-01-02	17.6	--	--	.4	1.22	.4	21.8	<.04	<.2	<1
USGS NU08	07-11-02	E1.8	--	--	--	--	--	--	--	--	--
CAMDEN COUNTY											
USGS NU11	07-11-02	7.2	--	--	<.2	.50	1.7	34.6	<.04	<.2	1
	07-11-02	7.2	--	--	<.2	.39	1.5	33.9	<.04	<.2	1
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	E.1	--	--	E.1	.11	<.3	<.08	<.04	<.2	<1
USGS NU16	07-01-02	36.0	--	--	E.1	.84	E.3	51.7	<.04	E.1	<1
GLOUCESTER COUNTY											
USGS NU29	07-15-02	20.8	--	--	2.2	.53	.5	31.4	<.04	3.2	<1
CUMBERLAND COUNTY											
USGS UND02	07-10-02	44.9	--	--	<.2	.12	<.3	6.78	.04	.8	1
CAMDEN COUNTY											
USGS UND09	07-09-02	14.0	--	--	<.2	2.64	E.2	4.25	<.04	.3	17
BURLINGTON COUNTY											
SUSCP11 AGEMIAN DO	08-06-02	3.6	--	--	<.2	.30	3.7	128	E.04	<.2	<1
OCEAN COUNTY											
SUSCP13 PENA DOM	08-06-02	8.2	.95	.85	<.2	.58	<.3	4.08	<.04	<.2	2
ATLANTIC COUNTY											
SUSCP22 GRIECO DOM	07-18-02	3.6	--	--	.5	1.38	<.3	21.0	E.03	E.1	4
	07-18-02	--	--	--	--	--	--	--	--	--	--
	07-18-02	--	--	--	--	--	--	--	--	--	--
CAPE MAY COUNTY											
SUSCP23 MATTHEWS D	08-07-02	64.8	--	--	<.2	1.04	<.3	162	.05	<.2	2
CUMBERLAND COUNTY											
SUSCP24 ERIANNE DO	08-08-02	<2.0	--	--	--	--	--	--	--	--	--
	08-08-02	28.5	--	--	<.2	.49	<.3	45.6	.05	E.1	<1

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	ALA-	ATRA-	CAR-	DEETHYL			NAPROP-	PRO-	SI-	TRI-
		CHLOR, WATER, DISS, REC, (UG/L) (46342)	ZINE, WATER, DISS, REC (39632)	BARYL WATER FLTRD 0.7 U GF, REC (82680)	ATRA- ZINE, WATER, DISS, REC (04040)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER (UG/L) (39415)	AMIDE WATER FLTRD 0.7 U GF, REC (82684)	METON, WATER, DISS, REC (04037)	MAZINE, WATER, DISS, REC (04035)	FLUR- ALIN WAT FLT 0.7 U GF, REC (82661)
GLOUCESTER COUNTY											
USGS NU02	06-27-02	--	--	--	--	--	--	--	--	--	--
	06-27-02	--	--	--	--	--	--	--	--	--	--
	07-01-02	<.004	E.004	<.041	E.004	<.005	<.013	<.007	<.01	.009	<.009
USGS NU08	07-11-02	<.004	<.007	<.041	<.006	<.005	<.013	<.007	<.01	<.005	<.009
CAMDEN COUNTY											
USGS NU11	07-11-02	<.004	<.007	<.041	<.006	.016	<.013	<.007	E.01	.012	<.009
	07-11-02	<.004	<.007	<.041	<.006	.016	<.013	<.007	E.01	.012	<.009
	07-11-02	.654	.775	E.990	E.374	.687	.802	.695	.76	.523	.694
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	<.004	<.007	<.041	<.006	<.005	<.013	<.007	<.01	<.005	<.009
USGS NU16	07-01-02	<.004	<.007	<.041	E.003	<.005	<.013	<.007	.04	.008	<.009
GLOUCESTER COUNTY											
USGS NU29	07-15-02	--	--	--	--	--	--	--	--	--	--
CUMBERLAND COUNTY											
USGS UND02	07-10-02	<.004	<.007	<.041	<.006	<.005	<.013	<.007	<.01	<.005	<.009
CAMDEN COUNTY											
USGS UND09	07-09-02	<.004	<.007	<.041	<.006	<.005	<.013	<.007	<.01	<.005	<.009
BURLINGTON COUNTY											
SUSCP11 AGEMIAN DO	08-06-02	.534	.972	<.041	E.226	<.005	<.013	<.007	<.01	<.005	<.009
OCEAN COUNTY											
SUSCP13 PENA DOM	08-06-02	<.004	<.007	<.041	<.006	<.005	<.013	<.007	<.01	<.005	<.009
ATLANTIC COUNTY											
SUSCP22 GRIECO DOM	07-18-02	<.004	<.007	<.041	<.006	<.005	<.013	<.007	<.01	<.005	E.001
	07-18-02	--	--	--	--	--	--	--	--	--	--
	07-18-02	--	--	--	--	--	--	--	--	--	--
CAPE MAY COUNTY											
SUSCP23 MATTHEWS D	08-07-02	<.004	<.007	E.005	<.006	<.005	<.013	<.007	<.01	<.005	<.009
CUMBERLAND COUNTY											
SUSCP24 ERIANNE DO	08-08-02	--	--	--	--	--	--	--	--	--	--
	08-08-02	<.004	<.007	<.041	<.006	<.005	.270	.010	.02	.071	<.009

Remark codes used in this report:

< -- Less than

E -- Estimated value

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- ifier	Date	1,1,1-	1,1-DI-	1,2-DI-	BENZENE	METHYL	METHYL	TETRA-	TRI-	TRI-	
		TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	CHLORO- ETHANE TOTAL (UG/L) (34496)	CHLORO- ETHANE TOTAL (UG/L) (32103)	1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	CHLORO- FORM TOTAL (UG/L) (32106)	TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	ENE CHLO- RIDE TOTAL (UG/L) (34423)	CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)
GLOUCESTER COUNTY											
USGS NU02	06-27-02	<.03	<.04	<.1	<.05	<.02	<.2	<.2	<.03	<.04	<.09
	06-27-02	<.03	<.04	<.1	<.05	<.02	<.2	<.2	<.03	<.04	<.09
	07-01-02	<.03	<.04	<.1	<.05	.17	.6	<.2	E.01	<.04	<.09
USGS NU08	07-11-02	<.03	<.04	<.1	<.05	.38	<.2	<.2	<.03	<.04	E.08
	CAMDEN COUNTY										
USGS NU11	07-11-02	<.03	<.04	<.1	<.05	1.60	.4	<.2	<.03	E.06	<.09
	07-11-02	<.03	<.04	<.1	<.05	1.66	.4	<.2	<.03	E.06	<.09
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	.47	.76	2.0	.46	1.93	2.0	1.7	.99	.47	1.98
	07-11-02	<.03	<.04	<.1	<.05	.11	<.2	<.2	<.03	<.04	<.09
USGS NU16	07-01-02	<.03	<.04	<.1	<.05	1.65	E.2	<.2	<.03	<.04	<.09
GLOUCESTER COUNTY											
USGS NU29	07-15-02	<.03	<.04	<.1	<.05	E.05	<.2	<.2	<.03	<.04	<.09
CUMBERLAND COUNTY											
USGS UND02	07-10-02	<.03	<.04	<.1	<.05	<.02	<.2	<.2	<.03	<.04	<.09
CAMDEN COUNTY											
USGS UND09	07-09-02	<.03	<.04	<.1	<.05	E.03	<.2	<.2	<.03	<.04	<.09
BURLINGTON COUNTY											
SUSCP11 AGEMIAN DO	08-06-02	<.03	<.04	<.1	<.05	E.06	<.2	<.2	<.03	<.04	<.09
OCEAN COUNTY											
SUSCP13 PENA DOM	08-06-02	<.03	<.04	<.1	<.05	.14	<.2	<.2	<.03	<.04	<.09
ATLANTIC COUNTY											
SUSCP22 GRIECO DOM	07-18-02	<.03	<.04	<.1	<.05	.30	<.2	M	<.03	<.04	<.09
	07-18-02	--	--	--	--	--	--	--	--	--	--
	07-18-02	--	--	--	--	--	--	--	--	--	--
CAPE MAY COUNTY											
SUSCP23 MATTHEWS D	08-07-02	E.02	E.04	E.1	.11	E.05	.3	<.2	E.02	E.05	<.09
CUMBERLAND COUNTY											
SUSCP24 ERIANNE DO	08-08-02	--	--	--	--	--	--	--	--	--	--
	08-08-02	<.03	<.04	<.1	<.05	.34	M	<.2	<.03	<.04	<.09

Remark codes used in this report:

< -- Less than

E -- Estimated value

M -- Presence verified, not quantified

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- ifier	Date	ALPHA	ALPHA	BETA,	GROSS	RADIUM			RADIUM		
		COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)	BETA, DIS- SOLVED (PCI/L) AS CS-137 (03515)	RA-224 2 SIGMA WATER (PCI/L) FLTRD (50834)	224, 2X CL, SS MDC, WATER, FLTRD (PCI/L) (99324)	RA-224 2 SIGMA WATER, FLTRD (PCI/L) (50833)	226, 2X CL, SS MDC, WATER, DISS, FLTRD (PCI/L) (76001)	226, 2X CL, SS MDC, WATER, FLTRD (PCI/L) (99325)	RADIUM 226, DIS- SOLVED (PCI/L) (09503)
GLOUCESTER COUNTY											
USGS NU02	06-27-02	--	--	--	--	--	--	--	--	--	--
	06-27-02	--	--	--	--	--	--	--	--	--	--
	07-01-02	--	--	--	--	--	--	--	--	--	--
USGS NU08	07-11-02	--	--	--	--	--	--	--	--	--	--
CAMDEN COUNTY											
USGS NU11	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--	--	--	--
USGS NU16	07-01-02	--	--	--	--	--	--	--	--	--	--
GLOUCESTER COUNTY											
USGS NU29	07-15-02	--	--	--	--	--	--	--	--	--	--
CUMBERLAND COUNTY											
USGS UND02	07-10-02	--	--	--	--	--	--	--	--	--	--
CAMDEN COUNTY											
USGS UND09	07-09-02	--	--	--	--	--	--	--	--	--	--
BURLINGTON COUNTY											
SUSCP11 AGEMIAN DO	08-06-02	2.9	13.1	2.0	11.1	.76	.67000	2	.32	.10000	.87
OCEAN COUNTY											
SUSCP13 PENA DOM	08-06-02	.93	2.9	.88	2.8	.42	.45000	.65	.20	.09100	.344
ATLANTIC COUNTY											
SUSCP22 GRIECO DOM	07-18-02	1.5	7.1	.99	5.0	.0042	.34000	-.0029	.00188	.13000	-.00163
	07-18-02	.26	-.1	.80	.3	.38	.42000	.26	.32	.16000	.48
	07-18-02	1.5	7.5	1.1	4.6	.42	.89000	.13	.40	.15000	.83
CAPE MAY COUNTY											
SUSCP23 MATTHEWS D	08-07-02	1.7	2.3	2.4	6.5	.10	.17000	.074	.16	.04300	.466
CUMBERLAND COUNTY											
SUSCP24 ERIANNE DO	08-08-02	--	--	--	--	--	--	--	--	--	--
	08-08-02	1.7	6.8	1.6	10.4	.42	.18000	.65	.36	.08100	1

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES
 LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	RADIUM 228,		RADIUM 228		RN-222 2 SIGMA	RADON 222	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
		RA-228 2 SIGMA WATER, DISS, (PCI/L) (76000)	2X CL, SS MDC, WATER, FLTRD, (PCI/L) (99326)	DIS- SOLVED (PCI/L) AS RA-228) (81366)	WATER, WHOLE, TOTAL, (PCI/L) (76002)			
GLOUCESTER COUNTY								
USGS NU02	06-27-02	--	--	--	--	--	--	<.02
	06-27-02	--	--	--	--	--	--	<.02
	07-01-02	--	--	--	--	--	--	.03
USGS NU08	07-11-02	--	--	--	--	--	--	--
CAMDEN COUNTY								
USGS NU11	07-11-02	--	--	--	--	--	--	E.02
	07-11-02	--	--	--	--	--	--	E.01
	07-11-02	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	--
	07-11-02	--	--	--	--	--	--	<.02
USGS NU16	07-01-02	--	--	--	--	--	--	E.01
GLOUCESTER COUNTY								
USGS NU29	07-15-02	--	--	--	--	--	--	.30
CUMBERLAND COUNTY								
USGS UND02	07-10-02	--	--	--	--	--	--	E.01
CAMDEN COUNTY								
USGS UND09	07-09-02	--	--	--	--	--	--	.08
BURLINGTON COUNTY								
SUSCP11 AGEMIAN DO	08-06-02	.54	.51200	2	21	140	140	<.02
OCEAN COUNTY								
SUSCP13 PENA DOM	08-06-02	.38	.51100	.831	20	130	130	.02
ATLANTIC COUNTY								
SUSCP22 GRIECO DOM	07-18-02	.52	.54000	1	30	250	250	.02
	07-18-02	.34	.56300	.461	--	--	--	--
	07-18-02	.49	.52800	1	--	--	--	--
CAPE MAY COUNTY								
SUSCP23 MATTHEWS D	08-07-02	.33	.51500	.559	35	670	670	.14
CUMBERLAND COUNTY								
SUSCP24 ERIANNE DO	08-08-02	--	--	--	--	--	--	--
	08-08-02	.53	.48400	2	35	410	410	E.01

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

A

Acid neutralizing capacity, definition of	31
Acre-foot, definition of	31
Adenosine triphosphate, definition of	31
Algae, definition of	
Blue-green, definition of	32
Fire, definition of	35
Green, definition of	35
Algal growth potential, definition of	31
Alkalinity, definition of	31
Allentown, Doctors Creek at	390
Annual 7-day minimum, definition of	31
Annual runoff, definition of	31
Aquifer, water table, definition of	44
Aroclor	31
Artificial substrate, definition of	31
Ash mass, definition of	31
Aspect, definition of	31
Assunpink Creek at Peace Street, at Trenton	381
Atsion, Mullica River at outlet of Atsion Lake, at . .	269

B

Babcock Creek near Mays Landing	293
Bacteria, definition of	31
Fecal streptococcal, definition of	35
Escherichia coli, definition of	34
Fecal coliform, definition of	35
Enterococcus, definition of	34
Total coliform, definition of	43
Bankfull stage, definition of	32
Barrett Run at Bridgeton	322
Base discharge, definition of	32
Base flow, definition of	32
Bass River, East Branch, near New Gretna	286
Batsto River at Batsto	281
Batsto, Mullica River at Constable Bridge, near . .	271
Bear Brook at Dark Moon Road, near Johnson- burg	341
Beaver Brook at Morris Avenue, at Denville	90
Beaver Brook at Rockaway	93
Beaver Dam Brook at Ryerson Road, at Lincoln Park	128
Bed load, definition of	32
Bed material, definition of	32
Bedload discharge, definition of	32
Belvidere, Pequest River at	347
Benthic organisms, definition of	32
Big Timber Creek, North Branch, at Glendora	416
Biochemical oxygen demand, definition of	32
Biomass pigment ratio, definition of	32
Biomass, definition of	32
Blacks Creek at Chesterfield	392
Blackwells Mills, Millstone River at	224
Blairstown, Paulins Kill at	338
Blue Anchor Brook at Elm	274
Blue-green algae, definition of	32
Bottom material, definition of	32
Bound Brook at Middlesex	235

Bound Brook at Route 28, at Middlesex	233
Bound Brook, Raritan River at Queens Bridge, at .	229
Bridgeton, Barrett Run at	322
Bulk electrical conductivity, definition of	32
Burnt Mills, Lamington River at	209

C

Capoolong Creek at Landsdowne	199
Cecil, Hospitality Branch at Blue Bell Road, near . .	289
Cedar Creek at Cedar Crest	267
Cedar Crest, Cedar Creek at	267
Cells volume, definition of	32
Cells/volume, definition of	32
Cfs-day, definition of	32
Chairville, Little Creek at	398
Channel bars, definition of	33
Chemical oxygen demand, definition of	33
Chesterfield, Blacks Creek at	392
Clayton, Still Run at Little Mill Road, near	309
Closter, Tenakill Brook at Old Closter Dock Road, at	76
Clostridium perfringens, definition of	33
Cohansey River at Seely	320
Coles Brook at Hackensack	79
Coliphages, definition of	33
Colonia, South Branch Rahway River at	189
Color unit, definition of	33
Confined aquifer, definition of	33
Contents, definition of	33
Continuous-record station, definition of	33
Control structure, definition of	33
Control, definition of	33
Cookstown, North Run at	384
Cooper River at Haddonfield	411
Cooper River, North Branch, at Kresson	413
Copper Hill, Third Neshanic River at	202
Crosswicks Creek at Groveville Road, at Groveville	387
Cubic foot per second per square mile, definition of	33
Cubic foot per second, definition of	33
Cubic foot per second-day, definition of	33

D

Daily mean suspended-sediment concentration, definition of	33
Daily-record station, definition of	33
Data collection platform, definition of	33
Data logger, definition of	33
Datum, definition of	33
Dead River near Millington	88
Delaware River at Lumberville, PA	355
Delaware River at Montague	325
Delaware River at Portland, PA	333
Delaware River at Riegelsville	351
Delaware River at Trenton	360
Dennis Creek Tributary 2 on Little Road, at Dennisville	303
Dennisville, Dennis Creek Tributary 2 on Little	

- Road, at. 303
- Denville, Beaver Brook at Morris Avenue, at. 90
- Diatom, definition of 33
- Diel, definition of 34
- Discharge, definition of 34
- Dissolved oxygen, definition of. 34
- Dissolved, definition of. 34
- Dissolved-solids concentration, definition of 34
- Diversity index, definition of 34
- Doctors Creek at Allentown 390
- Double Kill at Wawayanda 70
- Double Trouble, Jakes Branch at Dover Road,
near 264
- Drainage area, definition of. 34
- Drainage basin, definition of 34
- Dry mass, definition of 34
- Dry weight, definition of 34
- Dunnfield Creek at Dunnfield 329
- Dunnfield, Dunnfield Creek at. 329
- E**
- Earle, Mingamahone Brook near 254
- East Branch Bass River near New Gretna. 286
- Echo Lake, Macopin River at 100
- Edwards Run at Jefferson. 424
- Elm, Blue Anchor Brook at 274
- Embeddedness, definition of 34
- Enterococcus bacteria, definition of. 34
- EPT Index, definition of 34
- Escherichia coli (E. coli), definition of 34
- Estell Manor, Tuckahoe River near 295
- Estimated (E) concentration value, definition of 35
- Euglenoids, definition of 35
- Extractable organic halides, definition of 35
- F**
- Fecal coliform bacteria, definition of 35
- Fecal streptococcal bacteria, definition of 35
- Fire algae, definition of 35
- Fishing Creek at Rio Grande 301
- Flat Brook at Flatbrookville 327
- Flatbrookville, Flat Brook at 327
- Flow, definition of 34
- Flow-duration percentiles, definition of 35
- Franklin, Wallkill River at Scott Road, at. 58
- French Creek near Phoenixville, PA 418
- Frenchtown, Nishisakawick Creek near 353
- G**
- Gage datum, definition of 35
- Gage height, definition of 35
- Gage values, definition of 35
- Gaging station, definition of 35
- Garfield, Saddle River at 178
- Gas chromatography/flammation ionization detector,
definition of 35
- Geomorphic channel units, definition of 35
- Glendora, North Branch Big Timber Creek at 416
- Goffle Brook at Hawthorne 167
- Gravelly Run at Laurel Lake. 317
- Great Egg Harbor River at Weymouth 291
- Green algae, definition of 35
- Greenwood Branch at New Lisbon 406
- Grovers Mill, Millstone River near 217
- Groveville, Crosswicks Creek at Groveville Road,
at 387
- H**
- Habitat quality index, definition of 36
- Habitat, definition of. 35
- Hackensack River at Rivervale 73
- Hackensack, Coles Brook at 79
- Haddonfield, Cooper River at. 411
- Hammonton Creek at Wescoatville. 276
- Hampton Gate, Skit Branch near. 278
- Hannabrand Brook at Old Mill Road, near
Spring Lake Heights 248
- Hardness, definition of. 36
- Hawthorne, Goffle Brook at 167
- Head of River, Tuckahoe River at. 298
- Heathcote Brook at Kingston 219
- High tide, definition of 36
- Hilsenhoff's Biotic Index, definition of 36
- Honey Run near Hope. 344
- Hope, Honey Run near 344
- Horizontal datum, definition of 36
- Hospitality Branch at Blue Bell Road, near Cecil . . 289
- Hydrologic index stations, definition of 36
- Hydrologic unit, definition of. 36
- I**
- Inch, definition of 36
- Indian Branch near Malaga 312
- Instantaneous discharge, definition of 36
- Island, definition of. 36
- J**
- Jakes Branch at Dover Road, near Double
Trouble 264
- Jefferson, Edwards Run at 424
- Johnsonburg, Bear Brook at Dark Moon Road,
near. 341
- Jumping Brook near Neptune City 245
- K**
- Kingston, Heathcote Brook at 219
- Kresson, North Branch Cooper River at. 413
- L**
- Laboratory reporting level, definition of 36
- Lafayette, Paulins Kill at Warbasse Junction Road,
near. 335
- Lakewood, North Branch Metedeconk River at. . . . 256
- Lamington River at Burnt Mills. 209
- Land-surface datum, definition of 36
- Lansdowne, Capoolong Creek at 199
- Latent heat flux, definition of 36
- Laurel Lake, Gravelly Run at 317
- Lebanon State Forest, McDonalds Branch in 403
- Leesburg, West Creek near 306

- Light-attenuation coefficient, definition of 36
- Lincoln Park, Beaver Dam Brook at Ryerson
Road, at 128
- Lipid, definition of 36
- Little Creek at Chairville. 398
- Little Falls, Passaic River at 160
- Little Neshaminy Creek at Valley Road, near
Neshaminy, PA 395
- Lodi, Saddle River at 170
- Long-term method detection level, definition of 36
- Low flow, 7-day 10-year, definition of 41
- Low tide, definition of 37
- Lumberville, PA, Delaware River at 355
- M**
- Macopin Intake Dam, Pequannock River at 103
- Macopin River at Echo Lake 100
- Macrophytes, definition of 37
- Mahwah, Ramapo River near 108
- Major Run at Sharptown 432
- Malaga, Indian Branch near 312
- Manalapan Brook at Federal Road, near
Manalapan 239
- Manalapan, Manalapan Brook at Federal Road,
near 239
- Manasquan River at Squankum 251
- Martinsville, West Branch Middle Brook at
Chimney Rock Road, at 226
- Maurice River at Norma 314
- Maxwell, West Branch Wading River at 284
- Mays Landing, Babcock Creek near 293
- McDonalds Branch in Lebanon State Forest 403
- Mean concentration of suspended sediment,
definition of 37
- Mean discharge, definition of 37
- Mean high tide, definition of 37
- Mean low tide, definition of 37
- Mean sea level, definition of 37
- Measuring point, definition of 37
- Membrane filter, definition of 37
- Mendham, Passaic River at Tempe Wick Road,
near 82
- Mercerville, Miry Run at Route 533, at 379
- Metamorphic stage, definition of 37
- Metedeconk River, North Branch, at Lakewood 256
- Method detection limit, definition of 37
- Methylene blue active substances, definition of 37
- Micrograms per gram, definition of 37
- Micrograms per kilogram, definition of 37
- Micrograms per liter, definition of 37
- Microsiemens per centimeter, definition of 37
- Middle Brook, West Branch, at Chimney Rock
Road, at Martinsville 226
- Middlesex, Bound Brook at 235
- Middlesex, Bound Brook at Route 28, at 233
- Milligrams per liter, definition of 37
- Millington, Dead River near 88
- Millstone River at Baird Road, near Perrineville 214
- Millstone River at Blackwells Mills 224
- Millstone River near Grovers Mill 217
- Mingamahone Brook near Earle 254
- Minimum reporting level, definition of 37
- Miry Run at Route 533, at Mercerville 379
- Miscellaneous site, definition of 37
- Miscellaneous sites, ground-water quality at 435
- Montague, Delaware River at 325
- Morristown National Historical Park, Primrose
Brook at 85
- Most probable number (MPN), definition of 37
- Mount Holly, North Branch Rancocas Creek at
Iron Works Park, at 408
- Mount Misery Brook at Upton 400
- Mulhockaway Creek at Van Syckel 196
- Mullica River at Constable Bridge, near Batsto 271
- Mullica River at outlet of Atsion Lake, at Atsion 269
- Multiple-plate samplers, definition of 37
- Musconetcong River at Riegelsville 349
- N**
- Nanograms per liter, definition of 38
- National Geodetic Vertical Datum of 1929,
definition of 38
- Natural substrate, definition of 38
- Nekton, definition of 38
- Nephelometric turbidity unit, definition of 38
- Neptune City, Jumping Brook near 245
- Neshaminy, PA, Little Neshaminy Creek at
Valley Road, near 395
- Neshanic River at Reaville 205
- New Gretna, East Branch Bass River near 286
- New Lisbon, Greenwood Branch at 406
- Newport, Spruce Run at 192
- Nishisakawick Creek near Frenchtown 353
- Norma, Maurice River at 314
- North American Vertical Datum of 1988,
definition of 38
- North Branch Big Timber Creek at Glendora 416
- North Branch Cooper River at Kresson 413
- North Branch Metedeconk River at Lakewood 256
- North Branch Rancocas Creek at Iron Works
Park, at Mount Holly 408
- North Branch Raritan River near Raritan 211
- North Run at Cookstown 384
- O**
- Oakhurst, Whale Pond Brook at Larchwood
Avenue, at 242
- Open or screened interval, definition of 38
- Organic carbon, definition of 38
- Organic mass, definition of 38
- Organism count, definition of
Area, definition of 38
Total, definition 43
Volume, definition of 38
- Organochlorine compounds, definition of 38

P

Papakating Creek at Pellettown	66
Papakating Creek near Wykertown	63
Parameter Code, definition of	38
Partial-record station, definition of	38
Particle size, definition of	38
Particle-size classification, definition of	38
Passaic River at Little Falls	160
Passaic River at Tempe Wick Road, near Mendham	82
Passaic River at Two Bridges	98
Passaic River below Pompton River, at Two Bridges	131
Paulins Kill at Blairstown	338
Paulins Kill at Warbasse Junction Road, near Lafayette	335
Peak flow, definition of	39
Pellettown, Papakating Creek at	66
Pequannock River at Macopin Intake Dam	103
Pequest River at Belvidere	347
Percent composition, definition of	39
Percent shading, definition of	39
Periodic station, definition of	39
Periphyton, definition of	39
Perrineville, Millstone River at Baird Road, near	214
Pesticides, definition of	39
pH, definition of	39
Philadelphia, PA, Schuylkill River at	421
Phoenixville, PA, French Creek near	418
Phytoplankton, definition of	39
Picocurie, definition of	39
Pine Brook, Whippany River near	95
Plankton, definition of	39
Polychlorinated biphenyls (PCB s), definition of	39
Polychlorinated naphthalenes, definition of	39
Pompton Lakes, Ramapo River at	111
Pompton Lakes, Wanaque River at Wanaque Avenue, at	105
Pompton Plains, Pompton River at	120
Pompton River at Pompton Plains	120
Pool, definition of	39
Portland, PA, Delaware River at	333
Primary productivity, definition of	39
Carbon method, definition of	39
Oxygen method, definition of	40
Primrose Brook at Morristown National Historical Park	85

R

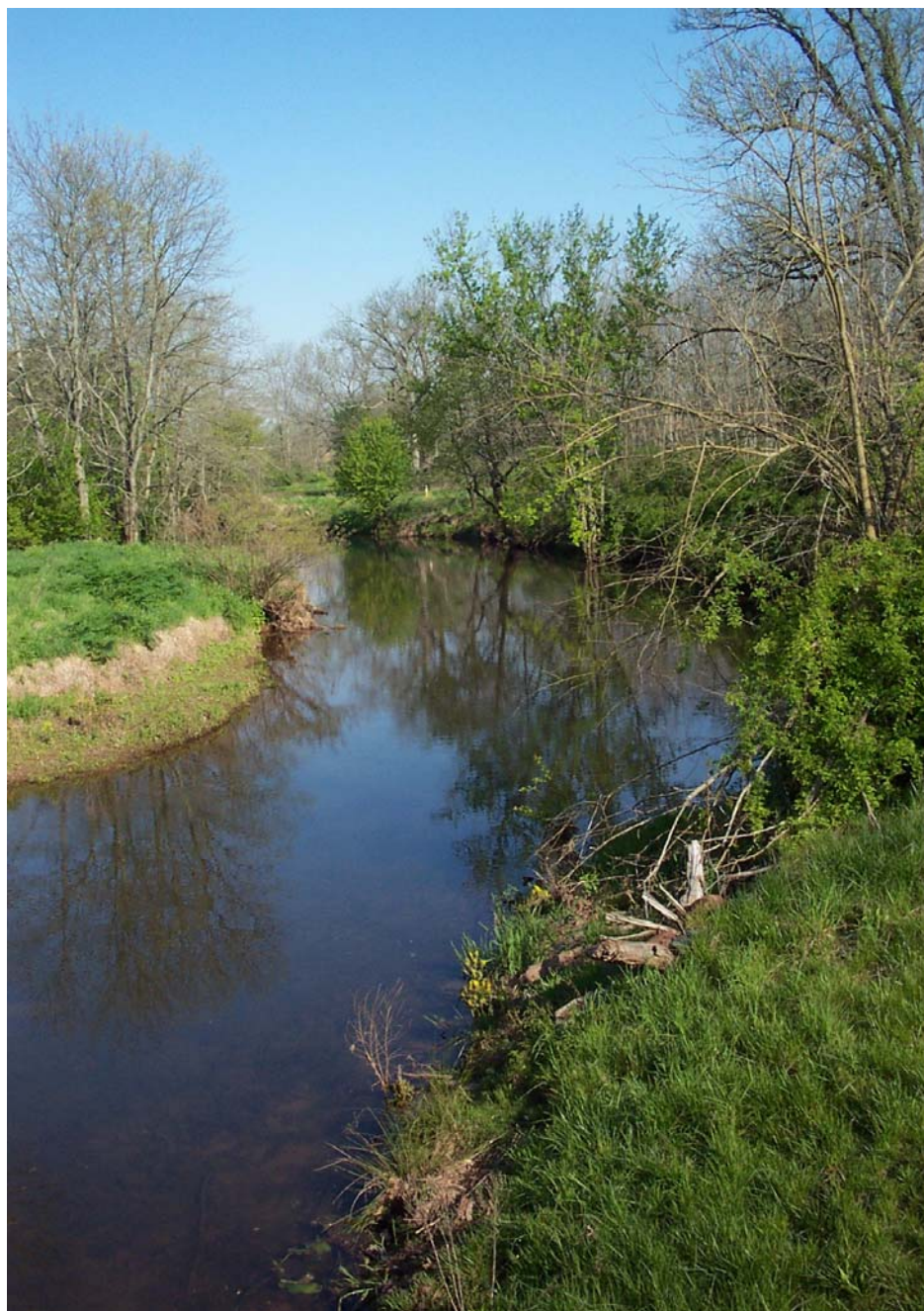
Raccoon Creek near Swedesboro	427
Radioisotopes, definition of	40
Rahway River at Rahway	186
Rahway River near Springfield	184
Rahway River, South Branch, at Colonia	189
Rahway River, West Branch, at Northfield Avenue, at West Orange	181
Rahway, Rahway River at	186
Ramapo River at Pompton Lakes	111
Ramapo River near Mahwah	108

Rancocas Creek, North Branch, at Iron Works Park, at Mount Holly	408
Raritan River at Queens Bridge, at Bound Brook	229
Raritan River, North Branch, near Raritan	211
Raritan River, South Branch, at South Branch	207
Raritan, North Branch Raritan River near	211
Reach, definition of	40
Reaville, Neshanic River at	205
Recoverable from bottom material, definition of	40
Recurrence interval, definition of	40
Replicate samples, definition of	40
Return period, definition of	40
Riegelsville, Delaware River at	351
Riegelsville, Musconetcong River at	349
Riffle, definition of	40
Rio Grande, Fishing Creek at	301
River mileage, definition of	40
Rivervale, Hackensack River at	73
Rock Brook at Zion	221
Rockaway, Beaver Brook at	93
Run, definition of	40
Runoff, definition of	40
S	
Saddle River at Garfield	178
Saddle River at Lodi	170
Salem River at Woodstown	430
Schuylkill River at Philadelphia, PA	421
Sea level, definition of	40
Sediment, definition of	40
Seely, Cohansey River at	320
Sensible heat flux, definition of	41
Sergeantsville, Wickecheoke Creek near	357
Sharptown, Major Run at	432
Shelves, definition of	41
Skit Branch near Hampton Gate	278
Sodium adsorption ratio, definition of	41
Soil heat flux, definition of	41
Soil-water content, definition of	41
South Branch Rahway River at Colonia	189
South Branch Raritan River at South Branch	207
South Branch, South Branch Raritan River at	207
Sparta, Walkkill River at	56
Specific electrical conductance, definition of	41
Spring Lake Heights, Hannabrand Brook at Old Mill Road, near	248
Springfield, Rahway River near	184
Spruce Run at Newport	192
Squankum, Manasquan River at	251
Stable isotope ratio, definition of	41
Stage (see gage height)	41
Stage-discharge relation, definition of	41
Still Run at Little Mill Road, near Clayton	309
Streamflow, definition of	41
Substrate embeddedness class, definition of	41
Substrate, definition of	41
Artificial, definition of	31
Natural, definition of	38

- Surface area of a lake, definition of 41
- Surficial bed material, definition of 41
- Suspended sediment, definition of 42
- Suspended solids, total residue at 105°C
concentration, definition of 42
- Suspended, definition of 41
- Recoverable, definition of 41
- Total, definition of 42
- Suspended-sediment concentration, definition of . . . 42
- Suspended-sediment discharge, definition of 42
- Suspended-sediment load, definition of 42
- Sussex, Wallkill River near 61
- Swedesboro, Raccoon Creek near 427
- Synoptic studies, definition of 42
- T**
- Taxa (Species) richness, definition of 42
- Taxonomy, definition of 42
- Tenakill Brook at Old Closter Dock Road, at
Closter 76
- Thalweg, definition of 42
- Thermograph, definition of 42
- Third Neshanic River at Copper Hill 202
- Time-weighted average, definition of 42
- Toms River at Whitesville 258
- Toms River near Toms River 261
- Tons per acre-foot, definition of 42
- Tons per day, definition of 43
- Total coliform bacteria, definition of 43
- Total discharge, definition of 43
- Total length, definition of 43
- Total load, definition of 43
- Total organism count, definition of 43
- Total recoverable, definition of 43
- Total sediment discharge, definition of 43
- Total sediment load, definition of 43
- Total, bottom material, definition of 43
- Total, definition of 43
- Transect, definition of 43
- Trenton, Assunpink Creek at Peace Street, at 381
- Trenton, Delaware River at 360
- Tuckahoe River at Head of River 298
- Tuckahoe River near Estell Manor 295
- Turbidity, definition of 43
- Two Bridges, Passaic River at 98
- Two Bridges, Passaic River below Pompton
River, at 131
- U**
- Ultraviolet (UV) absorbance (absorption),
definition of 44
- Unconfined aquifer, definition of 44
- Unionville, NY, Wallkill River near 68
- Upton, Mount Misery Brook at 400
- V**
- Van Syckel, Mulhockaway Creek at 196
- Vertical datum, definition of 44
- Volatile organic compounds, definition of 44
- W**
- Wading River, West Branch, at Maxwell 284
- Wallkill River at Scott Road, at Franklin 58
- Wallkill River at Sparta 56
- Wallkill River near Sussex 61
- Wallkill River near Unionville, NY 68
- Wanaque River at Wanaque Avenue, at
Pompton Lakes 105
- Water table, definition of 44
- Water year, definition of 44
- Water-table aquifer, definition of 44
- Wawayanda, Double Kill at 70
- WDR, definition of 44
- Weighted average, definition of 44
- Wescoatville, Hammonton Creek at 276
- West Branch Middle Brook at Chimney Rock
Road, at Martinsville 226
- West Branch Rahway River at Northfield
Avenue, at West Orange 181
- West Branch Wading River at Maxwell 284
- West Creek near Leesburg 306
- West Orange, West Branch Rahway River at
Northfield Avenue, at 181
- Wet mass, definition of 44
- Wet weight, definition of 44
- Weymouth, Great Egg Harbor River at 291
- Whale Pond Brook at Larchwood Avenue, at
Oakhurst 242
- Whippany River near Pine Brook 95
- Whitesville, Toms River at 258
- Wickecheoke Creek near Sergeantsville 357
- Woodstown, Salem River at 430
- WSP, definition of 44
- Wykertown, Papakating Creek near 63
- Z**
- Zion, Rock Brook at 221
- Zooplankton, definition of 44



01400640 Millstone River near Grovers Mill
Agricultural Land Use Indicator Station
Ambient Stream Monitoring Network
(file photograph, U.S. Geological Survey, West Trenton, New Jersey)



01398000 Neshanic River at Reaville
Agricultural Land Use Indicator Station
Ambient Stream Monitoring Network
(file photograph, U.S. Geological Survey, West Trenton, New Jersey)



01382000 Passaic River at Two Bridges
Watershed Integrator Station
Ambient Stream Monitoring Network
(file photograph, U.S. Geological Survey, West Trenton, New Jersey)

CONVERSION FACTORS AND DATUMS

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

Horizontal coordinate information is referenced to the North American Datum of 1927 (NAD27), unless otherwise noted.

Vertical coordinate information is referenced to the National Geodetic Vertical Datum of 1929 (NGVD of 1929), unless otherwise noted.