01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'43", Pike County, PA, Hydrologic Unit 02040104, at tollbridge (on U.S. Route 206) between Montague, NJ and Milford, PA, 1.1 mi downstream from Sawkill Creek, and at river mile 246.0.

DRAINAGE AREA.--3,480 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
19...	1230	14,000	4.6	0.146	0.112	758	12.2	97	6.7	71	3.0	5.5	17
MAR													
12...	1230	3,740	1.2	0.067	0.051	753	13.2	95	7.2	112	7.0	1.3	23
JUN													
09...	1200	10,100	3.5	0.118	0.090	748	9.7	98	7.2	80	22.0	15.2	19
SEP													
03...	1130	27,300	49	0.219	0.168	756	8.5	88	7.1	62	19.0	16.5	17

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
19...	5.13	1.09	0.75	5.13	E10	7.63	<0.17	3.5	7.2	--	44	7	0.27
MAR													
12...	6.95	1.42	0.64	9.17	13	17.3	<0.17	2.7	8.4	56	65	1	0.14
JUN													
09...	5.79	1.18	0.67	6.42	12	10.3	<0.17	2.8	6.6	42	46	6	0.17
SEP													
03...	5.35	0.910	1.12	4.24	12	6.79	<0.17	3.1	5.3	35	54	63	0.30

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
19...	0.030	<0.030	0.17	<0.003	<0.020	0.08	0.012	0.030	0.44	0.53	0.7	<0.1	0.7
MAR													
12...	<0.030	<0.030	0.34	<0.003	<0.020	0.05	0.006	0.010	0.48	0.53	0.3	<0.1	0.3
JUN													
09...	<0.030	<0.030	0.18	<0.003	<0.020	0.06	0.011	0.029	0.35	0.41	0.6	<0.1	0.6
SEP													
03...	0.022	0.033	0.18	<0.003	<0.020	0.37	0.024	0.132	0.49	0.86	3.3	<0.1	3.3

01438500 DELAWARE RIVER AT MONTAGUE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
19...	3.9	E1.1	--	<13
MAR				
12...	2.4	E1.8	--	E6.2
JUN				
09...	3.0	E1.9	3.10	10
SEP				
03...	5.8	E1.9	10.2	11

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
15...	0840	<10	<100	<20
22...	0900	10	<100	220
29...	0810	1,400	<100	<20
JUN				
05...	0845	50	700	<20
12...	0815	320	100	<20

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

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ

LOCATION.--Lat 41°06'24", long 74°57'08", Sussex County, Hydrologic Unit 02040104, 1.0 mi upstream from Flatbrookville, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--64.0 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
13...	1045	84	0.7	0.091	0.070	754	10.1	90	7.9	191	9.0	10.0	71
FEB													
06...	1100	53	1.4	0.064	0.050	763	14.2	97	7.7	217	-5.0	0.0	73
MAY													
13...	1045	65	0.9	0.073	0.056	744	10.3	99	7.8	233	15.0	12.3	86
AUG													
26...	1100	38	0.5	0.061	0.048	751	9.3	100	7.8	246	25.5	18.2	110

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
13...	20.5	4.79	0.69	8.92	E58	13.6	<0.17	3.7	13.2	--	107	5	0.11
FEB													
06...	21.6	4.74	0.60	12.2	57	20.5	<0.17	5.4	12.4	113	121	1	0.11
MAY													
13...	25.2	5.56	0.56	11.7	69	20.3	<0.17	3.4	12.6	121	129	2	0.11
AUG													
26...	30.4	7.33	0.60	10.7	83	17.3	<0.17	2.7	12.6	132	141	7	0.11

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
13...	<0.030	<0.030	<0.05	<0.003	<0.020	0.05	0.005	0.010	--	--	0.2	<0.1	0.2
FEB													
06...	<0.030	<0.030	0.20	<0.003	<0.020	0.02	0.005	0.009	0.32	0.34	<0.1	<0.1	<0.1
MAY													
13...	<0.030	<0.030	0.07	<0.003	<0.020	<0.02	0.004	0.009	0.18	--	<0.1	<0.1	<0.1
AUG													
26...	<0.020	<0.020	<0.05	<0.003	<0.020	0.02	E.004	0.006	--	--	<0.1	<0.1	<0.1

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
13...	3.0	3.1	--	<13
FEB				
06...	1.8	E1.7	--	<13
MAY				
13...	2.6	<1.0	2.00	E10
AUG				
26...	2.0	E1.7	0.600	9.5

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
15...	0940	30	<100	<20
22...	0935	70	200	300
29...	0905	50	600	1,100
JUN				
05...	0955	50	600	40
12...	0911	160	600	800

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

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ

LOCATION.--Lat 40°58'14", long 75°07'34", 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 mi^2.

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 "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report. 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 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
05...	1030	5.5	0.4	0.023	0.017	759	12.1	99	7.6	31	10.5	6.5	11
FEB													
13...	1110	3.6	0.4	0.012	0.009	753	14.5	101	7.1	36	-2.0	0.2	12
MAY													
05...	1040	4.4	0.2	0.015	0.011	753	11.5	101	5.7	32	15.0	9.3	12
AUG													
20...	1300	5.4	0.5	0.030	0.022	763	9.8	101	6.7	33	28.0	16.7	12

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
05...	2.71	1.03	0.34	0.82	5	1.16	<0.17	4.5	7.8	21	18	1	<0.10
FEB													
13...	2.91	1.11	0.31	0.81	E6	1.46	<0.17	4.6	8.9	--	27	3	<0.10
MAY													
05...	2.94	1.07	0.40	0.82	6	1.13	<0.17	4.1	8.0	22	27	9	<0.10
AUG													
20...	3.17	1.10	0.45	0.69	5	1.09	<0.17	5.0	7.0	21	30	5	E.06

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
NOV													
05...	<0.030	<0.030	<0.05	<0.003	--	0.03	<0.004	E.003	<0.1	<0.1	<0.1	1.1	<1.0
FEB													
13...	<0.030	<0.030	0.05	<0.003	0.026	<0.02	<0.004	<0.004	<0.1	<0.1	<0.1	0.6	1.0
MAY													
05...	<0.030	<0.030	<0.05	<0.003	<0.020	<0.02	<0.004	<0.004	<0.1	<0.1	<0.1	0.8	<1.0
AUG													
20...	<0.020	<0.020	E.04	<0.003	<0.020	<0.02	E.003	0.004	<0.1	<0.1	<0.1	1.2	<1.0

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chlorophyll a fluorometric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV		
05...	--	<13
FEB		
13...	--	<13
MAY		
05...	--	E7.0
AUG		
20...	0.100	9.0

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, unfltrd recoverable, ug/L (01045)
AUG											
20...	*1258*	*Sampler Blank*	--	--	--	--	--	--	--	--	--
20...	*1259*	*Field Blank*	--	--	--	--	--	--	*M*	--	--
20...	1300	Environmental	<2	17.2	E.05	E7	0.05	<0.8	--	E.4	10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recoverable, ug/L (01067)	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)
AUG											
20...	--	--	--	--	--	*<0.06*	--	--	--	*<1*	--
20...	*M*	--	--	*0.02*	--	*M*	--	--	--	*M*	--
20...	--	0.07	3.8	--	<0.02	--	1.73	E.3	<0.16	--	9

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB													
13...	1110	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
13...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
13...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
05...	1040	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
05...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	<0.013	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
05...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

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

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ—Continued

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
15...	0900	<10	<100	<20
22...	1000	20	<100	<20
29...	0830	<10	<100	<20
JUN				
05...	0855	20	<100	<20
12...	0915	80	<100	40

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

01443000 DELAWARE RIVER AT PORTLAND, PA

LOCATION.--Lat 40°55'26", long 75°05'46", Northampton County, Hydrologic Unit 02040105, at footbridge connecting Portland, PA and Columbia, NJ, 0.5 mi upstream from Paulins Kill, and at river mile 207.5.

DRAINAGE AREA.--4,165 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
05...	1410	3,970	0.7	0.100	0.075	758	12.6	102	7.4	92	18.0	6.0	24
MAR													
04...	0950	7,350	1.3	0.064	0.049	757	15.0	103	6.0	116	1.0	0.1	26
MAY													
05...	1250	9,640	2.5	0.060	0.044	753	--	--	6.7	78	17.0	14.3	21
AUG													
11...	1220	11,500	6.8	0.160	0.123	752	8.0	95	7.3	88	24.7	23.6	26

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
05...	7.29	1.52	0.65	6.32	17	10.2	<0.17	3.0	9.1	49	60	3	0.15
MAR													
04...	7.72	1.67	0.60	8.95	19	16.7	<0.17	2.9	8.7	60	68	4	0.14
MAY													
05...	6.35	1.32	0.66	6.18	15	9.85	<0.17	1.6	7.1	43	54	4	0.16
AUG													
11...	8.10	1.38	0.71	6.02	19	8.72	<0.17	3.6	6.7	47	48	8	0.24

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
05...	<0.030	<0.030	0.17	<0.003	<0.020	0.05	0.011	0.016	0.33	0.37	<0.1	<0.1	<0.1
MAR													
04...	<0.030	<0.030	0.35	<0.003	<0.020	0.05	0.005	0.013	0.50	0.55	0.2	<0.1	0.2
MAY													
05...	<0.030	<0.030	0.23	0.003	<0.020	0.09	0.006	0.017	0.39	0.48	0.5	<0.1	0.5
AUG													
11...	<0.020	0.041	0.18	<0.003	<0.020	0.09	0.023	0.038	0.42	0.51	0.9	<0.1	0.8

01443000 DELAWARE RIVER AT PORTLAND, PA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
05...	3.2	<1.0	--	E6.4
MAR				
04...	1.9	E2.0	--	<13
MAY				
05...	2.1	E1.4	--	<13
AUG				
11...	4.4	<1.0	1.50	11

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
15...	0925	90	<100	20
22...	1030	60	<100	<20
29...	0845	110	<100	130
JUN				
05...	0915	120	500	80
12...	0930	600	200	500

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

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 mi^2.

PERIOD OF RECORD.--Water years 2001 to current year.

REMARKS.--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 "Accuracy of Records" in the Explanation of Water-Quality Records section of this report. Data from the following periods were adjusted:
DISSOLVED OXYGEN: Jul. 21 to Jul. 24.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 1.

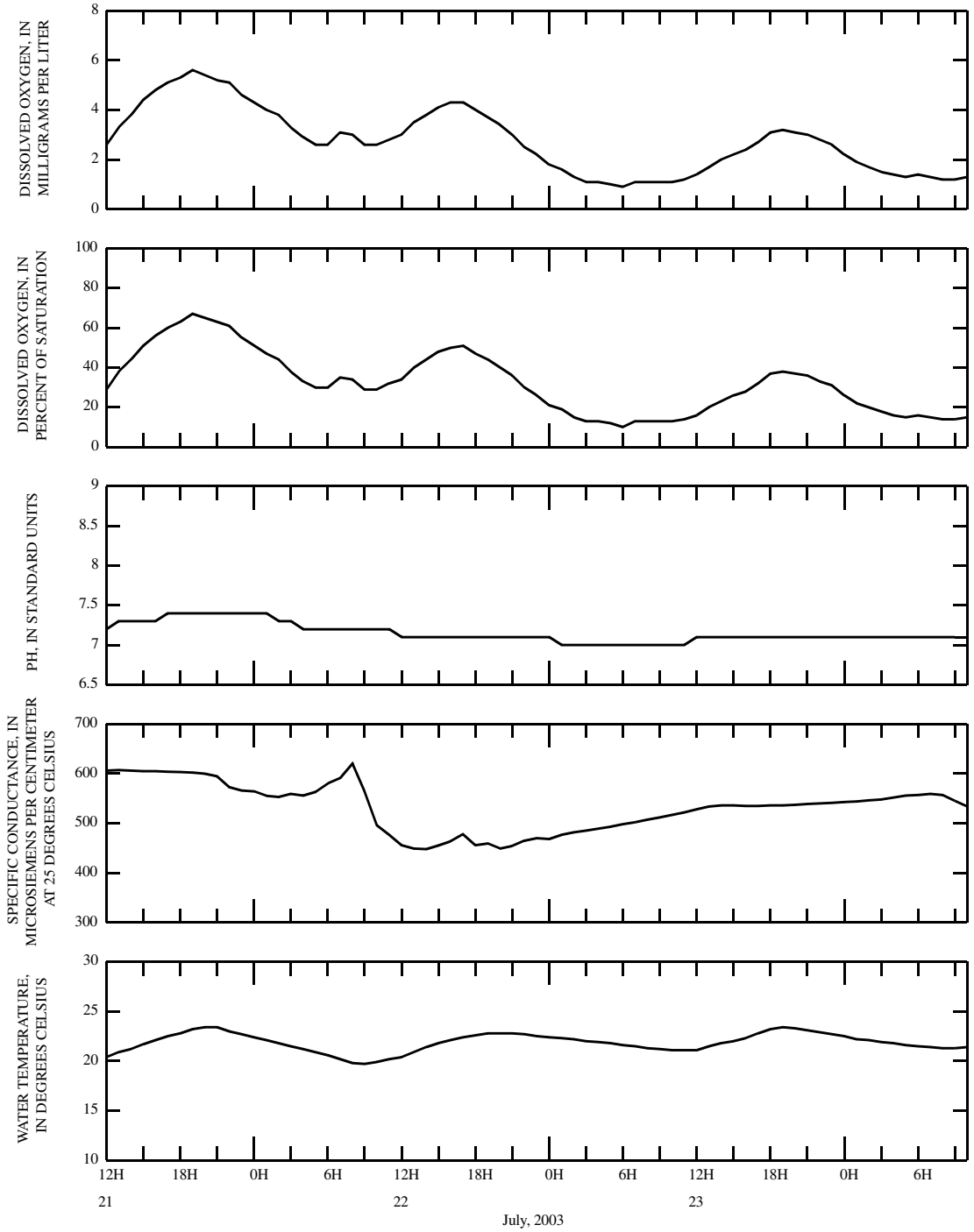


Figure 39. Reconnaissance Study--Physical characteristics and concentrations of constituents at 01443250 Paulins Kill at Warbasse Junction Road, near Lafayette, water year 2003.

01443500 PAULINS KILL AT BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'51", long 74°57'13", 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 mi^2.

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, 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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
DEC													
17...	1045	388	3.2	0.155	0.117	762	13.5	95	7.6	394	-1.0	1.0	120
MAR													
12...	1100	247	1.9	0.116	0.087	754	14.0	104	7.7	470	5.5	2.6	140
MAY													
20...	1045	87	6.4	0.107	0.080	760	9.6	98	7.9	522	24.0	16.3	190
SEP													
02...	1045	171	5.5	0.148	0.112	757	8.7	92	8.0	454	16.5	18.0	170

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
DEC													
17...	31.7	10.7	1.47	31.1	E86	54.2	<0.17	5.6	20.3	--	222	1	0.30
MAR													
12...	36.3	12.3	1.21	35.7	105	68.0	<0.17	3.8	19.0	243	254	6	0.23
MAY													
20...	47.1	17.7	1.45	30.9	152	59.4	<0.17	3.3	19.4	274	303	7	0.31
SEP													
02...	42.0	15.5	1.62	26.0	139	48.7	<0.17	6.0	15.3	241	250	9	0.29

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
DEC													
17...	0.051	<0.030	0.72	<0.003	<0.020	0.06	0.014	0.029	1.0	1.1	0.3	<0.1	0.3
MAR													
12...	<0.030	<0.030	0.85	0.006	0.021	0.05	0.006	0.017	1.1	1.1	0.2	<0.1	0.2
MAY													
20...	<0.030	<0.030	0.67	0.011	<0.020	0.12	0.019	0.048	0.98	1.1	0.8	<0.1	0.8
SEP													
02...	0.037	0.038	0.60	0.004	<0.020	0.09	0.020	0.046	0.89	0.98	0.6	<0.1	0.6

01443500 PAULINS KILL AT BLAIRSTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC				
17...	4.6	E1.6	--	14
MAR				
12...	3.6	<1.0	--	E9.2
MAY				
20...	3.0	E1.1	7.90	E12
SEP				
02...	4.2	E1.7	9.90	16

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
15...	0830	10	<100	130
22...	0925	160	200	110
29...	0800	180	100	500
JUN				
05...	0825	380	1,900	800
12...	0845	1,600	2,600	16,000

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

01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, NJ

LOCATION.--Lat 40°58'30", long 74°50'56", 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 mi^2.

PERIOD OF RECORD.--Water years 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). 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 "Accuracy of Records" in the Explanation of Water-Quality Records section of this report. Data from the following periods were adjusted:
DISSOLVED OXYGEN: Jul. 21 to Jul. 24.

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 and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
12...	1110	1.7	0.7	0.027	0.020	750	10.3	107	7.8	491	16.5	16.5	230
FEB													
04...	1110	3.3	1.2	0.058	0.044	733	10.2	86	7.6	492	8.5	6.5	230
MAY													
13...	1000	4.7	1.5	0.106	0.081	738	9.6	92	7.5	444	12.5	11.7	200
AUG													
11...	1000	32	1.4	0.229	0.175	747	6.9	80	7.4	319	34.5	21.4	130

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
12...	55.8	21.8	1.45	16.0	E177	28.3	<0.17	8.0	24.0	--	290	6	E.08
FEB													
04...	56.0	21.9	1.67	14.5	195	24.0	<0.17	6.2	24.6	274	282	3	0.17
MAY													
13...	47.2	18.8	1.31	15.2	170	27.6	<0.17	4.4	18.3	239	248	5	0.26
AUG													
11...	33.6	11.4	1.69	17.6	105	29.1	<0.17	8.9	11.1	177	191	3	0.44

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
12...	<0.030	0.049	1.51	0.004	<0.020	0.05	E.003	0.004	--	E1.6	0.4	<0.1	0.4
FEB													
04...	<0.030	0.033	1.78	0.006	<0.020	0.04	0.006	0.012	1.9	2.0	0.3	<0.1	0.3
MAY													
13...	--	<0.030	0.89	<0.003	<0.020	0.04	0.010	0.021	1.2	1.2	0.5	<0.1	0.5
AUG													
11...	0.021	0.047	0.23	<0.003	0.044	0.06	0.046	0.054	0.67	0.72	0.5	<0.1	0.5

01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
12...	1.3	E1.8	--	14
FEB				
04...	2.0	<1.0	--	E9.2
MAY				
13...	3.2	<1.0	3.70	E12
AUG				
11...	6.2	<1.0	3.80	16

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
15...	0810	60	<100	110
22...	0855	50	<100	20
29...	0745	120	<100	210
JUN				
05...	0810	160	<100	500
12...	0830	560	100	800

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

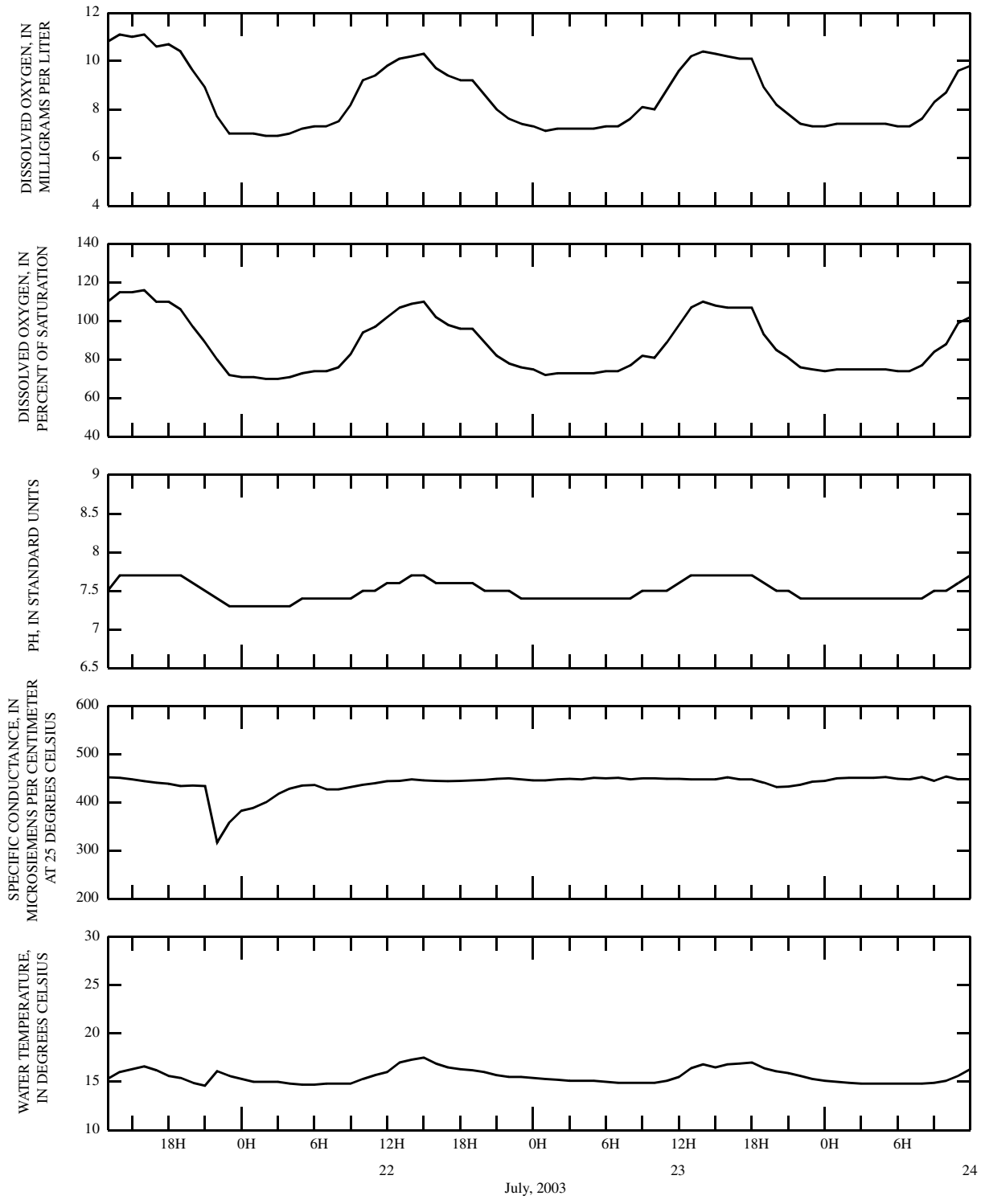


Figure 40. Reconnaissance Study--Physical characteristics and concentrations of constituents at 01445160 Bear Brook at Dark Moon Road, near Johnsonburg, water year 2003.

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 mi^2.

PERIOD OF RECORD.--Water years 2001-02.

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 "Accuracy of Records" in the Explanation of Water-Quality Records section of this report.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 1.

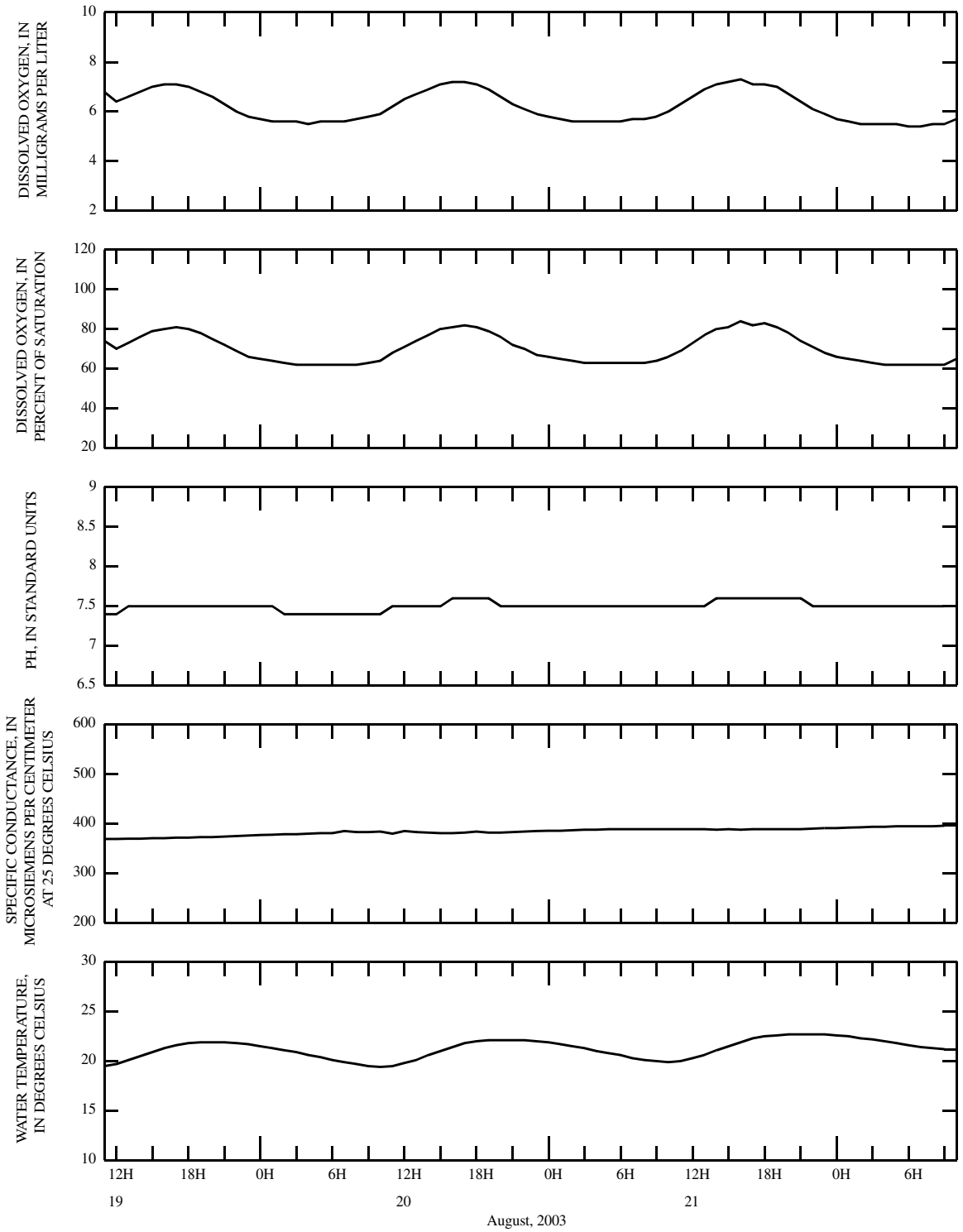


Figure 41. Reconnaissance Study--Physical characteristics and concentrations of constituents at 01445900 Honey Run near Hope, water year 2003.

01446400 PEQUEST RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'45", long 75°04'43", Warren County, Hydrologic Unit 02040105, at bridge on County Route 619 in Belvidere, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--158 mi^2.

PERIOD OF RECORD.--Water years 1957, 1962, 1976-82, 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 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
26...	1050	260	4.6	0.185	0.139	761	12.7	101	8.4	448	8.5	5.5	210
MAR													
04...	1100	318	4.5	0.144	0.109	757	15.9	112	8.1	469	6.0	0.9	180
MAY													
13...	1230	200	5.3	0.155	0.118	738	10.8	108	8.4	516	14.5	13.8	220
SEP													
04...	1100	246	4.2	0.193	0.144	750	9.6	101	8.2	486	22.5	16.8	210

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
26...	48.8	20.6	1.64	19.1	164	35.7	<0.17	8.1	31.5	269	282	5	0.43
MAR													
04...	44.3	17.7	1.70	20.6	180	40.9	<0.17	6.3	23.6	269	256	9	0.43
MAY													
13...	51.1	22.5	1.52	21.2	185	41.7	<0.17	6.6	19.6	280	298	12	0.37
SEP													
04...	48.6	21.6	1.93	17.6	186	37.2	<0.17	9.9	18.3	272	292	8	0.37

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
26...	0.035	0.035	1.12	0.009	0.037	0.07	0.029	0.050	1.6	1.6	0.6	<0.1	0.6
MAR													
04...	0.093	0.093	1.22	0.009	0.036	0.11	0.033	0.063	1.6	1.8	0.9	<0.1	0.9
MAY													
13...	0.045	0.047	1.06	0.020	0.047	0.14	0.045	0.080	1.4	1.6	1.3	<0.1	1.3
SEP													
04...	0.033	0.035	1.09	0.015	0.043	0.10	0.050	0.071	1.5	1.6	0.9	<0.1	0.9

01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
26...	5.0	E1.7	--	16
MAR				
04...	4.1	<1.0	--	<13
MAY				
13...	4.2	<1.0	--	16
SEP				
04...	5.2	<1.0	7.40	17

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
15...	0950	80	<100	500
22...	0945	120	600	1,300
29...	1010	280	400	300
JUN				
05...	1000	490	500	1,100
12...	0945	6,500	4,900	>16000

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

01455120 POHATCONG CREEK AT JANES CHAPEL ROAD, AT MOUNT BETHEL, NJ

LOCATION.--Lat 40°50'19", long 74°54'00", Warren County, Hydrologic Unit 02040105, at bridge on Janes Chapel Road, 0.8 mi north of Mount Bethel, 3.9 mi west of Hackettstown, and 5.7 mi upstream of Willever Lake.

DRAINAGE AREA.-- 1.80 mi^2.

PERIOD OF RECORD.--November 2002 to August 2003.

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). 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 "Accuracy of Records" in the Explanation of Water-Quality Records section of this report.

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.--Statewide Status and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
07...	1030	0.9	0.102	0.080	743	11.2	92	7.3	121	9.0	6.0	39	8.65
FEB													
26...	1030	1.9	0.059	0.045	752	13.2	92	7.2	145	-4.0	0.0	35	7.72
MAY													
14...	1000	1.3	0.064	0.049	740	10.6	100	7.4	134	15.0	11.2	37	8.34
AUG													
13...	1000	3.4	0.156	0.119	748	8.3	91	7.1	116	26.0	18.7	36	8.26

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
07...	4.28	1.11	6.17	E27	11.0	<0.17	14.8	9.0	--	75	2	0.13	<0.030
FEB													
26...	3.80	0.99	10.6	18	23.0	<0.17	12.3	9.2	--	86	1	0.13	<0.030
MAY													
14...	4.04	0.99	7.75	22	17.5	<0.17	12.9	8.8	76	96	4	E.07	<0.030
AUG													
13...	3.71	1.00	7.26	22	14.1	<0.17	14.1	7.8	--	76	5	0.22	<0.020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
07...	<0.030	0.32	<0.003	--	0.03	E.003	0.005	0.45	0.48	<0.1	<0.1	<0.1	3.5
FEB													
26...	<0.030	0.92	<0.003	--	<0.02	0.004	0.008	1.0	--	<0.1	<0.1	<0.1	2.0
MAY													
14...	<0.030	0.56	<0.003	0.009	<0.02	E.002	0.006	E.63	--	<0.1	<0.1	<0.1	1.9
AUG													
13...	<0.020	0.55	<0.003	--	0.03	0.009	0.016	0.77	0.80	0.3	<0.1	0.3	4.0

01455120 POHATCONG CREEK AT JANES CHAPEL ROAD, AT MOUNT BETHEL, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chlorophyll a fluorometric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV			
07...	E1.1	--	<13
FEB			
26...	<1.0	--	E6.1
MAY			
14...	<1.0	2.30	<13
AUG			
13...	<1.0	0.900	8.7

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

WATER-COLUMN AND BED-MATERIAL TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (00626)	Phosphorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inorganic carbon, bed sedimnt total, g/kg (00686)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, unfltrd recoverable, ug/L (01042)
AUG													
13...	1000	--	--	--	--	--	<2	18.5	0.06	E7	<0.04	<0.8	1.1
13...	1000	6.53	110	4,700	1.4	<0.2	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, unfltrd recoverable, ug/L (01092)	Arsenic bed sedimnt total, ug/g (01003)	Cadmium bed sedimnt recoverable, ug/g (01028)	Chromium, bed sedimnt recoverable, ug/g (01029)	Cobalt bed sedimnt recoverable, ug/g (01038)	Copper, bed sedimnt recoverable, ug/g (01043)
AUG													
13...	290	0.28	16.6	<0.02	0.73	E.4	<0.16	2	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	<1	0.060	3.7	1.9	3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recoverable, ug/g (01052)	Manganese, bed sedimnt recoverable, ug/g (01053)	Mercury bed sedimnt recoverable, ug/g (71921)	Nickel, bed sedimnt recoverable, ug/g (01068)	Selenium, bed sedimnt total, ug/g (01148)	Zinc, bed sedimnt recoverable, ug/g (01093)	1,2-Dimethylnaphthalene, bed sed <2 mm, ug/kg (49403)	1,6-Dimethylnaphthalene, bed sed <2 mm, ug/kg (49404)	1Methyl-9H-fluorene, bed sed <2 mm, ug/kg (49398)	1-Methylphenanthrene, bed sed <2 mm, ug/kg (49410)	1-Methylpyrene, bed sed <2 mm, wsv nat ug/kg (49388)	236Trimethylnaphthalene, bed sed <2 mm, ug/kg (49405)
AUG													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	5,400	3.4	42	<0.01	1.4	<1	19	<50	<50	<50	<50	E6	<50

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	2,6-Dimethylnaphthalene, bed sed <2 mm, ug/kg (49406)	2-Ethylnaphthalene bed sed <2 mm wsv nat ug/kg (49948)	2-Methylanthracene, bed sed <2 mm, ug/kg (49435)	Cyclopentaphenanthrene, bed sed <2 mm, ug/kg (49411)	9H-Flourene, bed sed <2 mm, wsv nat ug/kg (49399)	Acenaphthene, bed sed <2 mm, wsv nat ug/kg (49429)	Acenaphthylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthracene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo[a]anthracene, bed sed <2 mm, ug/kg (49436)	Benzo[a]pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo[b]fluoranthene bed sed <2 mm ug/kg (49458)	Benzo[ghi]perylene, bed sed <2 mm, ug/kg (49408)	Benzo[k]fluoranthene bed sed <2 mm ug/kg (49397)
AUG													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<50	<50	E10	<50	<50	<50	E6	<50	E10	E12	E12	<50	<50

01455120 POHATCONG CREEK AT JANES CHAPEL ROAD, AT MOUNT BETHEL, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chrysene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, ug/kg (49461)	Fluoranthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,-3-cd]-pyrene, bed sed <2 mm ug/kg (49390)	Isophorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphthalene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenanthrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenanthridine, bed sed <2 mm, wsv nat ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment falldia dst wat percent <.002mm (80294)
AUG													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<50	<50	E9	<50	<50	<50	<5	<50	<50	<50	E10	0.6	0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sediment, falldia dst wat percent <.004mm (80157)	Bed sediment falldia dst wat percent <.008mm (80293)	Bed sediment, falldia dst wat percent <.016mm (80282)	Bed sediment, falldia dst wat percent <.031mm (80283)
AUG				
13...	--	--	--	--
13...	0.2	0.2	0.3	0.5

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB													
26...	1030	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
26...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
26...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

01455120 POHATCONG CREEK AT JANES CHAPEL ROAD, AT MOUNT BETHEL, NJ—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
14...	1000	<0.006	E.034	<0.006	<0.004	<0.005	0.011	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
14...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	E.005	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
14...	<0.022	M	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
MAY					JUN				
15...	1020	10	<100	<20	05...	1015	130	<100	80
22...	1000	80	200	40	12...	1010	2,000	1,300	1,700
29...	1025	100	<100	40					

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

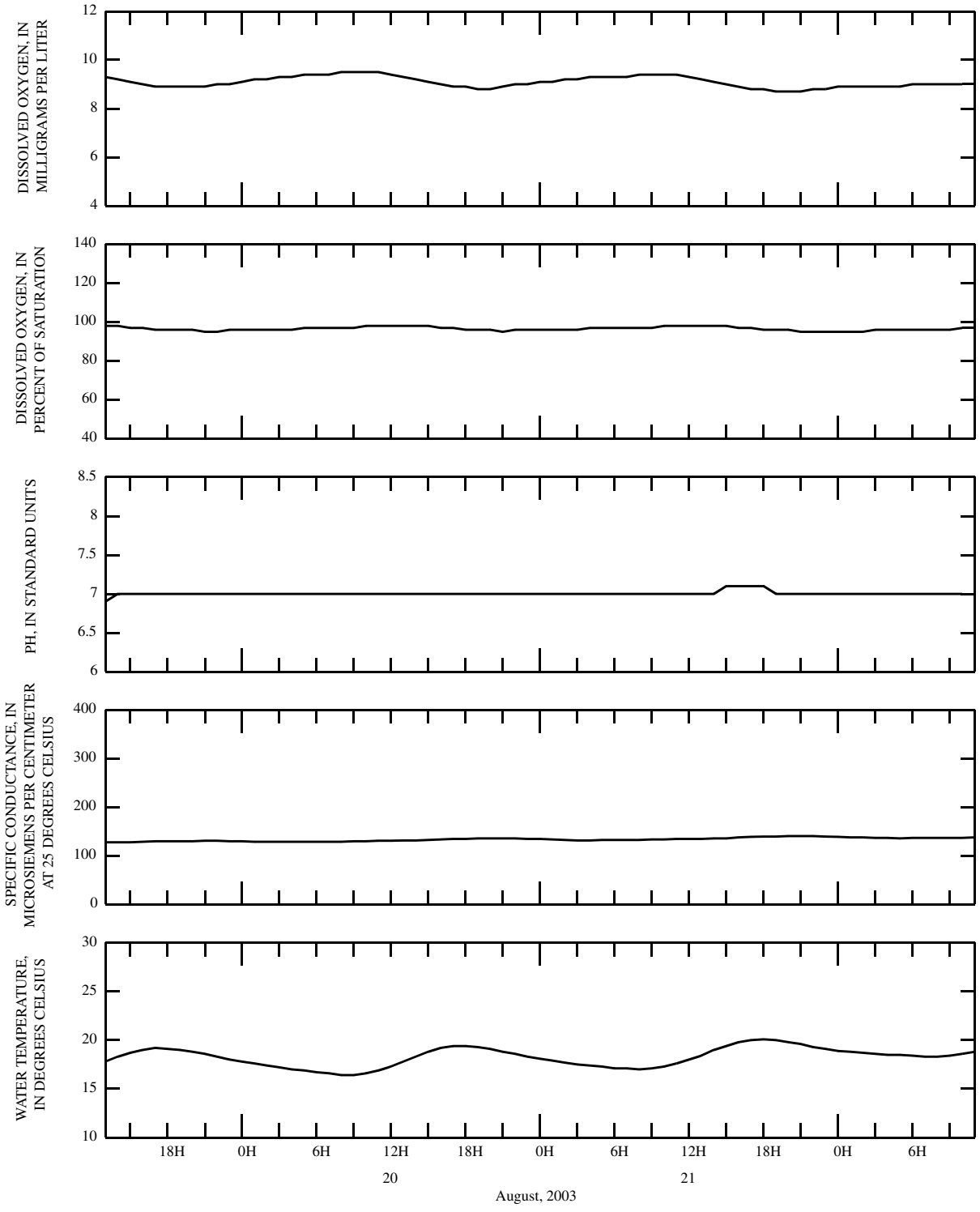


Figure 42. Reconnaissance Study--Physical characteristics and concentrations of constituents at 01455120 Pohatcong Creek at Janes Chapel Road, at Mount Bethel, water year 2003.

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'32", long 75°11'19", 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 mi^2.

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, 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 Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
07...	1150	183	3.2	0.080	0.063	759	12.9	108	8.2	428	9.0	7.5	150
FEB													
03...	1030	157	1.7	0.036	0.027	754	14.3	110	7.4	456	7.0	3.9	160
MAY													
05...	1050	238	2.3	0.062	0.048	763	11.2	107	8.2	441	14.5	13.1	150
AUG													
20...	0950	307	5.6	0.087	0.066	763	9.3	101	8.0	410	27.0	19.3	160

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
07...	33.0	16.2	2.04	27.4	111	51.3	<0.17	7.4	19.9	233	235	7	0.27
FEB													
03...	35.3	17.4	1.91	27.3	123	54.8	<0.17	8.7	18.4	251	260	1	0.99
MAY													
05...	34.1	16.3	1.49	30.0	111	58.0	<0.17	3.7	16.5	234	243	3	0.80
AUG													
20...	36.5	16.3	1.95	25.0	104	48.7	<0.17	10.5	14.0	225	240	12	0.48

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
07...	<0.030	<0.030	2.04	0.004	0.033	0.11	0.025	0.046	2.3	2.4	1.1	<0.1	1.1
FEB													
03...	<0.030	<0.030	2.98	0.008	0.021	0.06	0.015	0.025	4.0	4.0	0.5	<0.1	0.5
MAY													
05...	0.044	0.032	1.68	0.010	<0.020	0.13	0.008	0.023	2.5	2.6	0.9	<0.1	0.8
AUG													
20...	0.055	0.052	2.09	0.009	0.026	0.10	0.028	0.052	2.6	2.7	0.9	<0.1	0.8

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
07...	3.3	<1.0	--	26
FEB				
03...	1.8	2.1	--	16
MAY				
05...	2.2	<1.0	13.5	14
AUG				
20...	2.6	<1.0	1.90	23

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

WATER-COLUMN AND BED-MATERIAL TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (00626)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor-ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)
AUG													
20...	0950	--	--	--	--	--	<2	22.4	<0.06	20	E.02	<0.8	2.1
20...	0950	7.25	610	6,500	9.8	1.1	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)	Arsenic bed sedimnt total, ug/g (01003)	Cadmium bed sedimnt recover-able, ug/g (01028)	Chrom-ium, bed sedimnt recover-able, ug/g (01029)	Cobalt bed sedimnt recover-able, ug/g (01038)	Copper, bed sedimnt recover-able, ug/g (01043)
AUG													
20...	340	1.07	27.9	<0.02	1.77	0.7	<0.16	5	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	<1	0.110	14	5.2	16

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover-able, ug/g (01052)	Mangan-ese, bed sedimnt recover-able, ug/g (01053)	Mercury bed sedimnt recover-able, ug/g (71921)	Nickel, bed sedimnt recover-able, ug/g (01068)	Selen-ium, bed sedimnt total, ug/g (01148)	Zinc, bed sedimnt recover-able, ug/g (01093)	1,2-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49403)	1,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49404)	1Methyl -9H-fluor-ene, bed sed <2 mm, ug/kg (49398)	1-Methyl-phenan-threne, bed sed <2 mm, ug/kg (49410)	1-Methyl-pyrene, bed sed <2 mm, wsv nat ug/kg (49388)	236Tri-methyl-naphth-alene, bed sed <2 mm, ug/kg (49405)
AUG													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	12,000	13	330	0.01	38	<1	51	<50	E13	E13	E22	E27	E12

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	2,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49406)	2-Ethyl naphth-alene bed sed <2 mm wsv nat ug/kg (49948)	2-Methyl-anthra-cene, bed sed <2 mm, ug/kg (49435)	Cyclo-penta-phenan-threne, bed sed <2 mm, ug/kg (49411)	9H-Flour-ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace-naphth-ene, bed sed <2 mm, wsv nat ug/kg (49429)	Ace-naphth-ylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthra-cene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo-[a]-anthra-cene, bed sed <2 mm, ug/kg (49436)	Benzo-[a]-pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo-[b]-fluor-anthene bed sed <2 mm ug/kg (49458)	Benzo-[ghi]-peryl-ene, bed sed <2 mm, ug/kg (49408)	Benzo-[k]-fluor-anthene bed sed <2 mm ug/kg (49397)
AUG													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	E19	E11	E22	E29	E22	E13	E36	57	140	130	130	100	100

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chrysene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, ug/kg (49461)	Fluoranthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,-3-cd]-pyrene, bed sed <2 mm ug/kg (49390)	Isophorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphthalene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenanthrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenanthridine, bed sed <2 mm, wsv nat ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment falldia dst wat percent <.002mm (80294)
AUG													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	160	E48	310	110	<50	E9	E2	<50	160	<50	250	8.5	1.6

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sediment, falldia dst wat percent <.004mm (80157)	Bed sediment falldia dst wat percent <.008mm (80293)	Bed sediment, falldia dst wat percent <.016mm (80282)	Bed sediment, falldia dst wat percent <.031mm (80283)
AUG				
20...	--	--	--	--
20...	2.3	2.7	3.9	5.6

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB													
03...	1030	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
03...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
03...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
05...	1050	<0.006	E.037	<0.006	<0.004	<0.005	0.040	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
05...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	0.038	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
05...	<0.022	E.01	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
MAY					JUN				
15...	0915	50	<100	170	05...	0915	440	1,000	500
22...	0905	150	100	700	12...	0915	1,800	2,100	5,000
29...	0940	220	500	700					

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

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'40", long 75°11'24", Warren County, Hydrologic Unit 02040105, at suspension bridge at Riegelsville, 600 ft upstream from Musconetcong River, and at river mile 174.8. Water-quality samples are collected from the bridge and are unaffected by the flow of the Musconetcong River.

DRAINAGE AREA.--6,328 mi^2.

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). The flow of the Musconetcong River is included in the instantaneous discharge, cfs (00061).

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
DEC													
03...	1030	9,820	1.3	0.086	0.066	768	12.2	88	7.7	150	-5.0	2.0	46
FEB													
03...	1030	7,110	1.1	0.056	0.042	757	13.4	98	7.7	197	4.0	1.9	64
MAY													
08...	1030	11,000	2.6	0.048	0.035	756	9.0	89	7.6	157	18.0	14.3	49
SEP													
10...	1045	12,200	4.2	0.099	0.075	765	8.3	89	7.6	138	19.5	19.3	49

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
DEC													
03...	12.1	3.92	0.87	8.45	30	13.2	<0.17	4.2	13.8	78	86	6	0.16
FEB													
03...	16.5	5.47	1.17	11.9	41	18.2	<0.17	3.7	16.3	103	110	<1	0.17
MAY													
08...	12.7	4.18	1.05	8.93	34	14.2	<0.17	2.2	13.1	80	92	3	0.17
SEP													
10...	13.6	3.76	1.07	7.63	32	11.6	<0.17	3.6	11.9	75	80	6	0.19

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
DEC													
03...	<0.030	0.030	0.79	<0.003	0.044	0.04	0.036	0.041	0.95	0.99	0.2	<0.1	0.2
FEB													
03...	<0.030	<0.030	1.10	0.007	0.034	0.06	0.032	0.041	1.3	1.3	0.2	<0.1	0.2
MAY													
08...	<0.030	<0.030	0.66	0.005	0.027	0.09	0.026	0.044	0.83	0.93	0.6	<0.1	0.6
SEP													
10...	<0.020	<0.020	0.55	0.003	0.023	0.09	0.030	0.048	0.74	0.84	0.6	<0.1	0.6

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC				
03...	2.6	2.0	--	13
FEB				
03...	2.0	E1.5	--	E12
MAY				
08...	2.1	E1.1	10.1	E8.9
SEP				
10...	2.9	<1.0	3.40	12

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
15...	0900	<10	<100	80
22...	0900	40	100	20
29...	0930	370	100	800
JUN				
05...	0855	330	1,000	500
12...	0910	2,500	1,300	3,000

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

01458300 HARIHOKAKE CREEK AT HARTPENCE ROAD, NEAR MOUNT PLEASANT, NJ

LOCATION.--Lat 40°36'01", long 75°01'51", Hunterdon County, Hydrologic Unit 02040105, at bridge on Hartpence Road, 1.7 mi northeast of Mount Pleasant, 4.0 mi northeast of Milford, and 6.8 mi upstream from mouth.

DRAINAGE AREA.-- 0.98 mi^2.

PERIOD OF RECORD.--November 2002 to August 2003.

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 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
12...	1000	6.4	0.134	0.107	754	9.8	90	7.5	99	11.0	11.0	37	11.8
FEB													
05...	1030	0.8	0.044	0.034	751	14.1	99	7.5	82	-2.5	0.4	28	8.88
MAY													
22...	1000	4.6	0.064	0.050	756	10.2	95	7.5	87	14.0	11.9	31	9.59
AUG													
06...	0945	14	0.213	0.163	746	8.5	94	7.1	68	23.0	19.4	25	7.57

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
12...	1.94	1.79	3.05	E29	6.36	<0.17	9.5	7.2	--	71	8	0.17	<0.030
FEB													
05...	1.47	0.63	3.17	18	6.03	<0.17	8.1	7.4	48	59	<1	0.12	<0.030
MAY													
22...	1.59	0.77	3.18	22	6.46	<0.17	8.6	6.3	51	67	2	0.19	<0.030
AUG													
06...	1.47	1.00	2.38	16	4.72	<0.17	7.8	6.1	42	54	12	0.36	<0.020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
12...	<0.030	<0.05	<0.003	0.021	0.08	0.021	0.043	--	--	0.7	<0.1	0.7	5.4
FEB													
05...	<0.030	0.38	<0.003	<0.020	<0.02	0.005	0.009	0.50	--	<0.1	<0.1	<0.1	1.4
MAY													
22...	<0.030	0.29	<0.003	<0.020	0.02	0.018	0.030	0.48	0.50	0.2	<0.1	0.2	1.6
AUG													
06...	0.053	0.22	0.001	0.028	0.11	0.024	0.053	0.58	0.69	1.0	<0.1	1.0	5.8

01458300 HARIHOKAKE CREEK AT HARTPENCE ROAD, NEAR MOUNT PLEASANT, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV			
12...	E2.2	--	E8.9
FEB			
05...	<1.0	--	<13
MAY			
22...	E1.1	3.20	<13
AUG			
06...	2.4	3.30	9.9

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover -able, ug/L (01007)	Beryll-ium, water, unfltrd recover -able, ug/L (01012)	Boron, water, unfltrd recover -able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover -able, ug/L (01034)	Copper, water, unfltrd recover -able, ug/L (01042)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan-ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, unfltrd recover -able, ug/L (71900)	Nickel, water, unfltrd recover -able, ug/L (01067)
AUG													
06...	0945	<2	44.5	E.04	10	<0.04	<0.8	1.8	440	0.88	88.8	<0.02	3.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover -able, ug/L (01077)	Zinc, water, unfltrd recover -able, ug/L (01092)
AUG			
06...	E.4	<0.16	14

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)
FEB													
05...	1030	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01458300 HARIHOKAKE CREEK AT HARTPENCE ROAD, NEAR MOUNT PLEASANT, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
05...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
05...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
22...	1000	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
22...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	<0.013	<0.006	<0.007

01458300 HARIHOKAKE CREEK AT HARTPENCE ROAD, NEAR MOUNT PLEASANT, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
22...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUN				
11...	1015	130	900	300
18...	1015	1,900	500	800
25...	0920	230	200	40
JUL				
02...	0930	350	<100	170
09...	1000	300	<100	93

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

01458570 NISHISAKAWICK CREEK NEAR FRENCHTOWN, NJ

LOCATION.--Lat 40°32'32", long 75°02'48", 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 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
06...	1140	17	3.0	0.083	0.065	744	11.9	103	7.6	187	11.5	8.0	63
FEB													
03...	1320	6.7	0.7	0.033	0.026	754	15.7	109	7.8	175	9.5	0.2	53
MAY													
05...	1240	8.8	1.1	0.051	0.039	763	11.8	108	8.6	173	14.5	11.8	58
AUG													
21...	1330	7.1	1.0	0.062	0.047	755	9.1	104	7.5	176	28.0	21.6	58

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
06...	15.6	5.80	1.90	9.27	43	13.5	<0.17	10.6	17.7	111	118	2	0.20
FEB													
03...	13.4	4.83	1.22	8.95	33	14.7	<0.17	10.8	13.0	99	106	<1	0.14
MAY													
05...	14.7	5.09	1.27	9.76	43	15.6	<0.17	3.0	12.2	93	102	<1	0.18
AUG													
21...	14.8	4.99	1.75	9.48	43	13.4	<0.17	12.4	12.7	104	113	3	0.16

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
06...	<0.030	<0.030	2.36	<0.003	0.039	<0.02	0.028	0.034	2.6	--	0.3	<0.1	0.2
FEB													
03...	<0.030	<0.030	2.75	0.006	0.024	<0.02	0.015	0.018	2.9	--	0.2	<0.1	0.2
MAY													
05...	<0.030	0.083	1.30	0.009	<0.020	0.05	0.010	0.015	1.5	1.5	0.3	<0.1	0.3
AUG													
21...	0.032	0.022	1.88	<0.003	0.038	<0.02	0.040	0.046	2.0	--	0.2	<0.1	0.2

01458570 NISHISAKAWICK CREEK NEAR FRENCHTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
06...	3.0	<1.0	--	32
FEB				
03...	1.2	<1.0	--	14
MAY				
05...	1.9	E1.3	7.00	20
AUG				
21...	1.9	2.3	1.80	31

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUN				
11...	1002	150	300	130
18...	1014	1,500	1,700	1,300
25...	1050	140	<100	230
JUL				
02...	1010	210	<100	80
09...	1030	310	<100	220

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

01458710 COPPER CREEK NEAR FRENCHTOWN, NJ

LOCATION.--Lat 40°30'39", long 75°02'42", Hunterdon County, Hydrologic Unit 02040105, at bridge on Horseshoe Bend Road, 1.4 mi upstream from the mouth, 1.4 mi southeast of Frenchtown, and 2.2 mi west of Baptistown.

DRAINAGE AREA.--2.52 mi^2.

PERIOD OF RECORD.--Water years 2000, 2003 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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
19...	1000	1.8	0.092	0.070	767	11.7	97	7.5	165	7.0	7.6	58	13.6
FEB													
04...	1000	1.1	0.034	0.025	742	13.4	96	7.5	190	5.0	0.4	62	14.5
MAY													
21...	1000	1.7	0.053	0.041	762	9.7	91	7.6	204	15.0	12.8	68	16.4
AUG													
12...	1000	1.5	0.120	0.091	760	8.7	94	7.4	192	24.5	18.9	70	17.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
19...	5.76	2.05	6.32	E32	6.95	<0.17	11.3	18.8	--	113	3	0.27	<0.030
FEB													
04...	6.24	1.65	8.75	27	15.4	<0.17	8.4	22.0	107	112	3	0.15	<0.030
MAY													
21...	6.69	2.30	9.96	41	16.2	<0.17	9.2	22.7	114	121	3	0.16	<0.030
AUG													
12...	6.47	2.80	9.23	50	9.22	<0.17	13.8	18.0	117	121	1	0.31	<0.020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
19...	<0.030	3.44	<0.003	0.076	0.06	0.082	0.087	3.7	3.8	0.3	<0.1	0.3	3.1
FEB													
04...	<0.030	3.16	<0.003	0.065	<0.02	0.064	0.070	3.3	--	<0.1	<0.1	<0.1	1.5
MAY													
21...	<0.030	1.36	0.003	0.079	0.03	0.083	0.092	1.5	1.6	0.2	<0.1	0.2	2.0
AUG													
12...	<0.020	2.21	<0.003	0.116	0.03	0.127	0.128	2.5	2.5	<0.1	<0.1	<0.1	3.9

01458710 COPPER CREEK NEAR FRENCHTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chlorophyll a fluorometric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV 19...	<1.0	--	32
FEB 04...	<1.0	--	17
MAY 21...	E1.4	2.00	34
AUG 12...	<1.0	0.600	49

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)
AUG 12...	1000	<2	41.3	<0.06	44	<0.04	<0.8	2.1	30	E.04	1.9	<0.02	0.97

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, unfltrd recoverable, ug/L (01092)
AUG 12...	0.5	<0.16	<2

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB 04...	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01458710 COPPER CREEK NEAR FRENCHTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
04...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
04...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
21...	1000	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
21...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	<0.013	<0.006	<0.007

01458710 COPPER CREEK NEAR FRENCHTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
21...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUN					JUL				
11...	1019	40	300	80	02...	1035	130	100	80
18...	1032	4,700	2,400	3,000	09...	1045	360	<100	80
25...	1110	70	100	220					

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

01460200 DELAWARE RIVER BELOW TOHICKON CREEK AT POINT PLEASANT, PA

LOCATION.--Lat 40°25'06", long 75°03'42", Bucks County, Hydrologic Unit 02040105, on right bank at Forest Park Water Company pump station, 0.2 mi downstream from Tohickon Creek and 0.4 mi southeast of Point Pleasant.

DRAINAGE AREA.--6,570 mi2.

PERIOD OF RECORD.--May 2000 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 2000 to current year.
pH: May 2000 to current year.
WATER TEMPERATURE: May 2000 to current year.
DISSOLVED OXYGEN: May 2000 to current year.

INSTRUMENTATION.--Probes interfaced with a data collection platform with 30-minute recording interval. Satellite and landline telemetry at station.

REMARKS.--Specific conductance and pH records rated good except for period Oct. 30 to Apr. 27, which is poor. Dissolved oxygen record rated fair except for period Apr. 23 to May 8, which is poor. Water temperature record rated good. Other interruptions in the record due to intermittent pumping. (See Distributary from Bradshaw Reservoir, station 01472618).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 298 microsiemens, Dec. 12, 2002; minimum recorded, 77 microsiemens, Sept. 5, 6, 2003.
pH: Maximum recorded, 9.6, Apr. 25, 30, May 3, 2003; minimum recorded, 6.9, Oct. 18, 2002, Jan. 7, 2003.
WATER TEMPERATURE: Maximum, 32.5°C, Aug. 9, 2001; minimum, 2.0°C, Jan. 19-21, 2002.
DISSOLVED OXYGEN: Maximum, 15.5 mg/L, Nov. 25, 2000; minimum, 6.1 mg/L, Aug. 11, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 298 microsiemens, Dec. 12; minimum recorded, 77 microsiemens, Sept. 5, 6.
pH: Maximum recorded, 9.6, Apr. 25, 30, May 3; minimum recorded, 6.9, Oct. 18, Jan. 7

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	174	168	171	168	158	161	158	147	149	171	167	169
2	191	174	184	175	163	169	158	146	149	175	168	170
3	213	191	199	174	165	168	153	147	149	169	146	157
4	218	213	216	169	166	167	153	149	151	170	146	161
5	227	218	224	169	166	168	160	149	155	173	162	168
6	231	222	225	181	168	176	170	156	165	166	160	162
7	236	214	227	189	180	182	177	166	173	182	162	170
8	214	195	202	183	167	179	186	172	178	174	168	171
9	203	196	198	170	164	166	187	179	183	179	169	174
10	208	203	206	165	162	164	191	182	186	190	175	178
11	207	206	207	168	163	164	198	183	190	187	178	181
12	226	171	199	168	164	166	298	194	206	186	179	182
13	171	142	154	182	166	174	270	228	243	190	180	182
14	142	134	136	178	161	170	232	190	218	190	184	186
15	141	133	135	163	144	150	195	167	181	191	186	188
16	142	139	140	145	141	143	171	161	164	204	188	195
17	158	130	145	147	141	143	162	154	158	205	199	201
18	130	102	112	147	131	143	158	152	155	215	200	207
19	106	102	103	131	116	124	165	156	159	226	211	217
20	118	106	112	119	115	116	166	156	164	221	212	218
21	125	118	122	121	114	116	175	161	168	---	---	---
22	135	123	127	128	120	124	169	141	155	---	---	---
23	143	133	136	135	127	131	149	138	140	---	---	---
24	148	140	144	131	123	127	144	139	143	---	---	---
25	157	148	153	124	121	122	142	137	140	---	---	---
26	170	156	161	127	123	125	178	141	168	---	---	---
27	171	160	165	135	126	128	175	167	170	---	---	---
28	166	144	150	143	135	140	172	162	165	205	197	201
29	148	142	144	145	141	142	165	159	161	209	200	204
30	154	148	151	157	142	144	164	160	162	222	201	214
31	163	152	156	---	---	---	168	159	161	216	207	212
MONTH	236	102	165	189	114	150	298	137	168	226	146	186

01460200 DELAWARE RIVER BELOW TOHICKON CREEK, AT POINT PLEASANT, PA—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	215	201	205	200	183	191	126	116	117	165	158	163
2	203	198	201	188	179	183	125	117	121	168	162	165
3	206	199	202	214	179	196	142	123	128	172	164	169
4	203	196	199	211	199	204	131	128	130	170	146	159
5	211	198	203	202	192	197	135	130	132	146	137	141
6	219	203	210	201	192	197	143	134	135	143	140	142
7	206	196	202	230	199	219	135	131	133	148	141	145
8	200	188	195	230	214	221	150	131	139	159	147	151
9	205	191	197	227	214	220	156	147	150	167	159	165
10	207	196	201	221	214	216	157	151	155	172	167	170
11	213	200	209	216	207	213	158	154	156	177	171	174
12	209	202	205	213	205	208	160	155	158	187	176	180
13	213	201	208	213	208	211	161	149	154	191	177	187
14	216	207	211	216	207	212	---	---	---	192	175	184
15	220	210	216	230	211	216	---	---	---	179	176	177
16	217	210	214	211	204	208	---	---	---	179	176	178
17	217	208	213	206	199	202	---	---	---	181	176	179
18	222	206	210	201	182	191	164	160	162	188	178	183
19	232	222	229	185	129	154	172	162	164	191	179	187
20	228	208	218	129	112	120	169	163	167	185	179	182
21	222	204	212	119	111	113	176	168	173	190	183	186
22	209	198	205	118	101	111	180	174	176	195	190	193
23	---	---	---	104	97	100	184	178	181	198	195	196
24	---	213	---	99	96	97	184	176	181	198	196	198
25	215	198	207	107	99	103	185	176	179	203	198	201
26	203	186	194	114	106	111	185	177	182	203	184	197
27	199	187	189	118	112	116	193	185	189	200	183	190
28	194	186	189	119	115	115	191	171	185	183	165	172
29	---	---	---	122	115	119	171	158	162	171	165	169
30	---	---	---	130	121	127	164	157	161	176	161	164
31	---	---	---	124	116	120	---	---	---	174	167	169
MONTH	232	186	206	230	96	168	193	116	157	203	137	175

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	182	164	176	179	173	176	223	208	219	238	226	234
2	164	119	134	192	179	185	227	220	223	231	221	226
3	120	108	113	197	191	192	232	223	228	234	118	199
4	110	108	110	203	193	196	226	202	217	118	102	105
5	125	109	119	206	200	204	216	181	194	104	77	90
6	131	118	125	211	203	208	187	156	168	88	77	83
7	132	128	129	215	205	211	162	145	158	102	88	96
8	150	128	140	219	209	215	155	145	150	117	102	109
9	147	142	145	225	212	219	160	149	155	126	117	122
10	155	145	149	228	222	226	170	153	162	142	126	133
11	151	145	147	232	223	227	173	159	164	151	141	146
12	162	149	155	232	227	230	172	144	163	156	147	151
13	167	146	159	235	220	230	170	139	150	163	155	157
14	153	145	147	220	208	213	148	138	143	178	163	170
15	153	137	148	226	213	220	154	148	152	197	178	185
16	139	135	137	236	226	232	167	154	159	196	156	174
17	141	135	138	239	233	236	173	163	168	158	124	139
18	153	141	146	245	237	242	177	168	172	129	120	123
19	157	151	154	250	241	246	181	177	179	140	120	129
20	161	151	157	250	243	248	188	181	185	151	137	144
21	161	142	156	251	240	244	196	188	192	152	143	147
22	146	125	138	258	215	239	204	196	200	157	149	153
23	127	121	124	222	181	206	209	204	207	164	140	154
24	129	123	124	227	210	222	213	208	210	140	111	123
25	134	123	129	216	197	204	222	210	216	111	104	106
26	139	132	136	204	197	199	232	222	226	114	106	110
27	142	138	140	226	198	208	238	230	233	124	114	118
28	156	140	148	226	217	222	232	224	228	140	119	129
29	165	156	161	230	213	222	232	226	230	138	120	131
30	173	165	169	220	213	217	236	225	230	120	113	115
31	---	---	---	220	213	218	240	234	237	---	---	---
MONTH	182	108	142	258	173	218	240	138	191	238	77	140
YEAR	298	77	172									

01460200 DELAWARE RIVER BELOW TOHICKON CREEK, AT POINT PLEASANT, PA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.5	7.4	7.6	7.5	7.3	7.4	7.4	7.3	7.3	7.5	7.4	7.5
2	8.6	7.3	7.7	7.5	7.3	7.5	7.4	7.3	7.4	7.5	7.4	7.5
3	8.6	7.3	7.8	7.5	7.3	7.4	7.5	7.3	7.4	7.4	7.1	7.3
4	7.7	7.4	7.5	7.6	7.4	7.5	7.5	7.3	7.4	7.2	7.0	7.1
5	8.4	7.4	7.7	7.6	7.4	7.5	7.5	7.4	7.4	7.2	7.1	7.2
6	8.5	7.4	7.7	7.6	7.4	7.4	7.6	7.3	7.4	7.2	7.1	7.2
7	8.5	7.5	7.8	7.7	7.4	7.5	7.6	7.4	7.5	7.3	6.9	7.1
8	8.6	7.5	7.8	7.6	7.4	7.5	7.6	7.4	7.5	7.1	7.0	7.0
9	8.4	7.5	7.7	7.6	7.4	7.4	7.7	7.5	7.5	7.1	7.0	7.0
10	8.0	7.5	7.6	7.6	7.4	7.4	7.6	7.5	7.6	7.1	7.0	7.1
11	7.6	7.5	7.5	7.6	7.3	7.4	---	---	---	7.2	7.1	7.1
12	7.5	7.2	7.4	7.4	7.3	7.4	---	---	---	7.2	7.1	7.2
13	7.2	7.1	7.2	7.5	7.2	7.3	---	---	---	7.2	7.1	7.1
14	7.1	7.0	7.1	7.6	7.3	7.4	---	---	---	7.2	7.1	7.2
15	7.2	7.0	7.1	7.4	7.2	7.3	---	---	---	7.3	7.2	7.2
16	7.3	7.1	7.2	7.4	7.3	7.3	---	---	---	7.3	7.2	7.2
17	7.3	7.1	7.2	7.3	7.2	7.3	7.2	7.1	7.2	7.3	7.2	7.2
18	7.2	6.9	7.0	7.3	7.2	7.3	7.3	7.2	7.2	7.4	7.2	7.3
19	7.0	7.0	7.0	7.2	7.1	7.2	7.2	7.1	7.2	7.3	7.2	7.3
20	7.1	7.0	7.0	7.2	7.0	7.1	7.3	7.2	7.2	7.2	7.1	7.1
21	7.2	7.1	7.1	7.2	7.1	7.1	7.4	7.2	7.3	---	---	---
22	7.3	7.1	7.2	7.2	7.1	7.2	7.3	7.2	7.3	---	---	---
23	7.3	7.2	7.2	7.3	7.2	7.2	7.3	7.2	7.2	---	---	---
24	7.4	7.2	7.3	7.3	7.2	7.2	7.3	7.2	7.3	---	---	---
25	7.3	7.2	7.3	7.3	7.2	7.2	7.3	7.2	7.3	---	---	---
26	7.4	7.2	7.3	7.3	7.2	7.2	7.4	7.3	7.3	---	---	---
27	7.4	7.3	7.3	7.3	7.2	7.3	7.5	7.3	7.4	---	---	---
28	7.4	7.3	7.3	7.3	7.2	7.3	7.5	7.4	7.4	7.6	7.3	7.5
29	7.4	7.3	7.3	7.4	7.3	7.3	7.5	7.4	7.4	7.7	7.3	7.3
30	7.4	7.2	7.3	7.4	7.2	7.3	7.6	7.4	7.5	7.8	7.4	7.5
31	7.4	7.2	7.3	---	---	---	7.6	7.4	7.5	7.7	7.5	7.6
MAX	8.6	7.5	7.8	7.7	7.4	7.5	7.7	7.5	7.6	7.8	7.5	7.6
MIN	7.0	6.9	7.0	7.2	7.0	7.1	7.2	7.1	7.2	7.1	6.9	7.0

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.7	7.4	7.4	8.0	7.4	7.4	7.4	7.3	7.3	9.5	7.8	8.5
2	7.9	7.4	7.4	7.7	7.4	7.5	7.4	7.3	7.3	9.5	7.8	8.6
3	7.9	7.5	7.8	8.0	7.6	7.7	7.4	7.2	7.4	9.6	7.8	8.6
4	7.8	7.4	7.5	7.9	7.6	7.8	7.4	7.4	7.4	9.1	7.8	8.2
5	8.1	7.5	7.5	8.4	7.6	7.7	7.4	7.4	7.4	8.2	7.6	7.8
6	7.9	7.5	7.7	8.1	7.6	7.7	7.5	7.3	7.4	8.1	7.6	7.7
7	7.9	7.4	7.5	8.2	7.6	7.6	7.5	7.4	7.4	8.3	7.7	7.8
8	8.1	7.4	7.6	8.8	7.7	8.4	7.5	7.4	7.4	8.0	7.6	7.8
9	8.2	7.5	7.7	8.7	7.7	7.7	7.5	7.4	7.5	8.4	7.5	7.8
10	8.1	7.6	7.7	7.8	7.7	7.8	7.6	7.4	7.5	8.5	7.6	7.9
11	8.0	7.4	7.5	8.6	7.7	7.8	7.6	7.5	7.5	8.3	7.6	7.8
12	8.5	7.6	7.7	8.7	7.8	8.3	7.5	7.5	7.5	8.1	7.7	7.8
13	8.4	7.6	8.2	8.4	7.8	7.9	7.6	7.5	7.5	8.0	7.6	7.8
14	8.2	7.6	8.1	8.6	7.7	8.3	---	---	---	7.8	7.7	7.8
15	8.5	7.6	7.7	8.5	7.7	7.8	---	---	---	7.8	7.6	7.7
16	8.3	7.7	8.2	9.0	7.8	8.7	---	---	---	7.8	7.7	7.7
17	8.2	7.6	8.0	8.9	7.7	7.8	---	---	---	7.8	7.7	7.7
18	8.6	7.4	7.9	7.8	7.5	7.7	7.9	7.6	7.7	7.9	7.7	7.8
19	8.5	7.5	7.9	7.6	7.3	7.4	7.9	7.6	7.8	8.0	7.8	7.9
20	8.5	7.5	7.9	7.3	7.1	7.2	7.9	7.6	7.8	8.2	7.9	8.0
21	8.6	7.4	7.8	7.2	7.1	7.1	8.5	7.7	7.8	7.9	7.7	7.8
22	---	---	---	7.2	7.1	7.1	8.4	7.8	8.1	8.0	7.7	7.8
23	---	---	---	7.1	7.0	7.0	9.0	7.7	7.8	8.0	7.8	7.8
24	---	---	---	7.2	7.0	7.2	9.3	8.0	8.1	8.0	7.8	7.8
25	7.4	7.1	7.2	7.3	7.2	7.2	9.6	8.3	9.2	7.9	7.8	7.8
26	7.4	7.1	7.3	7.4	7.2	7.3	9.5	8.0	8.4	7.8	7.6	7.6
27	7.6	7.2	7.2	7.3	7.2	7.3	9.5	7.8	8.8	7.8	7.6	7.7
28	8.0	7.3	7.6	7.3	7.2	7.3	9.5	7.9	8.8	7.7	7.5	7.6
29	---	---	---	7.4	7.2	7.3	9.4	7.9	8.6	7.6	7.5	7.6
30	---	---	---	7.4	7.3	7.4	9.6	7.8	8.8	7.6	7.4	7.5
31	---	---	---	7.4	7.3	7.3	---	---	---	7.7	7.6	7.6
MAX	8.6	7.7	8.2	9.0	7.8	8.7	9.6	8.3	9.2	9.6	7.9	8.6
MIN	7.4	7.1	7.2	7.1	7.0	7.0	7.4	7.2	7.3	7.6	7.4	7.5

01460200 DELAWARE RIVER BELOW TOHICKON CREEK, AT POINT PLEASANT, PA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.7	7.6	7.7	8.1	7.8	7.9	8.2	7.9	8.0	8.8	7.8	8.0
2	7.6	7.3	7.4	8.2	7.9	8.0	8.4	7.7	8.0	7.9	7.5	7.6
3	7.3	7.2	7.2	8.3	8.0	8.1	8.4	7.8	8.0	7.7	7.3	7.4
4	7.4	7.2	7.3	8.6	8.0	8.2	8.0	7.7	7.8	7.3	7.2	7.2
5	7.3	7.2	7.3	8.8	8.0	8.4	7.7	7.2	7.6	7.2	7.0	7.1
6	7.4	7.3	7.4	9.1	8.1	8.6	7.4	7.2	7.3	7.1	7.0	7.1
7	7.5	7.4	7.4	9.1	8.1	8.7	7.4	7.2	7.3	7.3	7.1	7.2
8	7.6	7.4	7.6	9.3	8.1	8.8	7.4	7.3	7.3	7.4	7.2	7.3
9	7.6	7.5	7.5	9.1	8.0	8.6	7.4	7.2	7.4	7.5	7.2	7.4
10	7.6	7.4	7.6	8.5	8.0	8.2	7.4	7.2	7.4	7.7	7.4	7.4
11	7.6	7.4	7.6	9.0	7.9	8.2	7.4	7.2	7.4	7.8	7.4	7.6
12	7.6	7.4	7.6	9.1	7.8	8.6	7.5	7.3	7.4	7.9	7.3	7.7
13	7.6	7.5	7.6	9.0	7.9	8.5	7.5	7.4	7.4	7.8	7.4	7.6
14	7.5	7.3	7.5	9.0	7.8	8.4	7.4	7.2	7.4	8.0	7.5	7.6
15	7.6	7.4	7.5	8.9	7.9	8.4	7.5	7.4	7.5	7.7	7.4	7.6
16	7.4	7.3	7.4	8.8	8.0	8.4	7.6	7.4	7.5	7.6	7.4	7.5
17	7.5	7.4	7.4	9.0	7.9	8.4	7.7	7.6	7.6	7.4	7.3	7.3
18	7.5	7.4	7.5	8.7	7.9	8.3	7.7	7.4	7.6	7.3	7.2	7.3
19	7.7	7.5	7.5	8.6	7.8	8.1	7.8	7.6	7.7	7.3	7.1	7.2
20	7.7	7.5	7.6	8.3	7.8	8.0	8.1	7.7	7.8	7.4	7.2	7.4
21	7.5	7.4	7.5	8.3	7.7	7.9	8.2	7.6	7.8	7.5	7.2	7.4
22	7.6	7.5	7.5	7.9	7.4	7.6	8.4	7.7	7.9	7.5	7.3	7.4
23	7.5	7.4	7.4	7.6	7.3	7.5	8.6	7.8	8.2	7.6	7.3	7.4
24	7.5	7.4	7.5	7.6	7.5	7.6	8.8	7.9	8.4	7.5	7.2	7.3
25	7.5	7.4	7.5	7.8	7.6	7.7	9.0	7.9	8.6	7.3	7.1	7.2
26	7.5	7.4	7.5	7.9	7.6	7.8	9.0	8.0	8.6	7.3	7.2	7.3
27	7.6	7.5	7.5	8.1	7.7	7.8	9.1	8.0	8.7	7.4	7.2	7.3
28	7.6	7.5	7.6	8.3	7.8	8.0	9.4	8.0	8.9	7.4	7.3	7.4
29	7.8	7.6	7.7	8.5	7.9	8.1	9.3	8.1	8.8	7.5	7.4	7.4
30	7.8	7.7	7.8	8.6	7.9	8.2	9.2	7.8	8.6	7.4	7.3	7.4
31	---	---	---	8.7	7.9	8.2	9.4	7.8	8.8	---	---	---
MAX	7.8	7.7	7.8	9.3	8.1	8.8	9.4	8.1	8.9	8.8	7.8	8.0
MIN	7.3	7.2	7.2	7.6	7.3	7.5	7.4	7.2	7.3	7.1	7.0	7.1

YEAR			
	MAX	MAXIMUM 9.6	MINIMUM 7.0
	MIN	MAXIMUM 8.3	MINIMUM 6.9
	MEDIAN	MAXIMUM 9.2	MINIMUM 7.0

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	22.0	19.0	20.0	---	---	---	---	---	---	---	---	---
2	23.0	20.0	21.0	---	---	---	---	---	---	---	---	---
3	23.5	20.5	22.0	---	---	---	---	---	---	---	---	---
4	22.5	21.0	21.5	---	---	---	---	---	---	---	---	---
5	24.0	21.0	22.0	---	---	---	---	---	---	---	---	---
6	22.5	20.0	21.0	---	---	---	---	---	---	---	---	---
7	22.0	20.0	21.0	---	---	---	---	---	---	---	---	---
8	21.0	18.5	19.5	---	---	---	---	---	---	---	---	---
9	19.0	17.5	18.5	---	---	---	---	---	---	---	---	---
10	18.5	18.0	18.5	---	---	---	---	---	---	---	---	---
11	18.0	---	---	---	---	---	---	---	---	---	---	---
12	---	---	16.0	---	---	---	---	---	---	---	---	---
13	16.0	15.5	15.5	---	---	---	---	---	---	---	---	---
14	15.5	14.5	15.0	---	---	---	---	---	---	---	---	---
15	15.0	14.0	14.5	---	---	---	---	---	---	---	---	---
16	14.0	---	---	---	---	---	---	---	---	---	---	---
17	---	---	13.0	---	---	---	---	---	---	---	---	---
18	13.0	12.5	12.5	---	---	---	---	---	---	---	---	---
19	12.5	12.0	12.0	---	---	---	---	---	---	---	---	---
20	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
21	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
22	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
23	---	11.0	11.5	---	---	---	---	---	---	---	---	---
24	11.5	10.5	11.0	---	---	---	---	---	---	---	---	---
25	11.0	10.5	11.0	---	---	---	---	---	---	---	---	---
26	11.5	11.0	11.0	---	---	---	---	---	---	---	---	---
27	11.5	---	11.0	---	---	---	---	---	---	---	---	---
28	11.5	---	---	---	---	---	---	---	---	---	---	---
29	11.0	10.0	10.5	---	---	---	---	---	---	---	---	---
30	10.0	9.0	9.5	---	---	---	---	---	---	---	---	---
31	10.0	---	---	---	---	---	---	---	---	---	---	---
MONTH	24.0	9.0	15.4	---	---	---	---	---	---	---	---	---

01460200 DELAWARE RIVER BELOW TOHICKON CREEK, AT POINT PLEASANT, PA—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	17.5	15.0	16.0
2	---	---	---	---	---	---	---	---	---	18.5	16.5	17.0
3	---	---	---	---	---	---	---	---	---	19.0	16.5	17.5
4	---	---	---	---	---	---	---	---	---	17.5	16.5	17.0
5	---	---	---	---	---	---	---	---	---	16.5	14.5	15.5
6	---	---	---	---	---	---	---	---	---	14.5	14.0	14.0
7	---	---	---	---	---	---	---	---	---	16.0	13.5	14.5
8	---	---	---	---	---	---	---	---	---	15.5	15.0	15.0
9	---	---	---	---	---	---	---	---	---	15.5	15.0	15.0
10	---	---	---	---	---	---	---	---	---	16.0	15.0	15.5
11	---	---	---	---	---	---	---	---	---	17.0	15.5	16.0
12	---	---	---	---	---	---	---	---	---	16.5	15.5	16.0
13	---	---	---	---	---	---	---	---	---	16.0	15.0	15.5
14	---	---	---	---	---	---	---	---	---	15.5	14.5	15.0
15	---	---	---	---	---	---	---	---	---	15.0	14.0	14.5
16	---	---	---	---	---	---	---	---	---	15.0	14.0	14.5
17	---	---	---	---	---	---	---	---	---	15.5	14.0	14.5
18	---	---	---	---	---	---	---	---	---	15.5	14.0	15.0
19	---	---	---	---	---	---	---	---	---	18.0	14.0	16.0
20	---	---	---	---	---	---	---	---	---	19.5	15.5	17.5
21	---	---	---	---	---	---	---	---	---	18.0	17.0	17.5
22	---	---	---	---	---	---	---	---	---	17.5	16.5	17.0
23	---	---	---	---	---	---	---	---	---	16.5	15.5	16.0
24	---	---	---	---	---	---	---	---	---	16.0	15.5	15.5
25	---	---	---	---	---	---	---	---	---	15.5	15.0	15.5
26	---	---	---	---	---	---	---	---	---	15.0	14.5	15.0
27	---	---	---	---	---	---	---	---	---	15.5	---	---
28	---	---	---	---	---	---	16.0	13.0	14.5	16.0	---	---
29	---	---	---	---	---	---	16.0	14.5	15.0	17.5	15.5	16.5
30	---	---	---	---	---	---	17.0	14.5	15.5	18.5	16.5	17.5
31	---	---	---	---	---	---	---	---	---	18.0	17.5	18.0
MONTH	---	---	---	---	---	---	17.0	13.0	15.0	19.5	13.5	15.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.5	16.0	---	23.5	21.5	22.5	25.5	24.5	25.0	23.0	21.5	22.5
2	16.0	15.0	---	24.0	22.0	23.0	26.5	24.0	25.0	21.5	---	21.0
3	---	15.0	---	23.5	22.5	23.0	26.5	25.0	25.5	---	19.0	---
4	---	---	---	25.0	22.5	23.5	26.0	25.0	25.5	19.0	18.0	18.5
5	15.0	14.0	---	26.5	23.5	25.0	25.5	24.5	25.0	19.0	18.0	18.5
6	16.5	15.0	15.5	27.5	24.5	25.5	23.5	23.0	23.0	19.0	18.0	18.5
7	---	---	---	27.5	25.0	26.0	23.0	23.0	23.0	20.0	18.5	19.5
8	16.0	15.5	15.5	27.5	25.5	26.5	24.0	23.0	23.5	21.0	19.5	20.0
9	16.5	15.5	16.0	27.0	25.5	26.0	24.0	22.5	23.5	21.5	20.0	20.5
10	---	16.5	17.0	25.5	23.5	24.5	24.0	23.0	23.5	22.0	20.0	20.5
11	18.5	17.5	18.0	24.5	22.5	23.5	24.5	23.5	24.0	22.0	20.0	21.0
12	19.0	18.0	18.5	24.5	22.0	23.5	24.0	23.5	24.0	22.5	20.5	21.0
13	19.0	18.5	18.5	25.0	22.0	23.5	24.5	23.5	24.0	21.0	20.5	20.5
14	19.0	---	---	25.0	22.5	23.5	24.5	23.5	24.0	22.5	20.5	21.5
15	19.5	18.5	19.0	25.5	22.5	24.0	25.5	24.0	24.5	22.0	21.5	21.5
16	19.5	18.5	19.0	25.5	23.5	24.5	25.0	24.0	24.5	22.0	20.5	21.5
17	19.5	18.5	19.0	27.0	23.5	25.0	25.0	23.5	24.0	21.0	20.0	20.5
18	19.0	18.5	19.0	25.5	24.0	24.5	24.5	23.0	23.5	20.0	19.5	20.0
19	---	---	18.5	26.5	23.5	24.5	25.0	23.0	24.0	20.5	---	---
20	---	---	---	26.5	23.0	24.5	25.5	23.0	24.0	21.0	---	20.5
21	---	16.5	---	26.5	24.0	25.0	26.0	23.5	24.5	21.0	20.0	20.5
22	16.5	16.0	16.0	25.0	23.5	24.0	27.0	24.5	25.5	20.5	20.0	20.0
23	17.0	---	16.5	24.0	22.5	23.5	26.5	24.5	25.5	20.0	---	---
24	19.0	17.0	18.0	25.0	23.0	24.0	26.0	23.0	24.5	19.5	18.0	19.0
25	20.0	18.5	19.0	25.5	23.0	24.5	25.5	23.0	24.0	18.0	17.5	18.0
26	---	20.0	20.0	26.0	23.5	24.5	25.0	23.0	24.0	18.0	18.0	18.0
27	22.0	21.0	21.5	27.0	24.5	25.5	25.5	23.5	24.5	19.0	18.0	18.5
28	23.0	---	22.5	26.5	25.0	25.5	26.0	23.5	24.5	19.0	18.5	19.0
29	23.0	22.0	22.5	27.5	24.5	25.5	24.5	23.0	24.0	18.5	17.5	18.0
30	23.0	22.0	22.5	27.0	24.5	25.5	25.5	23.5	24.0	17.5	16.5	17.0
31	---	---	---	26.5	24.5	25.5	25.0	22.0	23.5	---	---	---
MONTH	23.0	14.0	18.7	27.5	21.5	24.5	27.0	22.0	24.2	23.0	16.5	19.8

01460200 DELAWARE RIVER BELOW TOHICKON CREEK, AT POINT PLEASANT, PA—Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.8	8.6	9.3	---	---	---	---	---	---	---	---	---
2	9.8	8.3	8.9	---	---	---	---	---	---	---	---	---
3	9.8	8.0	8.7	---	---	---	---	---	---	---	---	---
4	8.7	7.9	8.2	---	---	---	---	---	---	---	---	---
5	9.3	7.7	8.5	---	---	---	---	---	---	---	---	---
6	9.7	8.0	8.7	---	---	---	---	---	---	---	---	---
7	10.0	8.1	8.8	---	---	---	---	---	---	---	---	---
8	10.1	8.5	9.2	---	---	---	---	---	---	---	---	---
9	10.3	8.7	9.3	---	---	---	---	---	---	---	---	---
10	9.7	8.6	9.1	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	9.4	---	---	---	---	---	---	---	---	---	---	---
13	9.5	9.4	9.4	---	---	---	---	---	---	---	---	---
14	9.6	9.4	9.5	---	---	---	---	---	---	---	---	---
15	9.8	9.6	9.7	---	---	---	---	---	---	---	---	---
16	9.8	9.5	9.7	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	10.3	7.7	9.1	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	14.8	11.3	12.8
2	---	---	---	---	---	---	---	---	---	14.7	11.3	12.9
3	---	---	---	---	---	---	---	---	---	14.4	10.9	12.4
4	---	---	---	---	---	---	---	---	---	12.4	10.6	11.5
5	---	---	---	---	---	---	---	---	---	11.3	10.4	11.0
6	---	---	---	---	---	---	---	---	---	10.9	10.2	10.5
7	---	---	---	---	---	---	---	---	---	10.9	9.9	10.4
8	---	---	---	---	---	---	---	---	---	10.1	9.3	9.7
9	---	---	---	---	---	---	---	---	---	10.3	9.1	9.7
10	---	---	---	---	---	---	---	---	---	10.6	9.1	9.8
11	---	---	---	---	---	---	---	---	---	10.2	9.0	9.5
12	---	---	---	---	---	---	---	---	---	10.0	8.6	9.3
13	---	---	---	---	---	---	---	---	---	10.0	8.8	9.4
14	---	---	---	---	---	---	---	---	---	10.0	9.1	9.5
15	---	---	---	---	---	---	---	---	---	10.0	9.4	9.7
16	---	---	---	---	---	---	---	---	---	10.2	9.3	9.8
17	---	---	---	---	---	---	---	---	---	10.2	9.6	9.9
18	---	---	---	---	---	---	---	---	---	10.2	9.4	9.8
19	---	---	---	---	---	---	---	---	---	10.0	9.6	9.8
20	---	---	---	---	---	---	---	---	---	9.7	9.2	9.5
21	---	---	---	---	---	---	---	---	---	9.3	8.9	9.1
22	---	---	---	---	---	---	---	---	---	9.4	8.8	9.1
23	---	---	---	---	---	---	---	---	---	9.7	9.1	9.4
24	---	---	---	---	---	---	---	---	---	9.8	9.3	9.5
25	---	---	---	---	---	---	---	---	---	9.9	9.4	9.6
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	15.2	11.6	13.3	---	---	---
29	---	---	---	---	---	---	14.2	11.3	12.6	9.6	9.1	9.3
30	---	---	---	---	---	---	15.1	11.4	13.1	9.2	8.9	9.1
31	---	---	---	---	---	---	---	---	---	8.9	8.7	8.8
MONTH	---	---	---	---	---	---	15.2	11.3	13.0	14.8	8.6	10.0

01460200 DELAWARE RIVER BELOW TOHICKON CREEK, AT POINT PLEASANT, PA—Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.9	8.5	8.7	8.8	8.4	8.6	8.2	7.4	7.8	---	---	---
2	9.2	8.8	---	9.1	8.3	8.6	8.6	7.2	7.8	---	---	---
3	9.5	---	9.4	9.1	8.2	8.6	8.4	7.2	7.7	---	---	---
4	---	9.5	---	9.6	8.1	8.8	7.8	6.9	7.3	8.8	8.6	8.7
5	---	---	---	10.2	8.0	8.9	---	6.8	---	8.9	8.7	8.8
6	9.6	9.2	9.4	10.8	7.8	9.1	7.3	7.1	7.3	8.9	8.7	8.8
7	---	---	---	11.4	7.5	9.1	---	---	---	8.7	8.7	8.7
8	---	9.1	---	11.3	7.3	9.1	7.5	7.3	7.4	8.8	8.6	8.7
9	9.3	---	9.1	11.1	7.2	8.6	---	---	---	9.0	8.6	8.8
10	9.0	8.8	8.9	9.2	7.3	8.0	---	---	---	9.1	8.7	8.9
11	8.8	8.6	8.7	10.4	7.4	8.6	---	---	---	9.3	8.8	9.0
12	8.6	8.3	8.5	10.5	7.7	9.1	---	---	---	9.5	8.7	9.1
13	8.5	8.3	8.4	10.3	7.7	9.0	---	---	---	9.4	8.6	9.0
14	8.5	---	---	9.8	7.6	8.7	---	---	---	9.5	8.6	9.0
15	8.5	8.3	8.4	9.7	7.7	8.6	---	---	---	---	---	---
16	8.5	8.3	8.4	9.2	7.4	8.2	---	---	---	---	---	---
17	8.6	8.4	8.5	9.3	7.2	8.2	---	---	---	8.8	8.6	8.8
18	8.7	8.4	8.5	8.7	7.1	7.8	---	---	---	8.9	8.8	8.9
19	8.9	8.5	8.7	8.8	6.9	7.8	---	---	---	---	---	---
20	---	---	---	8.4	6.8	7.6	---	---	---	8.9	8.7	8.8
21	---	---	---	8.1	6.5	7.3	---	---	---	9.1	8.8	8.9
22	9.2	9.1	9.2	---	---	---	---	---	---	9.1	8.7	8.9
23	9.2	9.0	9.1	---	---	---	---	---	---	---	---	---
24	9.0	8.7	8.9	---	---	---	---	---	---	8.5	8.1	8.4
25	8.8	8.5	8.7	7.3	6.4	6.9	---	---	---	8.6	8.5	8.6
26	8.6	8.4	8.5	7.9	7.0	7.6	---	---	---	8.7	8.6	8.7
27	8.4	8.0	8.3	7.9	7.1	7.5	---	---	---	8.7	8.6	8.6
28	8.4	8.2	8.3	8.1	6.9	7.4	---	---	---	8.6	8.5	8.5
29	8.5	8.2	8.4	8.7	7.2	7.8	---	---	---	8.8	8.5	8.7
30	8.7	8.2	8.5	8.9	7.5	8.1	---	---	---	9.1	8.8	8.9
31	---	---	---	9.0	7.5	8.1	---	---	---	---	---	---
MONTH	9.6	8.0	8.7	11.4	6.4	8.3	8.6	6.8	7.5	9.5	8.1	8.8

01460860 LOCKATONG CREEK AT ROUTE 12, AT BAPTISTOWN, NJ

LOCATION.--Lat 40°31'01", long 74°59'30", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 12, 0.8 mi east of Baptistown, 1.7 mi northwest of Point Breeze, and 4.5 mi upstream of Muddy Run.

DRAINAGE AREA.--8.46 mi^2.

PERIOD OF RECORD.--November 2002 to August 2003.

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 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
07...	0900	7.4	0.198	0.155	746	10.3	85	7.8	159	9.1	6.2	57	12.6
FEB													
25...	1000	8.0	0.229	0.183	758	15.8	109	7.1	105	0.4	0.0	22	4.85
MAY													
22...	1000	4.8	0.118	0.093	754	7.4	72	7.8	192	15.1	13.5	66	14.9
AUG													
12...	1000	4.1	0.260	0.200	750	7.9	89	7.7	165	24.6	20.8	62	14.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
07...	6.09	2.26	9.35	33	11.8	<0.17	11.6	21.4	102	111	1	0.38	<0.030
FEB													
25...	2.33	2.37	8.51	12	14.9	<0.17	4.7	7.6	56	69	8	0.43	0.084
MAY													
22...	7.11	1.79	13.0	44	17.2	<0.17	10.5	19.5	119	129	3	0.36	<0.030
AUG													
12...	6.05	2.29	9.05	40	11.0	<0.17	14.4	14.7	107	119	1	0.49	<0.020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
07...	<0.030	1.69	0.006	0.031	0.06	0.023	0.048	2.1	2.1	0.5	<0.1	0.5	5.7
FEB													
25...	0.099	0.69	0.005	0.064	0.13	0.062	0.086	1.1	1.2	0.5	<0.1	0.5	6.8
MAY													
22...	<0.030	2.09	0.028	<0.020	0.09	0.014	0.039	2.5	2.5	0.6	<0.1	0.6	3.2
AUG													
12...	<0.020	2.44	0.006	0.035	0.10	0.045	0.067	2.9	3.0	0.5	<0.1	0.4	6.7

01460860 LOCKATONG CREEK AT ROUTE 12, AT BAPTISTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV 07...	E1.6	--	53
FEB 25...	E1.8	--	20
MAY 22...	<1.0	5.70	92
AUG 12...	<1.0	2.40	49

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover -able, ug/L (01007)	Beryll-ium, water, unfltrd recover -able, ug/L (01012)	Boron, water, unfltrd recover -able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover -able, ug/L (01034)	Copper, water, unfltrd recover -able, ug/L (01042)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan-ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, unfltrd recover -able, ug/L (71900)	Nickel, water, unfltrd recover -able, ug/L (01067)
AUG 12...	1000	<2	39.2	<0.06	42	<0.04	<0.8	1.8	500	0.39	19.0	<0.02	1.95

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover -able, ug/L (01077)	Zinc, water, unfltrd recover -able, ug/L (01092)
AUG 12...	0.7	<0.16	3

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)
FEB 25...	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01460860 LOCKATONG CREEK AT ROUTE 12, AT BAPTISTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
25...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
25...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
22...	1000	<0.006	E.018	<0.006	<0.004	<0.005	0.022	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
22...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	E.011	<0.006	<0.007

01460860 LOCKATONG CREEK AT ROUTE 12, AT BAPTISTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
22...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUN				
11...	1038	130	500	1,300
18...	1048	7,400	12,000	>16000
25...	1124	120	200	300
JUL				
02...	1100	120	100	230
09...	1110	170	200	230

Remark codes used in this table:

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, and at river mile 155.4.

DRAINAGE AREA.--6,598 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
26...	1000	16,500	2.4	0.111	0.086	766	11.5	92	8.2	128	7.0	6.0	43
FEB													
13...	0900	6,090	--	0.062	0.048	760	13.9	101	8.5	208	-2.1	2.0	68
MAY													
08...	1000	11,300	1.8	0.055	0.041	756	9.8	97	7.8	150	17.7	14.5	53
AUG													
21...	1000	9,060	4.2	0.097	0.074	760	8.2	96	7.9	199	22.8	23.0	74

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
26...	11.2	3.58	0.92	8.49	27	12.4	<0.17	4.6	12.2	--	76	3	0.43
FEB													
13...	17.4	6.01	1.22	14.5	E51	26.6	<0.17	3.1	17.3	--	126	3	0.20
MAY													
08...	13.6	4.64	1.07	9.65	38	16.2	<0.17	1.9	13.0	86	101	5	0.18
AUG													
21...	20.0	5.91	1.33	10.6	51	18.1	<0.17	5.0	14.9	111	119	12	0.21

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
26...	0.037	0.131	--	<0.003	0.032	0.05	0.021	0.035	--	0.48	0.4	<0.1	0.4
FEB													
13...	<0.030	<0.030	1.08	0.007	0.038	0.10	0.033	0.040	1.3	1.4	0.3	<0.1	0.3
MAY													
08...	<0.030	<0.030	0.69	0.007	<0.020	0.10	0.013	0.037	0.87	0.97	0.4	<0.1	0.4
AUG													
21...	0.020	<0.020	1.01	<0.003	0.040	0.11	0.043	0.058	1.2	1.3	0.7	<0.1	0.7

01461000 DELAWARE RIVER AT LUMBERVILLE, PA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
26...	3.2	<1.0	--	14
FEB				
13...	2.1	E1.1	--	E7.5
MAY				
08...	2.1	E1.5	13.4	16
AUG				
21...	3.1	E1.2	1.60	20

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUN				
11...	0924	40	400	40
18...	0935	130	300	220
25...	1010	330	600	1,100
JUL				
02...	0940	30	<100	70
09...	0955	30	<100	40

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

01463500 DELAWARE RIVER AT TRENTON, NJ

LOCATION.--Lat 40°13'18", long 74°46'41", Mercer County, Hydrologic Unit 02040105, at Calhoun Street Bridge at Trenton, 0.5 mi upstream from Assunpink Creek, and at river mile 134.5.

DRAINAGE AREA.--6,780 mi^2.

PERIOD OF RECORD.--Water years 1945 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 current year.
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 (in-situ system, max-min recorded): October 1953 to September 1961.
TEMPERATURE / DISSOLVED-OXYGEN MONITOR (in-situ system):
October 1962 to September 1965: max-min recorded (only dissolved-oxygen concentration recorded during water year 1964).
October 1965 to May 1968: measurements recorded hourly.
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 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 located inside raw-water intake of Morrisville Water Filtration Plant, Morrisville, PA, 1600 feet upstream from the gage house.

REMARKS.--Additional nutrient samples on Dec. 4 at 0931, Mar. 6 at 0931, June 5 at 1021, and Sept. 4 at 0901 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 "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report. 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 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 "Accuracy of the Records" in the Explanation of Water-Quality Records section of this report. Data from the following periods were adjusted:
DISSOLVED OXYGEN: Oct. 16 to Feb. 12, Feb. 27 to Mar. 13, Mar. 25 to Apr. 25, May 5 to May 23, May 28 to July 1, July 7 to Aug. 18, Sept. 2-15.
pH: Sept. 2-15.
WATER TEMPERATURE: Jan. 15 to Feb. 27, Apr. 2 to May 13.
TURBIDITY: Oct. 1-16, May 21-23, May 26-28, June 2-3, July 1-8, July 16 to Aug. 4.

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. 4 at 0932, Mar. 6 at 0932, June 5 at 1022, and Sept. 4 at 0902; 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 OF SATURATION: Maximum, 151, Aug. 12, 2002; minimum, 64, Sept. 3, 2003.
pH: Maximum, 10.3 units, Aug. 9, 10, 1983; minimum 5.3 units, June 22, 1972.
SPECIFIC CONDUCTANCE: Maximum, 468 µS/cm, Jan. 11, 1999; minimum, 63 µS/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 2000-03.

EXTREMES FOR CURRENT YEAR.--
DISSOLVED OXYGEN: Maximum, 17.1 mg/L, Feb. 19; minimum, 5.8 mg/L, Sept. 3.
DISSOLVED OXYGEN PERCENT OF SATURATION: Maximum, 147, Apr. 28; minimum, 64, Sept. 3.
pH: Maximum, 9.4 units, Apr. 28; minimum, 6.2 units, Sept. 5, 6.
SPECIFIC CONDUCTANCE: Maximum, 305 µS/cm, Dec. 13; minimum, 77 µS/cm, Sept. 6.
WATER TEMPERATURE: Maximum, 27.3°C, July 8; minimum, -0.1°C, on several days during January and February.
TURBIDITY: Maximum, 200 NTU, July 23; minimum, <2.0 NTU, on many days.

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
NOV											
01...	*0715*	*Field Blank*	--	--	--	--	--	--	--	--	--
01...	0920	Environmental	10,400	2.3	--	--	--	761	12.6	107	7.8
DEC											
04...	0930	Environmental	10,900	1.7	3.2	0.084	0.064	770	14.6	102	7.7
04...	0931	Environmental	--	--	--	--	--	--	--	--	--
04...	0932	Environmental	--	--	--	--	--	--	--	--	--
JAN											
08...	0940	Environmental	20,000	2.3	--	--	--	745	13.6	101	7.6
MAR											
06...	0930	Environmental	17,800	--	8.9	0.080	0.063	752	13.7	101	7.7
06...	0931	Environmental	--	--	--	--	--	--	--	--	--
06...	0932	Environmental	--	--	--	--	--	--	--	--	--
APR											
10...	1040	Environmental	24,400	3.7	--	--	--	760	13.4	104	7.4
MAY											
08...	0920	Environmental	11,800	3.6	--	--	--	752	9.9	100	7.9
JUN											
05...	1020	Environmental	39,700	15	17	0.156	0.120	751	10.2	99	7.4
05...	1021	Environmental	--	--	--	--	--	--	--	--	--
05...	1022	Environmental	--	--	--	--	--	--	--	--	--
JUL											
02...	0915	Environmental	13,500	3.5	--	--	--	756	8.9	103	7.8
SEP											
04...	0900	Environmental	35,400	37	31	0.158	0.119	752	8.9	96	7.3
04...	0901	Environmental	--	--	--	--	--	--	--	--	--
04...	0902	Environmental	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
NOV													
01...	--	--	--	--	--	--	--	--	--	--	--	*<0.20*	--
01...	154	--	8.0	--	--	--	--	--	--	32	40	14.5	--
DEC													
04...	153	-0.5	1.0	51	13.3	4.37	1.07	9.42	33	33	40	15.0	<0.17
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
08...	179	5.0	2.1	--	--	--	--	--	--	27	33	21.8	--
MAR													
06...	198	--	2.5	54	14.0	4.69	1.32	14.5	--	34	42	25.6	<0.17
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
10...	160	9.5	4.3	--	--	--	--	--	--	25	30	19.6	--
MAY													
08...	160	17.5	15.2	--	--	--	--	--	--	34	41	15.1	--
JUN													
05...	124	21.5	13.7	39	10.5	3.14	1.12	8.61	25	25	30	13.2	<0.17
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
02...	191	--	22.3	--	--	--	--	--	--	44	53	18.5	--
SEP													
04...	116	--	18.3	35	9.93	2.42	1.20	6.87	25	24	30	11.8	<0.17
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)
NOV													
01...	--	*<0.2*	--	--	--	*<0.10*	*<0.04*	--	*<0.06*	*<0.008*	*<0.02*	--	--
01...	--	16.6	--	--	--	0.24	<0.04	--	0.94	E.006	0.03	--	--
DEC													
04...	4.5	14.1	85	95	--	0.18	<0.04	--	0.86	<0.008	0.02	<0.02	--
04...	--	--	--	--	0.14	--	--	--	0.84	--	--	--	0.032
04...	--	--	--	--	--	--	0.044	0.038	--	<0.003	0.034	--	--
JAN													
08...	--	13.6	--	--	--	0.19	E.03	--	0.98	<0.008	E.02	--	--
MAR													
06...	4.0	14.0	103	114	--	0.42	E.04	--	0.98	0.008	0.02	0.14	--
06...	--	--	--	--	0.26	--	--	--	0.97	--	--	--	0.036
06...	--	--	--	--	--	--	0.039	0.038	--	0.008	0.036	--	--
APR													
10...	--	12.3	--	--	--	0.27	0.05	--	0.72	E.004	E.01	--	--
MAY													
08...	--	12.8	--	--	--	0.33	<0.04	--	0.57	E.006	<0.02	--	--
JUN													
05...	4.7	10.6	70	86	--	0.49	<0.04	--	0.73	E.006	--	0.26	--
05...	--	--	--	--	0.27	--	--	--	0.68	--	--	--	0.032
05...	--	--	--	--	--	--	0.043	0.044	--	0.005	0.027	--	--
JUL													
02...	--	14.1	--	--	--	0.25	<0.04	--	0.71	0.010	<0.02	--	--
SEP													
04...	3.4	9.0	61	72	--	0.70	E.02	--	0.47	<0.008	0.02	0.51	--
04...	--	--	--	--	0.28	--	--	--	0.46	--	--	--	0.032
04...	--	--	--	--	--	--	0.042	0.049	--	<0.003	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, high level, water, unfltrd mg/L (00340)	Chlorophyll a fluorometric method, corrctd ug/L (32209)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV												
01...	*E.003*	--	--	--	--	--	--	--	--	--	--	--
01...	0.058	--	1.2	--	--	--	--	--	--	--	3	73
DEC												
04...	0.039	--	1.1	0.2	<0.1	0.2	2.7	--	<10	--	4	106
04...	--	0.98	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	E1.8	--	--	--	--
JAN												
08...	0.032	--	1.2	--	--	--	--	--	--	--	3	184
MAR												
06...	0.076	--	1.4	0.8	<0.1	0.8	2.7	--	20	--	13	606
06...	--	1.2	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	<1.0	--	--	--	--
APR												
10...	0.032	--	0.98	--	--	--	--	--	--	--	5	356
MAY												
08...	0.042	--	0.90	--	--	--	--	--	--	--	6	204
JUN												
05...	0.089	--	1.2	3.0	<0.1	3.0	3.7	--	20	--	37	3,970
05...	--	0.95	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	E1.2	--	--	--	--
JUL												
02...	0.046	--	0.96	--	--	--	--	--	--	--	6	222
SEP												
04...	0.138	--	1.2	5.3	<0.1	5.3	4.4	--	30	23.4	63	6,020
04...	--	0.74	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	<1.2	--	--	--	--

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

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium(VI) water, fltrd, ug/L (01032)	Chrom-ium, water, fltrd, ug/L (01030)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)
DEC													
04...	0930	<2	24.5	<0.06	E6.2	11	0.05	--	<0.8	<0.8	1.2	1.2	90
04...	0932	--	--	--	--	--	--	<5	--	--	--	--	--
MAR													
06...	0930	<2	26.6	E.04	E7.1	13	<0.04	--	<0.8	E.4	1.3	1.9	290
06...	0932	--	--	--	--	--	--	<5	--	--	--	--	--
JUN													
05...	1020	<2	26.9	0.11	12	16	0.17	--	<0.8	0.9	1.6	3.2	660
05...	1022	--	--	--	--	--	--	<5	--	--	--	--	--
SEP													
04...	0900	E1	43.1	0.13	12	12	0.17	--	<0.8	E.7	1.3	3.4	1,460
04...	0902	--	--	--	--	--	--	<5	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
DEC											
04...	E.07	0.21	17.9	<0.02	<0.02	1.31	1.60	<0.5	<0.16	15	13
04...	--	--	--	--	--	--	--	--	--	--	--
MAR											
06...	E.06	0.67	34.0	<0.02	<0.02	1.33	1.31	E.3	<0.16	10	14
06...	--	--	--	--	--	--	--	--	--	--	--
JUN											
05...	0.14	2.34	94.3	<0.02	E.01	1.05	2.18	0.6	<0.16	9	30
05...	--	--	--	--	--	--	--	--	--	--	--
SEP											
04...	0.14	4.12	323	<0.02	E.01	0.67	2.53	E.3	<0.16	2	30
04...	--	--	--	--	--	--	--	--	--	--	--

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)
DEC													
04...	0930	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MAR													
06...	0930	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
JUN													
05...	1020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SEP													
04...	0900	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
DEC													
04...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2
MAR													
06...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	E.1
JUN													
05...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	E.1
SEP													
04...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	E.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
DEC									
04...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2
MAR									
06...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2
JUN									
05...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2
SEP									
04...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

Pesticides in filtered water were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only schedule-2001 compounds detected in one or more surface-water samples are included in the following table. Pesticides in unfiltered water were determined using laboratory schedule 1608. All schedule-1608 compounds are included in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	Aldrin, water, unfltrd ug/L (39330)	alpha-Endosulfan, water, unfltrd ug/L (34361)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH, water, unfltrd ug/L (39337)	Aroclor 1016 + 1242, water, unfltrd ug/L (81648)
NOV											
01...	0920	Environmental	<0.006	E.014	<0.006	<0.004	--	--	<0.005	--	--
DEC											
04...	0930	Environmental	<0.006	E.012	<0.006	<0.004	<0.04	<0.1	<0.005	<0.03	<0.1
JAN											
08...	0940	Environmental	<0.006	E.012	<0.006	<0.004	--	--	<0.005	--	--
MAR											
06...	0930	Environmental	<0.006	E.018	<0.006	<0.004	<0.04	<0.1	<0.005	<0.03	<0.1
APR											
10...	1040	Environmental	<0.006	E.009	<0.006	<0.004	--	--	<0.005	--	--
MAY											
08...	0920	Environmental	<0.006	E.011	<0.006	<0.004	--	--	<0.005	--	--
08...	*0921*	*Split Replicate*	*<0.006*	*E.010*	*<0.006*	*<0.004*	--	--	*<0.005*	--	--
JUN											
05...	1020	Environmental	<0.006	E.029	0.017	0.005	<0.20	<0.5	<0.005	<0.15	<0.5
JUL											
02...	0915	Environmental	<0.006	E.017	<0.006	<0.004	--	--	<0.005	--	--
SEP											
04...	0900	Environmental	<0.006	E.006	<0.006	<0.004	<0.04	<0.1	<0.005	<0.03	<0.1

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Aroclor 1221, water, unfltrd ug/L (39488)	Aroclor 1232, water, unfltrd ug/L (39492)	Aroclor 1248, water, unfltrd ug/L (39500)	Aroclor 1254, water, unfltrd ug/L (39504)	Aroclor 1260, water, unfltrd ug/L (39508)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	beta-Endosulfan, water, unfltrd ug/L (34356)	beta-HCH, water, unfltrd ug/L (39338)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)
NOV													
01...	--	--	--	--	--	0.022	<0.050	<0.010	--	--	<0.002	<0.041	<0.020
DEC													
04...	<1	<0.1	<0.1	<0.1	<0.1	0.013	<0.050	<0.010	<0.04	<0.03	<0.002	<0.041	<0.020
JAN													
08...	--	--	--	--	--	0.012	<0.050	<0.010	--	--	<0.002	<0.041	<0.020
MAR													
06...	<1	<0.1	<0.1	<0.1	<0.1	0.017	<0.050	<0.010	<0.04	<0.03	<0.002	<0.041	<0.020
APR													
10...	--	--	--	--	--	0.010	<0.050	<0.010	--	--	<0.002	<0.041	<0.020
MAY													
08...	--	--	--	--	--	0.012	<0.050	<0.010	--	--	<0.002	<0.041	<0.020
08...	--	--	--	--	--	*0.012*	*<0.050*	*<0.010*	--	--	*<0.002*	*<0.041*	*<0.020*
JUN													
05...	<5	<0.5	<0.5	<0.5	<0.5	0.215	<0.050	<0.010	<0.20	<0.15	<0.002	E.009	<0.020
JUL													
02...	--	--	--	--	--	0.026	<0.050	<0.010	--	--	<0.002	<0.041	<0.020
SEP													
04...	<1	<0.1	<0.1	<0.1	<0.1	0.007	<0.050	<0.010	--	<0.03	<0.002	<0.041	<0.020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chlordane, technical, water, unfltrd ug/L (39350)	cis-Chlordane, water, unfltrd ug/L (39062)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	DCPA, water fltrd 0.7u GF ug/L (82682)	delta-HCH, water, unfltrd ug/L (34259)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Dieldrin, water, unfltrd ug/L (39380)	Endosulfan sulfate water unfltrd ug/L (34351)	Endrin aldehyde, water, unfltrd ug/L (34366)	Endrin, water, unfltrd ug/L (39390)	EPTC, water, fltrd 0.7u GF ug/L (82668)
NOV													
01...	--	--	<0.006	<0.003	--	<0.004	<0.005	<0.005	--	--	--	--	<0.002
DEC													
04...	<0.1	<0.1	<0.006	<0.003	<0.09	<0.004	<0.005	<0.005	<0.02	<0.6	<0.2	<0.06	<0.002
JAN													
08...	--	--	<0.006	<0.003	--	<0.004	<0.005	<0.005	--	--	--	--	<0.002
MAR													
06...	<0.1	<0.1	<0.006	<0.003	<0.09	<0.004	<0.005	<0.005	<0.02	<0.6	<0.2	<0.06	<0.002
APR													
10...	--	--	<0.006	<0.003	--	<0.004	<0.005	<0.005	--	--	--	--	<0.002
MAY													
08...	--	--	<0.006	<0.003	--	<0.004	<0.005	<0.005	--	--	--	--	<0.002
08...	--	--	*<0.006*	*<0.003*	--	*<0.004*	*<0.005*	*<0.005*	--	--	--	--	*<0.002*
JUN													
05...	<0.5	<0.5	<0.006	<0.003	<0.45	<0.004	<0.005	<0.005	<0.10	<3.0	<1.0	<0.30	<0.002
JUL													
02...	--	--	<0.006	<0.003	--	<0.004	<0.005	<0.005	--	--	--	--	<0.002
SEP													
04...	<0.1	<0.1	<0.006	<0.003	--	<0.004	<0.005	<0.005	<0.20	--	<3.0	<0.42	<0.002

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Heptachlor epoxide water unfltrd ug/L (39420)	Heptachlor, water, unfltrd ug/L (39410)	Lindane water, unfltrd ug/L (39340)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDD, water, unfltrd ug/L (39310)	p,p-' DDE, water, unfltrd ug/L (39320)
NOV													
01...	<0.009	<0.005	<0.005	<0.007	--	--	--	<0.027	E.009	<0.006	<0.007	--	--
DEC													
04...	<0.009	<0.005	<0.005	<0.007	<0.8	<0.03	<0.03	<0.027	E.003	<0.006	<0.007	<0.1	<0.04
JAN													
08...	<0.009	<0.005	<0.005	<0.007	--	--	--	<0.027	E.006	<0.006	<0.007	--	--
MAR													
06...	<0.009	<0.005	<0.005	<0.007	<0.8	<0.03	<0.03	<0.027	E.009	<0.006	<0.007	<0.1	<0.04
APR													
10...	<0.009	<0.005	<0.005	<0.007	--	--	--	<0.027	E.009	<0.006	<0.007	--	--
MAY													
08...	<0.009	<0.005	<0.005	<0.007	--	--	--	<0.027	E.004	<0.006	<0.007	--	--
08...	*<0.009*	*<0.005*	*<0.005*	*<0.007*	--	--	--	*<0.027*	*E.004*	*<0.006*	*<0.007*	--	--
JUN													
05...	<0.009	<0.005	<0.005	<0.007	<4.0	<0.15	<0.15	<0.027	0.099	<0.006	<0.007	<0.5	<0.20
JUL													
02...	<0.009	<0.005	<0.005	<0.007	--	--	--	<0.027	E.007	<0.006	<0.007	--	--
SEP													
04...	<0.009	<0.005	<0.005	<0.007	<0.8	<0.03	<0.03	<0.027	E.004	<0.006	<0.007	<0.1	<0.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	p,p-' DDT, water, unfltrd ug/L (39300)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Toxaphene, water, unfltrd ug/L (39400)	trans-Chlordane, water, unfltrd ug/L (39065)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
NOV									
01...	--	<0.022	<0.01	<0.005	<0.02	<0.034	--	--	<0.009
DEC									
04...	<0.1	<0.022	M	<0.005	<0.02	<0.034	<2	<0.1	<0.009
JAN									
08...	--	<0.022	<0.01	<0.005	<0.02	<0.034	--	--	<0.009
MAR									
06...	<0.1	<0.022	<0.01	<0.005	<0.02	<0.034	<2	<0.1	<0.009
APR									
10...	--	<0.022	<0.01	<0.005	<0.02	<0.034	--	--	<0.009
MAY									
08...	--	<0.022	E.01	0.007	<0.02	<0.034	--	--	<0.009
08...	--	*<0.022*	*E.01*	*0.007*	*<0.02*	*<0.034*	--	--	*<0.009*
JUN									
05...	<0.5	<0.022	E.01	0.015	<0.02	<0.034	<10	<0.5	<0.009
JUL									
02...	--	<0.022	E.01	0.013	<0.02	<0.034	--	--	<0.009
SEP									
04...	<0.1	<0.022	E.01	E.005	<0.02	<0.034	<2	<0.1	<0.009

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

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
07...	0935	<10	<100	80
14...	0935	<10	100	140
21	1045	20	<100	<20
28	1050	220	500	500
JUNE				
04...	0910	610	2500	300

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

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.7	8.5	9.5	12.5	11.9	12.2	14.2	13.7	14.0	14.4	13.9	14.1
2	10.6	8.3	9.4	12.3	11.9	12.1	14.2	13.6	13.9	13.9	13.8	13.9
3	10.8	7.9	9.2	12.4	12.0	12.2	14.2	13.6	13.9	14.3	13.9	14.0
4	8.8	7.6	8.2	12.4	12.1	12.3	14.7	14.2	14.4	14.6	14.3	14.4
5	10.5	7.5	8.8	12.4	12.1	12.3	14.8	14.5	14.6	14.7	14.4	14.6
6	10.5	7.9	9.1	12.2	11.9	12.0	14.9	14.7	14.8	14.6	14.4	14.5
7	10.2	8.0	9.1	12.1	11.7	11.9	15.1	14.8	14.9	14.6	14.3	14.4
8	11.0	8.3	9.5	12.0	11.6	11.7	15.1	14.9	15.0	14.4	14.1	14.3
9	10.8	8.7	9.7	11.8	11.4	11.6	---	---	---	14.2	13.9	14.1
10	10.1	8.7	9.4	---	---	---	15.5	15.2	15.3	14.0	13.7	13.9
11	9.7	8.8	9.3	---	---	---	15.3	15.0	15.2	14.2	13.3	13.9
12	9.3	8.7	9.1	---	---	---	15.0	14.6	14.8	---	---	---
13	9.5	9.3	9.5	---	---	---	14.7	14.4	14.6	---	---	---
14	9.6	9.5	9.6	---	---	---	14.4	13.8	14.0	14.8	14.4	14.6
15	9.9	9.6	9.7	---	---	---	13.9	13.8	13.8	14.8	14.4	14.6
16	10.0	9.7	9.8	10.9	10.7	10.8	13.9	13.8	13.9	15.0	14.6	14.8
17	10.5	9.9	10.3	11.2	10.9	11.0	14.6	13.9	14.2	15.0	14.6	14.8
18	10.7	10.4	10.6	11.5	11.0	11.3	15.2	14.6	14.9	15.2	14.8	15.0
19	10.9	10.7	10.8	11.9	11.5	11.8	15.2	15.0	15.1	15.2	14.9	15.1
20	11.1	10.8	11.0	12.2	11.9	12.1	15.0	14.0	14.6	15.2	14.9	15.1
21	11.4	11.1	11.2	12.2	11.9	12.1	14.0	13.8	13.8	15.2	14.9	15.1
22	11.7	11.3	11.5	12.0	11.7	11.9	14.2	13.8	14.1	15.4	14.9	15.2
23	11.9	11.4	11.6	12.2	11.7	12.0	14.4	14.2	14.3	15.5	15.2	15.3
24	12.0	11.6	11.8	12.5	11.7	12.2	14.6	14.3	14.5	15.4	15.3	15.3
25	12.2	11.8	12.0	12.8	12.3	12.6	14.4	14.2	14.3	15.3	15.2	15.2
26	12.0	11.8	11.9	12.8	12.5	12.6	14.9	14.3	14.7	15.2	14.9	15.1
27	12.1	11.7	11.9	12.8	12.3	12.6	15.3	14.9	15.1	15.1	14.7	14.9
28	12.3	11.9	12.1	13.3	12.8	13.1	15.2	14.8	15.0	15.1	15.0	15.1
29	12.2	11.9	12.1	13.7	13.3	13.5	15.0	14.7	14.8	15.1	14.8	14.9
30	12.4	12.0	12.2	13.8	13.5	13.6	15.0	14.6	14.8	14.9	14.7	14.8
31	12.7	12.3	12.5	---	---	---	14.7	14.4	14.6	14.7	14.2	14.4
MONTH	12.7	7.5	10.4	13.8	10.7	12.1	15.5	13.6	14.5	15.5	13.3	14.7

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	14.3	13.7	13.9	15.2	14.6	14.9	12.7	12.4	12.6	12.6	9.3	10.7
2	14.1	13.6	13.8	14.8	14.1	14.4	12.9	12.6	12.7	12.4	8.9	10.6
3	15.1	13.6	14.3	14.5	14.0	14.3	12.7	12.4	12.6	12.4	8.3	10.4
4	14.6	14.1	14.3	15.1	14.1	14.6	12.4	12.3	12.4	11.6	8.8	10.0
5	15.8	14.2	14.8	14.8	14.0	14.4	12.6	12.4	12.5	10.4	8.5	9.4
6	16.1	14.9	15.4	14.2	13.6	13.8	13.1	12.6	12.9	10.7	8.9	9.7
7	16.0	15.2	15.6	14.7	13.7	14.2	---	---	---	12.3	9.7	10.8
8	16.1	15.1	15.6	15.1	14.0	14.5	13.9	13.5	13.7	10.6	8.9	9.5
9	16.4	15.4	15.8	14.9	13.5	14.1	14.0	13.8	13.9	10.5	8.8	9.7
10	16.0	15.2	15.5	13.6	13.2	13.4	13.9	13.6	13.8	11.1	9.7	10.2
11	16.2	14.9	15.5	14.4	13.4	13.9	13.6	13.2	13.4	11.2	9.5	10.0
12	16.2	14.9	15.5	15.1	13.6	14.3	13.2	12.6	12.9	11.0	9.4	10.0
13	16.3	15.0	15.7	14.3	12.9	13.7	12.6	12.2	12.5	10.2	9.1	9.7
14	17.0	15.4	16.0	13.5	12.4	13.0	12.5	12.0	12.2	10.5	8.8	9.7
15	16.7	15.2	16.0	14.1	12.6	13.3	12.1	11.5	11.9	10.8	9.3	10.1
16	16.7	15.6	16.1	14.1	12.3	13.1	11.8	10.9	11.5	10.8	9.6	10.2
17	16.3	15.8	16.1	13.1	11.7	12.3	11.3	10.6	10.9	11.2	9.9	10.5
18	17.0	15.6	16.1	11.7	10.7	11.2	12.2	11.1	11.5	11.2	9.9	10.5
19	17.1	16.2	16.6	11.6	10.6	11.2	13.3	11.2	12.2	11.4	10.1	10.7
20	17.0	15.9	16.4	12.7	11.5	12.3	13.6	11.4	12.4	11.1	9.8	10.4
21	16.9	15.3	16.0	12.7	12.3	12.5	13.7	11.2	12.3	---	---	---
22	15.7	14.3	14.8	12.4	12.0	12.1	13.4	10.6	11.9	---	---	---
23	15.4	14.0	14.2	---	---	---	13.4	10.6	11.9	---	---	---
24	15.0	14.1	14.7	---	---	---	15.3	11.1	12.8	---	---	---
25	15.3	14.8	15.1	---	---	---	14.9	11.2	12.8	---	---	---
26	15.8	15.0	15.4	13.4	12.8	13.2	12.2	10.2	11.0	---	---	---
27	15.8	15.2	15.5	13.4	13.0	13.1	14.8	9.9	12.1	---	---	---
28	15.8	14.9	15.3	13.2	12.8	13.0	14.7	10.6	12.4	---	---	---
29	---	---	---	12.9	12.3	12.6	12.1	9.5	10.9	9.7	8.9	9.4
30	---	---	---	12.4	11.9	12.1	12.9	9.2	11.0	9.5	8.8	9.1
31	---	---	---	12.4	12.1	12.2	---	---	---	9.0	8.6	8.8
MONTH	17.1	13.6	15.4	15.2	10.6	13.3	15.3	9.2	12.3	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.1	8.4	8.8	---	---	---	8.7	7.6	8.1	---	---	---
2	9.5	9.0	9.3	---	---	---	8.9	7.6	8.1	---	---	---
3	10.0	9.5	9.7	---	---	---	8.9	7.6	8.3	9.1	5.8	8.1
4	10.2	9.9	10.1	---	---	---	8.6	7.5	8.0	9.4	7.6	9.0
5	10.3	9.9	10.1	---	---	---	7.9	7.5	7.7	9.5	9.1	9.3
6	10.1	9.7	10	---	---	---	8.2	7.9	8.1	9.6	9.1	9.4
7	9.9	9.7	9.8	---	---	---	8.5	8.1	8.3	9.5	8.9	9.4
8	9.9	9.7	9.8	10.8	8.2	9.4	8.5	7.9	8.3	9.4	8.6	9.2
9	9.9	9.4	9.8	10.7	8.1	9.2	8.6	8.3	8.4	9.6	8.5	9.2
10	9.7	9.2	9.5	8.8	7.1	8.0	8.5	8.0	8.3	9.7	8.5	9.1
11	9.5	9.1	9.3	10.6	7.0	8.7	8.6	8.3	8.4	10.1	8.8	9.4
12	9.4	8.9	9.1	11.4	8.1	9.7	8.5	8.4	8.4	9.9	8.4	9.2
13	9.0	8.8	8.9	11.7	6.2	9.8	8.7	8.4	8.5	9.4	8.6	9.1
14	9.0	8.8	8.9	10.9	8.0	9.3	8.6	8.3	8.5	9.9	8.6	9.2
15	9.0	8.6	8.9	10.9	7.3	9.4	8.6	8.3	8.5	---	---	---
16	9.1	8.6	9.0	10.2	7.5	8.9	8.4	8.2	8.3	---	---	---
17	9.3	8.9	9.1	10.6	7.3	9.0	8.6	8.2	8.4	---	---	---
18	9.4	9.0	9.2	10.2	7.7	9.0	---	---	---	8.7	8.4	8.6
19	9.7	9.4	9.5	11.4	7.4	9.3	---	---	---	8.6	8.3	8.6
20	9.6	9.2	9.4	11.4	7.4	9.5	---	---	---	8.8	6.9	8.6
21	9.8	9.3	9.6	10.2	7.2	8.8	---	---	---	8.9	7.0	8.6
22	10.3	9.7	10.0	9.0	7.2	7.7	---	---	---	9.0	8.6	8.8
23	10.2	9.9	10.1	7.8	7.1	7.5	---	---	---	8.8	8.5	8.7
24	10.0	9.6	9.8	8.1	7.4	7.7	---	---	---	8.9	8.5	8.7
25	9.8	9.4	9.6	8.5	7.2	8.0	---	---	---	9.1	8.8	9.0
26	9.5	8.8	9.4	8.8	7.7	8.2	---	---	---	9.2	9.1	9.2
27	9.3	9.0	9.1	9.1	7.6	8.3	---	---	---	9.3	9.0	9.2
28	9.3	8.5	9.1	9.2	7.3	8.2	---	---	---	9.1	8.9	9.0
29	9.4	8.8	9.1	9.6	7.6	8.6	---	---	---	9.2	8.8	9.1
30	9.7	8.8	9.2	10.0	7.8	8.8	---	---	---	9.8	9.1	9.5
31	---	---	---	9.8	7.9	8.9	---	---	---	---	---	---
MONTH	10.3	8.4	9.4	---	---	---	---	---	---	10.1	5.8	9.0
YEAR	17.1	5.8	11.7									

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	120	92	104	108	100	104	106	101	104	108	105	106
2	121	90	105	104	100	102	104	100	102	106	104	105
3	125	88	105	104	99	102	102	98	100	105	103	105
4	100	86	92	103	100	101	104	100	102	106	104	105
5	121	84	101	103	98	101	103	101	102	107	104	105
6	118	87	102	102	98	100	105	101	103	106	104	105
7	115	88	101	102	97	98	105	101	103	106	104	105
8	120	89	103	101	96	98	106	102	104	105	102	103
9	113	91	102	100	95	97	---	---	---	105	101	103
10	106	91	98	---	---	---	---	---	---	104	101	103
11	100	91	96	---	---	---	---	---	---	105	97	102
12	95	89	92	---	---	---	106	103	105	---	---	---
13	95	93	94	---	---	---	106	104	105	---	---	---
14	95	94	94	---	---	---	105	103	104	103	99	101
15	96	93	94	---	---	---	106	103	104	---	---	---
16	96	93	94	95	93	94	105	104	104	---	---	---
17	99	94	97	94	92	93	107	104	106	---	---	---
18	99	97	98	96	92	94	110	106	108	---	---	---
19	100	97	99	97	95	96	109	106	108	---	---	---
20	102	98	100	99	97	98	108	105	107	---	---	---
21	105	101	102	99	97	98	105	104	104	---	---	---
22	107	102	105	98	96	97	107	104	106	106	102	104
23	109	102	105	99	94	97	108	105	106	106	104	105
24	107	103	106	102	94	98	108	105	107	105	105	105
25	108	105	107	103	99	101	107	103	105	105	104	104
26	108	105	106	104	100	101	108	104	106	104	102	103
27	109	104	106	103	99	101	110	107	108	103	100	102
28	109	105	107	104	100	102	110	106	108	103	103	103
29	107	104	106	104	101	102	110	106	108	103	101	102
30	106	103	105	104	101	102	110	106	108	102	100	101
31	109	104	106	---	---	---	110	106	108	100	97	98
MONTH	125	84	101	108	92	99	110	98	105	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	98	94	95	112	106	109	102	100	101	130	93	108
2	100	96	98	110	103	106	104	99	101	131	92	111
3	111	96	103	106	101	104	105	101	103	131	86	108
4	108	104	106	110	101	105	103	102	102	122	90	104
5	114	103	108	110	101	106	103	101	102	104	86	94
6	115	105	110	105	99	101	108	102	105	104	87	95
7	113	106	110	107	98	103	---	---	---	123	93	106
8	115	106	110	113	101	107	108	105	106	106	88	95
9	116	106	111	115	101	107	108	106	107	104	87	96
10	113	107	109	104	97	100	109	106	108	111	96	101
11	115	103	109	106	97	102	108	106	106	114	95	101
12	115	104	109	113	99	106	109	104	106	113	95	102
13	114	103	109	108	97	103	110	104	107	102	90	96
14	120	106	111	103	92	98	112	104	108	104	86	95
15	117	106	112	109	94	101	112	104	108	106	90	98
16	114	107	111	112	95	103	114	103	108	105	93	100
17	112	108	110	107	93	100	106	100	104	110	95	102
18	117	107	110	96	89	93	110	101	105	110	96	103
19	117	111	114	93	87	90	123	100	110	117	98	107
20	121	109	114	96	90	94	127	103	114	118	99	108
21	123	108	115	97	94	96	129	103	115	---	---	---
22	114	104	108	96	94	95	128	99	112	---	---	---
23	112	101	103	---	---	---	125	99	111	---	---	---
24	107	101	104	---	---	---	144	101	119	---	---	---
25	110	104	107	---	---	---	142	103	120	---	---	---
26	112	105	109	110	107	109	116	96	104	---	---	---
27	112	106	109	111	107	109	146	93	116	---	---	---
28	115	105	110	111	108	109	147	102	122	---	---	---
29	---	---	---	109	106	107	121	93	108	101	92	96
30	---	---	---	106	102	103	131	91	110	102	91	96
31	---	---	---	103	101	102	---	---	---	95	90	93
MONTH	123	94	108	115	87	102	147	91	109	---	---	---

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	95	87	91	---	---	---	106	92	98	---	---	---
2	96	91	94	---	---	---	110	91	98	---	---	---
3	98	94	96	---	---	---	111	93	102	100	64	90
4	99	96	97	---	---	---	106	91	99	99	81	96
5	101	96	99	---	---	---	96	91	93	100	96	99
6	102	98	100	---	---	---	97	93	95	102	96	100
7	99	97	98	---	---	---	99	95	97	103	97	101
8	99	97	98	137	101	118	101	92	97	104	95	100
9	100	96	98	134	101	115	102	97	100	107	93	101
10	101	94	98	108	85	96	100	94	98	108	93	101
11	100	96	98	127	82	103	102	97	100	114	97	105
12	101	95	97	---	---	---	102	99	100	111	94	103
13	96	94	95	142	73	116	102	99	101	104	95	101
14	97	93	95	130	94	109	102	99	101	113	96	104
15	98	93	96	133	85	111	103	98	101	---	---	---
16	99	93	96	125	89	107	101	98	100	---	---	---
17	101	95	98	132	86	109	104	97	100	---	---	---
18	101	96	98	125	92	109	---	---	---	95	92	94
19	104	100	101	141	88	113	---	---	---	96	92	94
20	102	97	100	141	89	116	---	---	---	98	77	94
21	101	98	100	126	86	108	---	---	---	99	77	95
22	104	99	102	110	86	93	---	---	---	99	95	97
23	105	100	102	92	84	89	---	---	---	97	93	95
24	105	100	103	97	87	92	---	---	---	95	92	94
25	106	101	103	103	86	96	---	---	---	96	92	94
26	106	96	104	108	92	99	---	---	---	97	95	96
27	106	100	104	113	92	102	---	---	---	99	94	97
28	108	97	104	115	90	101	---	---	---	97	94	96
29	110	102	105	120	92	106	---	---	---	98	93	97
30	114	101	107	123	95	107	---	---	---	101	95	99
31	---	---	---	120	95	108	---	---	---	---	---	---
MONTH	114	87	99	---	---	---	---	---	---	114	64	98
YEAR	147	64	103									

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.6	7.5	7.9	7.8	7.5	7.7	7.6	7.5	7.6	7.7	7.6	7.7
2	8.7	7.5	8.0	7.8	7.7	7.7	7.6	7.5	7.6	7.7	7.6	7.6
3	8.7	7.5	8.1	7.8	7.7	7.8	7.6	7.6	7.6	7.6	7.5	7.5
4	8.1	7.5	7.7	7.8	7.7	7.8	7.6	7.6	7.6	7.5	7.4	7.5
5	8.6	7.5	8.0	7.9	7.7	7.8	7.6	7.5	7.6	7.6	7.5	7.5
6	8.6	7.6	8.1	7.9	7.8	7.8	7.6	7.6	7.6	7.6	7.5	7.6
7	8.5	7.6	8.1	7.9	7.8	7.8	7.6	7.6	7.6	7.7	7.6	7.7
8	8.7	7.7	8.2	7.9	7.8	7.8	7.7	7.6	7.6	7.7	7.6	7.7
9	8.6	7.8	8.2	7.9	7.7	7.8	---	---	---	7.7	7.6	7.7
10	8.2	7.7	7.9	7.8	7.7	7.7	7.7	7.7	7.7	7.8	7.7	7.7
11	7.9	7.6	7.8	7.7	7.6	7.7	7.7	7.7	7.7	7.8	7.7	7.7
12	7.7	7.4	7.5	7.7	7.6	7.6	7.7	7.6	7.6	---	---	---
13	7.5	7.3	7.4	7.6	7.6	7.6	7.6	7.6	7.6	---	---	---
14	7.3	7.3	7.3	7.8	7.6	7.7	7.6	7.5	7.5	7.9	7.8	7.8
15	7.3	7.2	7.2	7.7	7.4	7.6	7.5	7.5	7.5	7.9	7.8	7.9
16	7.4	7.2	7.4	7.4	7.3	7.3	7.5	7.5	7.5	8.0	7.8	7.9
17	7.5	7.4	7.5	7.4	7.2	7.3	7.5	7.5	7.5	8.0	7.8	7.9
18	7.4	7.2	7.3	7.3	7.3	7.3	7.6	7.5	7.5	8.0	7.9	7.9
19	7.2	7.2	7.2	7.3	7.2	7.2	7.6	7.5	7.6	8.0	7.9	8.0
20	7.3	7.2	7.3	7.2	7.2	7.2	7.6	7.6	7.6	8.0	7.9	8.0
21	7.5	7.3	7.4	7.2	7.2	7.2	7.6	7.5	7.6	8.0	8.0	8.0
22	7.4	7.4	7.4	7.3	7.2	7.2	7.6	7.5	7.5	8.1	8.0	8.0
23	7.5	7.4	7.5	7.4	7.2	7.3	7.5	7.5	7.5	8.1	7.9	8.0
24	7.6	7.5	7.5	7.4	7.2	7.3	7.6	7.5	7.5	8.1	8.0	8.0
25	7.6	7.5	7.6	7.3	7.2	7.3	7.6	7.5	7.5	8.0	8.0	8.0
26	7.7	7.6	7.6	7.3	7.3	7.3	7.6	7.5	7.6	8.0	8.0	8.0
27	7.7	7.6	7.6	7.4	7.3	7.4	7.7	7.6	7.6	8.0	8.0	8.0
28	7.7	7.6	7.6	7.5	7.4	7.4	7.7	7.6	7.6	8.0	8.0	8.0
29	7.6	7.6	7.6	7.5	7.4	7.5	7.7	7.6	7.7	8.0	8.0	8.0
30	7.7	7.6	7.6	7.5	7.4	7.4	7.7	7.6	7.7	8.1	8.0	8.0
31	7.7	7.6	7.7	---	---	---	7.7	7.6	7.7	8.1	8.0	8.0
MAX	8.7	7.8	8.2	7.9	7.8	7.8	7.7	7.7	7.7	8.1	8.0	8.0
MIN	7.2	7.2	7.2	7.2	7.2	7.2	7.5	7.5	7.5	7.5	7.4	7.5
		FEBRUARY			MARCH			APRIL			MAY	
1	8.0	7.9	8.0	8.1	7.7	7.9	7.5	7.4	7.4	9.1	8.2	8.9
2	8.1	7.8	8.0	8.0	7.6	7.8	7.4	7.3	7.4	9.1	8.6	8.8
3	8.1	7.8	8.0	7.8	7.5	7.7	7.4	7.4	7.4	9.2	8.2	8.8
4	8.0	7.8	7.9	8.0	7.6	7.7	7.4	7.4	7.4	8.9	8.3	8.8
5	8.2	7.8	7.9	8.0	7.6	7.9	7.5	7.4	7.4	8.6	7.6	7.8
6	8.2	7.9	8.0	7.9	7.5	7.6	7.5	7.4	7.5	7.8	7.3	7.5
7	8.1	7.8	7.9	7.9	7.5	7.7	---	---	---	8.7	7.6	7.9
8	8.2	7.8	7.9	8.3	7.7	7.9	7.6	7.5	7.5	8.5	7.2	7.7
9	8.2	7.8	8.0	8.6	7.8	8.2	7.6	7.5	7.5	7.8	7.4	7.6
10	8.2	7.8	8.0	8.3	7.6	7.7	7.7	7.6	7.6	8.1	7.4	7.8
11	8.4	7.8	8.0	8.0	7.7	7.8	7.7	7.6	7.6	8.2	7.6	7.8
12	8.5	8.0	8.2	8.5	7.8	8.0	7.7	7.6	7.6	8.3	7.8	7.9
13	8.6	8.1	8.3	8.5	7.9	8.2	7.8	7.6	7.6	8.4	7.6	8.0
14	8.7	8.1	8.4	8.2	7.7	8.0	7.8	7.6	7.7	8.3	7.8	8.0
15	8.7	8.2	8.5	8.5	7.6	8.2	7.9	7.5	7.7	8.0	7.8	7.9
16	8.6	8.3	8.4	8.8	7.8	8.4	8.1	7.6	7.8	8.1	7.6	7.8
17	8.3	8.0	8.1	8.8	7.8	8.4	8.0	7.6	7.8	8.1	7.7	7.9
18	8.6	7.9	8.0	8.3	7.6	7.8	8.1	7.6	7.8	8.2	7.7	7.9
19	8.7	8.3	8.5	7.6	7.3	7.4	8.6	7.6	7.9	8.2	7.8	7.9
20	8.8	8.3	8.5	7.4	7.2	7.2	8.8	7.9	8.5	8.3	7.7	7.9
21	8.8	8.4	8.6	7.3	7.2	7.3	9.0	8.1	8.7	7.8	7.6	7.7
22	8.6	7.7	8.1	7.3	7.2	7.2	8.9	8.0	8.7	7.8	7.6	7.7
23	7.7	7.5	7.5	---	---	---	9.0	8.0	8.7	8.0	7.6	7.7
24	7.6	7.4	7.5	---	---	---	9.3	8.2	8.6	8.0	7.8	7.9
25	7.7	7.5	7.5	---	---	---	9.3	8.7	9.1	8.0	7.8	7.9
26	7.8	7.5	7.7	7.3	7.2	7.3	9.2	8.6	8.8	8.0	7.8	7.9
27	7.8	7.6	7.7	7.3	7.3	7.3	9.3	8.1	8.8	7.9	7.7	7.9
28	8.2	7.6	7.8	7.4	7.3	7.4	9.4	8.9	9.2	7.8	7.5	7.6
29	---	---	---	7.4	7.4	7.4	9.2	8.4	8.9	7.7	7.5	7.6
30	---	---	---	7.5	7.4	7.4	9.2	8.3	8.9	7.7	7.4	7.5
31	---	---	---	7.4	7.4	7.4	---	---	---	7.6	7.4	7.5
MAX	8.8	8.4	8.6	8.8	7.9	8.4	9.4	8.9	9.2	9.2	8.6	8.9
MIN	7.6	7.4	7.5	7.3	7.2	7.2	7.4	7.3	7.4	7.6	7.2	7.5

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.5	7.4	7.4	8.1	7.5	7.8	7.6	7.2	7.5	8.5	7.6	8.0
2	7.5	7.2	7.2	8.4	7.7	7.9	7.7	7.2	7.4	7.6	7.1	7.4
3	7.2	7.0	7.2	8.2	7.7	7.9	7.8	7.4	7.6	7.3	6.9	7.1
4	7.3	7.2	7.2	8.5	7.8	8.1	7.7	7.4	7.5	6.9	6.4	6.6
5	7.4	7.3	7.3	8.5	8.1	8.2	7.4	7.1	7.2	6.5	6.2	6.5
6	7.4	7.3	7.4	8.6	8.1	8.3	7.1	7.0	7.0	6.4	6.2	6.3
7	7.4	7.3	7.4	8.5	8.3	8.5	7.1	7.0	7.1	6.4	6.3	6.4
8	7.4	7.4	7.4	8.6	8.2	8.4	7.1	7.0	7.0	6.7	6.3	6.5
9	7.4	7.4	7.4	8.4	8.2	8.4	7.1	7.0	7.1	6.9	6.6	6.7
10	7.5	7.3	7.4	8.2	7.5	7.8	7.1	7.0	7.0	7.1	6.7	6.8
11	7.5	7.4	7.4	8.3	7.3	7.7	7.2	7.1	7.1	7.4	6.8	7.2
12	7.5	7.3	7.4	---	---	---	7.2	7.1	7.2	7.6	7.1	7.3
13	7.5	7.4	7.4	8.6	7.9	8.3	7.1	7.0	7.1	7.3	7.1	7.2
14	7.4	7.3	7.4	8.3	7.6	8.1	7.0	6.8	7.0	7.6	7.1	7.3
15	7.5	7.3	7.4	8.4	7.6	8.1	6.9	6.8	6.9	7.5	7.1	7.3
16	7.5	7.3	7.4	8.3	7.6	8.1	7.0	6.9	7.0	7.5	7.2	7.3
17	7.5	7.4	7.5	8.4	7.6	8.1	7.2	7.0	7.1	7.2	6.9	6.9
18	7.6	7.5	7.5	8.3	7.8	8.1	7.2	7.0	7.1	6.9	6.8	6.8
19	7.6	7.5	7.6	8.4	7.5	8.0	7.3	7.0	7.1	6.9	6.8	6.9
20	7.6	7.5	7.6	8.4	7.6	8.1	7.5	7.2	7.3	7.0	6.9	7.0
21	7.6	7.5	7.6	8.2	7.4	7.9	7.6	7.3	7.4	7.1	7.0	7.0
22	7.5	7.4	7.5	7.9	7.0	7.5	7.6	7.4	7.5	7.1	7.0	7.1
23	7.5	7.4	7.4	7.1	7.0	7.0	7.9	7.4	7.6	7.1	6.9	7.0
24	7.4	7.4	7.4	7.2	7.0	7.1	8.0	7.6	7.8	7.0	6.7	6.8
25	7.4	7.2	7.4	7.3	7.1	7.2	8.3	7.8	8.0	6.7	6.4	6.4
26	7.5	7.4	7.4	7.3	7.0	7.1	8.3	8.0	8.2	6.7	6.4	6.5
27	7.5	7.2	7.4	7.6	7.1	7.2	8.4	8.0	8.2	6.8	6.6	6.7
28	7.6	7.4	7.5	7.7	7.1	7.2	8.5	8.0	8.2	6.8	6.7	6.8
29	7.8	7.5	7.6	7.9	7.2	7.6	8.6	8.2	8.4	6.9	6.8	6.9
30	8.0	7.5	7.7	8.1	7.3	7.6	8.6	8.1	8.4	6.9	6.6	6.9
31	---	---	---	8.0	7.5	7.7	8.6	7.8	8.3	---	---	---
MAX	8.0	7.5	7.7	8.6	8.3	8.5	8.6	8.2	8.4	8.5	7.6	8.0
MIN	7.2	7.0	7.2	7.1	7.0	7.0	6.9	6.8	6.9	6.4	6.2	6.3

YEAR			
	MAX	MAXIMUM 9.4	MINIMUM 6.4
	MIN	MAXIMUM 8.9	MINIMUM 6.2
	MEDIAN	MAXIMUM 9.2	MINIMUM 6.3

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	194	176	183	168	162	165	157	151	154	175	168	173
2	179	176	177	169	167	168	159	155	157	182	162	172
3	195	179	187	173	169	171	158	157	157	178	151	164
4	210	194	200	174	170	173	159	157	158	174	152	163
5	222	209	216	173	171	172	162	157	159	188	167	177
6	230	221	225	182	172	177	177	162	168	177	166	169
7	232	225	228	188	179	184	183	176	178	183	170	175
8	234	223	230	188	183	186	193	181	185	182	178	180
9	223	206	214	183	169	174	---	---	---	184	178	181
10	206	203	204	170	167	169	198	194	195	188	182	185
11	206	200	203	169	167	168	202	192	197	189	184	186
12	225	198	210	172	167	169	245	199	210	---	---	---
13	198	156	175	177	172	175	305	236	263	---	---	---
14	156	140	146	181	173	178	236	190	209	195	188	192
15	142	140	141	173	151	162	200	181	192	---	---	---
16	145	141	143	152	148	150	181	168	174	---	---	---
17	159	142	151	152	134	144	168	160	163	---	---	---
18	147	106	124	158	147	155	162	157	159	215	200	210
19	107	104	106	147	123	132	165	160	163	233	204	222
20	117	107	110	124	118	120	172	164	168	---	---	---
21	124	117	121	122	119	121	179	156	171	---	---	---
22	130	123	126	133	120	127	176	152	162	230	216	226
23	140	130	135	137	131	134	152	143	146	229	215	225
24	146	140	143	139	129	134	149	146	147	236	225	231
25	155	146	151	129	126	127	149	141	144	236	225	230
26	166	154	158	132	127	130	183	148	167	228	221	224
27	175	166	170	136	130	132	180	172	176	221	217	218
28	169	153	162	145	136	142	181	170	174	218	212	215
29	153	148	150	150	145	148	171	165	168	213	206	211
30	157	147	152	153	148	152	170	165	168	225	205	215
31	164	157	160	---	---	---	168	165	167	226	210	218
MONTH	234	104	168	188	118	155	305	141	173	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	221	210	216	200	193	197	124	121	122	174	169	172
2	212	208	210	193	186	190	131	123	127	177	171	174
3	212	209	211	205	178	189	137	131	134	182	176	179
4	214	205	209	211	201	207	138	135	136	181	168	178
5	213	207	209	201	192	199	140	136	138	168	147	155
6	225	213	219	195	188	191	143	140	141	151	146	148
7	224	210	215	216	195	210	---	---	---	157	149	153
8	214	205	208	229	215	223	152	138	144	165	155	160
9	211	203	205	229	208	221	162	152	158	173	161	167
10	216	210	213	214	197	206	169	162	165	179	173	176
11	220	213	216	219	209	215	169	166	168	183	177	179
12	221	215	218	215	209	213	171	167	169	188	182	185
13	221	216	218	212	210	211	167	162	164	196	186	190
14	225	218	222	217	208	211	162	158	159	196	186	193
15	228	223	225	235	213	224	161	156	158	188	172	178
16	232	221	229	214	208	211	162	158	160	179	175	177
17	236	212	229	210	203	207	164	161	163	180	174	176
18	230	220	227	203	181	195	170	164	168	190	174	178
19	233	218	223	181	140	158	173	170	172	189	178	183
20	238	230	235	140	114	124	176	172	174	187	179	184
21	231	218	225	134	114	126	180	174	178	193	181	188
22	229	216	222	129	104	116	185	180	183	201	187	193
23	241	206	219	---	---	---	191	184	187	206	189	198
24	243	231	235	---	---	---	190	184	187	210	189	202
25	231	222	226	---	---	---	188	184	187	216	195	204
26	222	206	214	118	112	116	191	185	188	212	192	201
27	207	194	201	123	118	120	197	191	195	208	187	197
28	196	194	195	123	120	121	198	194	196	201	175	187
29	---	---	---	128	121	124	195	168	181	177	173	175
30	---	---	---	135	126	131	172	167	169	178	167	172
31	---	---	---	133	122	128	---	---	---	173	169	172
MONTH	243	194	218	235	104	178	198	121	165	216	146	180

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	183	172	177	181	176	178	239	219	228	249	238	243
2	186	123	152	191	181	186	236	213	222	245	231	238
3	123	107	115	201	189	196	239	225	234	241	183	229
4	124	105	111	205	195	200	243	222	230	183	103	119
5	134	124	131	211	199	206	232	186	212	109	83	100
6	139	133	136	221	204	212	186	161	169	88	77	83
7	143	138	140	223	213	216	173	162	166	103	86	94
8	153	141	148	218	212	215	164	153	156	114	100	107
9	153	144	148	225	217	220	171	156	163	129	114	121
10	155	149	152	231	220	224	170	158	164	139	128	132
11	156	149	152	230	224	227	173	166	170	153	139	147
12	159	153	156	---	---	---	177	164	170	160	153	157
13	170	156	163	235	230	232	176	148	161	168	158	164
14	159	145	149	235	215	226	148	141	144	183	166	174
15	155	147	150	220	211	214	159	148	153	197	183	188
16	147	134	137	230	220	225	165	156	160	206	173	191
17	137	132	134	237	224	232	175	164	169	175	138	156
18	160	137	147	239	230	236	192	173	176	143	126	129
19	160	149	154	249	234	241	186	176	181	144	126	133
20	170	157	164	248	238	243	190	180	187	159	144	152
21	175	153	162	249	235	244	198	190	194	162	152	156
22	157	134	147	243	213	230	206	197	202	162	158	160
23	136	121	127	243	171	199	212	205	208	162	148	157
24	128	123	125	228	193	204	218	207	213	159	121	136
25	135	124	130	216	195	207	220	212	217	122	106	112
26	140	131	136	199	192	195	229	217	224	113	105	109
27	144	139	141	206	194	200	238	227	233	124	112	118
28	159	142	151	224	205	209	244	232	238	134	117	125
29	168	153	161	226	216	220	246	227	233	141	128	136
30	182	167	174	226	216	222	242	229	235	137	112	119
31	---	---	---	236	223	227	243	232	237	---	---	---
MONTH	186	105	146	249	171	216	246	141	195	249	77	146
YEAR	305	77	178									

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.7	18.8	19.8	8.7	7.8	8.1	3.1	2.5	2.8	3.6	3.2	3.4
2	21.8	19.4	20.6	8.1	7.3	7.8	2.5	2.1	2.4	3.8	3.5	3.7
3	22.7	20.6	21.6	7.5	7.0	7.3	2.5	1.3	1.9	3.5	2.5	3.0
4	22.2	20.8	21.2	7.2	6.8	7.0	1.3	0.9	1.1	2.5	1.9	2.1
5	22.4	20.7	21.5	7.1	6.4	6.8	1.1	0.1	0.5	2.0	1.8	1.9
6	21.6	20.0	20.7	7.6	7.0	7.3	1.1	0.1	0.5	2.3	1.9	2.1
7	21.1	19.6	20.3	7.7	6.9	7.2	0.6	0.0	0.3	2.2	1.9	2.1
8	20.0	18.2	19.0	7.8	6.9	7.3	0.8	0.1	0.5	2.2	1.8	2.0
9	18.6	17.2	17.6	8.2	7.4	7.8	---	---	---	2.7	1.9	2.3
10	17.5	17.1	17.3	9.3	8.0	8.7	---	---	---	3.1	2.4	2.8
11	17.1	16.5	16.7	10.7	9.3	10.2	---	---	---	3.1	2.1	2.5
12	16.7	15.6	16.1	10.5	10.1	10.4	2.0	0.7	1.3	---	---	---
13	15.6	14.9	15.1	10.4	9.8	10.2	2.3	1.8	2.0	---	---	---
14	15.1	14.4	14.7	10.1	9.3	9.7	3.2	2.3	2.9	0.8	0.2	0.5
15	14.4	13.3	13.7	9.7	9.2	9.5	3.8	3.2	3.5	---	---	---
16	13.8	12.8	13.3	9.3	8.5	8.9	3.7	3.3	3.5	---	---	---
17	12.8	12.1	12.5	8.5	7.5	7.9	3.3	2.5	2.8	---	---	---
18	12.5	11.6	12.0	7.7	7.0	7.4	2.5	1.5	1.8	---	---	---
19	11.6	11.1	11.3	7.0	6.4	6.6	1.7	1.2	1.4	---	---	---
20	11.6	10.9	11.2	6.4	6.0	6.2	3.3	1.7	2.4	---	---	---
21	11.5	10.5	11.1	6.5	5.9	6.2	3.7	3.3	3.5	---	---	---
22	11.4	10.4	11.0	6.7	6.3	6.5	3.6	3.2	3.4	0.0	-0.1	-0.1
23	11.2	10.5	10.9	6.6	6.1	6.3	3.3	2.9	3.0	-0.1	-0.1	-0.1
24	10.7	10.0	10.3	6.4	5.8	6.1	3.0	2.3	2.6	-0.1	-0.1	-0.1
25	10.1	9.8	10	6.2	5.5	5.9	2.9	2.2	2.5	-0.1	-0.1	-0.1
26	10.6	9.8	10.2	6.3	5.7	6.0	2.2	1.6	1.9	-0.1	-0.1	-0.1
27	10.5	9.9	10.2	6.3	5.4	5.8	1.9	1.5	1.7	-0.1	-0.1	-0.1
28	10.1	9.7	9.9	5.4	4.4	4.8	2.0	1.6	1.8	-0.1	-0.1	-0.1
29	9.8	9.1	9.4	4.4	3.4	3.7	2.5	1.9	2.2	-0.1	-0.1	-0.1
30	9.1	8.2	8.7	3.4	3.1	3.3	2.7	2.0	2.3	-0.1	-0.1	-0.1
31	8.7	8.0	8.3	---	---	---	3.3	2.7	3.0	-0.1	-0.1	-0.1
MONTH	22.7	8.0	14.4	10.7	3.1	7.2	3.8	0.0	2.1	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	0.6	-0.1	0.0	2.5	2.2	2.4	6.6	5.3	5.8	16.9	15.1	16.0
2	1.5	0.6	1.1	2.9	2.4	2.6	6.4	4.9	5.7	18.0	16.6	17.3
3	2.5	1.2	1.8	2.6	1.6	2.1	7.5	6.0	6.6	17.9	16.7	17.3
4	3.0	2.5	2.8	2.3	1.2	1.9	7.4	6.8	7.1	17.5	16.4	17.0
5	2.6	1.8	2.3	2.9	2.0	2.5	6.8	6.3	6.5	17.0	14.7	15.6
6	1.8	1.0	1.4	3.0	2.0	2.5	6.8	5.7	6.3	14.7	13.9	14.1
7	1.1	0.6	0.8	2.4	1.4	1.9	---	---	---	15.5	13.4	14.4
8	1.5	0.6	1.0	3.4	1.9	2.6	4.7	4.4	4.5	15.6	14.6	15.1
9	1.3	0.2	0.7	4.5	3.1	3.8	4.4	4.2	4.3	14.8	14.4	14.6
10	1.0	0.8	0.9	4.1	2.7	3.2	5.3	4.2	4.7	15.3	14.5	14.9
11	1.3	0.2	0.8	3.1	2.0	2.5	5.8	5.2	5.4	16.3	15.2	15.7
12	1.4	0.5	0.9	3.2	2.2	2.7	8.0	5.8	6.8	16.6	15.7	16.2
13	0.9	0.1	0.4	3.8	3.0	3.3	9.6	7.7	8.5	15.7	14.6	15.1
14	1.1	0.0	0.4	3.8	2.8	3.3	10.6	8.9	9.7	14.8	14.3	14.5
15	0.9	0.4	0.7	4.5	3.0	3.8	12.1	9.9	10.9	14.5	13.9	14.2
16	0.4	0.0	0.0	5.9	4.1	4.9	13.9	11.5	12.6	14.1	13.7	13.9
17	0.0	0.0	0.0	6.7	5.6	6.2	13.8	11.8	12.7	14.6	13.5	13.9
18	0.0	0.0	0.0	7.5	6.1	6.9	11.8	10.4	10.9	14.3	13.8	14.0
19	0.0	0.0	0.0	7.4	4.9	6.2	11.8	10.0	10.9	16.6	13.6	15.0
20	1.3	0.0	0.4	4.9	3.5	3.9	12.2	10.6	11.5	18.0	15.8	16.8
21	2.2	0.9	1.6	4.4	3.6	3.9	12.6	11.3	12.1	17.5	16.7	17.2
22	2.6	2.0	2.4	5.5	4.4	5.0	13.3	12.0	12.7	16.7	15.9	16.4
23	2.1	1.5	1.9	---	---	---	12.9	11.6	12.1	15.9	15.2	15.6
24	1.5	1.0	1.2	---	---	---	12.6	10.8	11.7	15.3	15.0	15.1
25	1.7	0.7	1.2	---	---	---	13.1	11.4	12.3	15.0	14.9	15.0
26	1.5	0.7	1.1	7.5	6.4	6.9	13.0	12.4	12.6	14.9	14.2	14.6
27	1.3	0.5	1.0	7.8	6.9	7.3	14.6	12.3	13.3	15.0	13.9	14.5
28	2.4	1.0	1.7	8.0	7.2	7.6	15.3	13.4	14.3	15.9	14.5	15.1
29	---	---	---	8.7	7.6	8.1	15.4	14.2	14.9	17.3	15.1	16.2
30	---	---	---	8.6	7.9	8.4	16.2	14.5	15.3	18.5	16.4	17.4
31	---	---	---	7.9	6.6	7.4	---	---	---	18.3	17.5	17.8
MONTH	3.0	-0.1	1.0	8.7	1.2	4.4	16.2	4.2	9.7	18.5	13.4	15.5

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.6	16.5	17.2	23.3	21.7	22.5	25.1	24.5	24.9	23.5	21.8	22.7
2	16.5	15.2	15.7	23.3	22.2	22.7	26.1	24.1	25.0	21.8	20.3	21.1
3	15.4	14.3	14.8	23.0	22.3	22.7	26.7	25.4	25.9	20.3	19.7	19.9
4	14.3	13.5	13.8	24.7	22.2	23.3	26.0	25.0	25.6	19.9	17.8	18.4
5	14.8	13.6	14.1	25.7	24.1	24.8	25.4	24.0	24.9	18.8	17.6	18.1
6	16.2	14.3	15.2	26.6	24.8	25.6	24.0	23.0	23.4	18.5	17.7	18.1
7	15.9	15.4	15.6	27.1	25.8	26.3	23.3	22.7	22.9	19.6	17.9	18.8
8	15.5	15.1	15.3	27.3	25.9	26.6	23.7	22.5	23.0	20.1	18.8	19.5
9	16.5	15.0	15.6	26.7	25.6	26.3	23.8	23.2	23.5	20.7	19.4	20.1
10	17.9	15.8	16.8	25.6	23.2	24.4	24.0	22.8	23.4	21.0	19.5	20.3
11	18.3	17.0	17.6	24.3	22.9	23.5	24.1	23.2	23.6	21.2	19.8	20.6
12	18.8	17.8	18.3	---	---	---	24.2	23.5	23.8	20.9	20.3	20.7
13	18.6	18.2	18.4	25.1	23.2	24.0	24.4	23.2	23.8	20.8	20.3	20.5
14	18.9	17.7	18.3	24.0	23.2	23.6	24.5	23.2	23.9	21.9	20.5	21.0
15	19.5	18.1	18.8	25.1	22.9	23.9	25.1	23.3	24.2	21.9	21.3	21.7
16	19.2	18.2	18.7	25.4	23.5	24.3	25.0	24.1	24.5	21.8	20.9	21.5
17	19.4	18.0	18.7	26.2	23.6	24.9	24.6	23.5	24.1	21.4	19.8	20.5
18	19.1	18.3	18.7	25.3	24.3	24.9	24.4	23.0	23.8	20.4	19.4	19.6
19	18.7	17.9	18.3	25.9	23.6	24.7	24.4	22.9	23.7	20.5	19.4	19.8
20	18.5	18.0	18.2	26.0	23.9	25.0	24.9	23.3	24.1	20.6	19.3	20.0
21	18.2	16.4	17.4	26.2	24.3	25.1	25.5	24.1	24.8	20.5	19.6	20.2
22	16.4	15.7	16.0	25.3	24.1	24.7	26.3	24.9	25.5	20.5	19.8	20.0
23	16.6	15.4	16.0	24.1	22.9	23.3	26.2	24.7	25.6	20.0	19.4	19.8
24	18.4	16.5	17.4	24.3	23.3	23.7	24.9	23.7	24.3	19.4	18.0	18.6
25	20.0	18.0	18.9	25.2	23.4	24.3	25.2	23.3	24.1	18.0	17.4	17.6
26	21.2	19.3	20.2	25.5	23.9	24.7	24.9	23.7	24.3	17.9	17.3	17.5
27	22.3	20.5	21.4	26.2	24.9	25.5	25.1	23.5	24.3	18.5	17.4	17.9
28	22.7	21.1	21.9	26.6	25.6	25.9	25.8	23.7	24.7	18.5	18.0	18.3
29	23.1	21.6	22.4	26.6	25.0	25.8	25.0	23.7	24.4	18.3	17.5	17.9
30	23.1	21.9	22.6	25.9	24.9	25.4	25.3	23.7	24.4	17.5	16.4	16.9
31	---	---	---	25.8	24.6	25.2	24.4	23.0	23.7	---	---	---
MONTH	23.1	13.5	17.7	27.3	21.7	24.6	26.7	22.5	24.3	23.5	16.4	19.6
YEAR	27.3	-0.1	12.3									

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

TURBIDITY, WATER, UNFILTERED, FIELD, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	3.3	<2.0	<2.0	4.1	<2.0	2.1	2.2	<2.0	<2.0	17	<2.0	<2.0
2	<2.0	<2.0	<2.0	2.7	<2.0	2.0	<2.0	<2.0	<2.0	62	17	36
3	<2.0	<2.0	<2.0	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	33	5.6	18
4	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	8.8	4.3	6.1
5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5.5	2.6	3.6
6	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	4.4	<2.0	<2.0
7	<2.0	<2.0	<2.0	4.3	<2.0	2.0	<2.0	<2.0	<2.0	2.5	<2.0	<2.0
8	<2.0	<2.0	<2.0	3.1	<2.0	<2.0	<2.0	<2.0	<2.0	2.2	<2.0	<2.0
9	<2.0	<2.0	<2.0	2.2	<2.0	<2.0	---	---	---	<2.0	<2.0	<2.0
10	<2.0	<2.0	<2.0	68	<2.0	9.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
11	3.9	<2.0	<2.0	68	<2.0	13	2.6	<2.0	<2.0	<2.0	<2.0	<2.0
12	64	3.9	26	2.3	<2.0	<2.0	18	2.5	12	---	---	---
13	46	25	35	6.5	2.3	5.1	15	9.1	12	---	---	---
14	26	13	19	7.4	3.0	4.0	21	8.0	14	<2.0	<2.0	<2.0
15	18	10	14	4.6	3.0	3.9	15	8.0	11	<2.0	<2.0	<2.0
16	13	2.3	7.3	6.7	2.1	3.3	14	4.8	8.3	<2.0	<2.0	<2.0
17	32	3.2	12	110	2.9	41	7.9	3.3	5.7	<2.0	<2.0	<2.0
18	43	19	31	41	20	32	5.6	2.0	3.5	<2.0	<2.0	<2.0
19	31	15	20	28	10	18	2.9	<2.0	<2.0	<2.0	<2.0	<2.0
20	24	9.3	14	17	9.2	12	56	<2.0	5.1	<2.0	<2.0	<2.0
21	12	4.1	8.1	12	2.4	5.2	160	21	55	<2.0	<2.0	<2.0
22	9.9	4.9	6.0	3.7	<2.0	<2.0	22	7.9	13	<2.0	<2.0	<2.0
23	5.5	2.7	4.0	7.1	<2.0	2.7	10	2.5	5.8	<2.0	<2.0	<2.0
24	4.6	2.2	3.0	4.2	<2.0	2.0	7.1	3.8	5.4	<2.0	<2.0	<2.0
25	3.7	2.2	2.8	4.4	<2.0	2.3	6.0	2.4	3.8	<2.0	<2.0	<2.0
26	4.7	<2.0	2.7	3.4	<2.0	<2.0	5.4	2.7	3.8	<2.0	<2.0	<2.0
27	8.4	3.6	5.4	3.5	<2.0	<2.0	4.0	<2.0	2.5	<2.0	<2.0	<2.0
28	6.7	2.6	4.7	3.1	<2.0	<2.0	2.2	<2.0	<2.0	<2.0	<2.0	<2.0
29	6.5	<2.0	2.7	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
30	4.4	<2.0	3.1	2.6	<2.0	<2.0	2.3	<2.0	<2.0	<2.0	<2.0	<2.0
31	3.7	<2.0	2.5	---	---	---	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MONTH	64	<2.0	7.4	110	<2.0	6.0	160	<2.0	6.0	62	<2.0	2.8
		FEBRUARY			MARCH			APRIL			MAY	
1	<2.0	<2.0	<2.0	4.8	<2.0	3.1	18	10	13	5.1	<2.0	2.7
2	<2.0	<2.0	<2.0	19	<2.0	5.5	10	7.5	8.8	4.2	<2.0	<2.0
3	<2.0	<2.0	<2.0	26	14	18	9.9	5.7	7.4	6.0	<2.0	2.5
4	<2.0	<2.0	<2.0	16	10	13	7.6	4.4	5.8	7.4	2.0	3.4
5	<2.0	<2.0	<2.0	14	6.3	8.8	6.9	4.6	5.6	6.4	<2.0	3.4
6	<2.0	<2.0	<2.0	23	12	16	7.7	4.8	5.6	3.6	<2.0	<2.0
7	2.8	<2.0	<2.0	15	9.0	11	---	---	---	2.8	<2.0	<2.0
8	2.2	<2.0	<2.0	9.8	6.1	7.6	15	2.1	3.2	2.8	<2.0	2.2
9	<2.0	<2.0	<2.0	16	4.6	7.7	3.6	<2.0	2.7	2.7	<2.0	2.0
10	<2.0	<2.0	<2.0	30	14	22	6.0	3.1	4.2	3.7	<2.0	2.2
11	<2.0	<2.0	<2.0	17	10	12	4.6	2.2	3.1	2.5	<2.0	<2.0
12	<2.0	<2.0	<2.0	11	3.2	6.6	9.3	4.2	5.7	4.1	<2.0	2.1
13	<2.0	<2.0	<2.0	4.6	2.8	3.6	8.2	2.8	4.4	2.9	<2.0	<2.0
14	<2.0	<2.0	<2.0	18	2.8	9.4	4.9	2.1	3.3	3.6	<2.0	<2.0
15	<2.0	<2.0	<2.0	11	7.6	9.2	3.8	<2.0	2.6	3.9	<2.0	<2.0
16	<2.0	<2.0	<2.0	10	5.5	8.0	6.6	2.1	3.0	2.7	<2.0	<2.0
17	<2.0	<2.0	<2.0	7.5	4.4	5.6	3.6	<2.0	2.0	3.4	<2.0	<2.0
18	<2.0	<2.0	<2.0	27	6.1	12	3.4	<2.0	2.2	2.7	<2.0	<2.0
19	---	---	---	26	9.7	16	6.2	<2.0	2.2	3.1	<2.0	2.1
20	<2.0	<2.0	<2.0	49	15	24	2.4	<2.0	<2.0	5.3	2.3	3.7
21	<2.0	<2.0	<2.0	110	30	48	2.2	<2.0	<2.0	4.9	<2.0	2.4
22	18	<2.0	3.6	---	---	---	2.2	<2.0	<2.0	5.3	<2.0	2.3
23	25	12	15	---	---	---	2.6	<2.0	2.1	4.8	<2.0	<2.0
24	20	13	17	---	---	---	2.4	<2.0	2.0	<2.0	<2.0	<2.0
25	13	6.0	8.7	---	---	---	2.9	<2.0	<2.0	<2.0	<2.0	<2.0
26	6.0	3.5	4.7	13	8.0	11	<2.0	<2.0	<2.0	29	<2.0	3.8
27	6.5	3.5	4.6	11	7.6	9.2	2.3	<2.0	<2.0	29	4.3	11
28	4.9	2.7	3.8	12	6.7	8.9	2.3	<2.0	<2.0	11	<2.0	4.7
29	---	---	---	9.1	6.3	7.9	4.2	<2.0	2.2	9.2	<2.0	4.2
30	---	---	---	15	8.5	11	5.1	<2.0	2.6	8.5	<2.0	2.9
31	---	---	---	17	10	13	---	---	---	5.9	2.0	3.5
MONTH	25	<2.0	2.6	110	<2.0	12	18	<2.0	3.6	29	<2.0	2.5

01463500 DELAWARE RIVER AT TRENTON, NJ—Continued

TURBIDITY, WATER, UNFILTERED, FIELD, NEPHELOMETRIC TURBIDITY UNITS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	5.6	<2.0	2.6	---	---	---	---	---	---
2	---	---	---	3.2	<2.0	<2.0	---	---	---	---	---	---
3	---	---	---	3.0	<2.0	<2.0	---	---	---	19	<2.0	6.2
4	100	9.3	40	3.0	<2.0	<2.0	---	---	---	35	5.6	17
5	37	13	22	<2.0	<2.0	<2.0	---	---	---	69	11	21
6	24	6.7	12	---	---	---	---	---	---	130	27	62
7	24	3.3	9.0	---	---	---	---	---	---	42	14	23
8	32	13	21	---	---	---	---	---	---	20	12	15
9	27	4.6	13	2.5	<2.0	<2.0	---	---	---	26	11	14
10	13	2.2	5.9	3.4	<2.0	<2.0	---	---	---	29	11	15
11	10	<2.0	6.3	3.0	<2.0	<2.0	---	---	---	19	10	13
12	48	<2.0	9.5	31	<2.0	3.0	---	---	---	13	9.9	12
13	86	12	33	<2.0	<2.0	<2.0	---	---	---	31	9.8	12
14	85	19	37	<2.0	<2.0	<2.0	---	---	---	14	9.6	11
15	32	5.5	21	<2.0	<2.0	<2.0	---	---	---	16	4.3	9.7
16	33	2.5	17	6.2	<2.0	<2.0	---	---	---	47	3.2	24
17	31	<2.0	16	22	<2.0	<2.0	---	---	---	40	8.9	19
18	15	<2.0	6.0	<2.0	<2.0	<2.0	---	---	---	26	6.2	15
19	12	<2.0	5.6	7.9	<2.0	<2.0	---	---	---	39	6.1	16
20	21	<2.0	8.9	66	<2.0	3.9	---	---	---	20	8.2	15
21	190	15	61	5.6	<2.0	<2.0	---	---	---	16	4.9	7.8
22	120	15	39	35	<2.0	12	---	---	---	13	5.5	8.3
23	55	11	25	200	18	83	---	---	---	72	3.9	17
24	26	5.4	14	68	9.0	30	---	---	---	150	27	65
25	21	2.6	9.3	25	3.8	9.1	---	---	---	70	18	36
26	14	2.4	7.1	7.6	2.5	4.8	---	---	---	48	16	25
27	11	<2.0	6.3	---	---	---	---	---	---	18	10	15
28	35	<2.0	6.4	---	---	---	---	---	---	130	11	34
29	9.0	<2.0	4.4	---	---	---	---	---	---	35	15	23
30	6.5	<2.0	2.1	---	---	---	---	---	---	23	4.7	13
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	190	<2.0	17	---	---	---	---	---	---	150	<2.0	20
YEAR	200	<2.0	7.8									

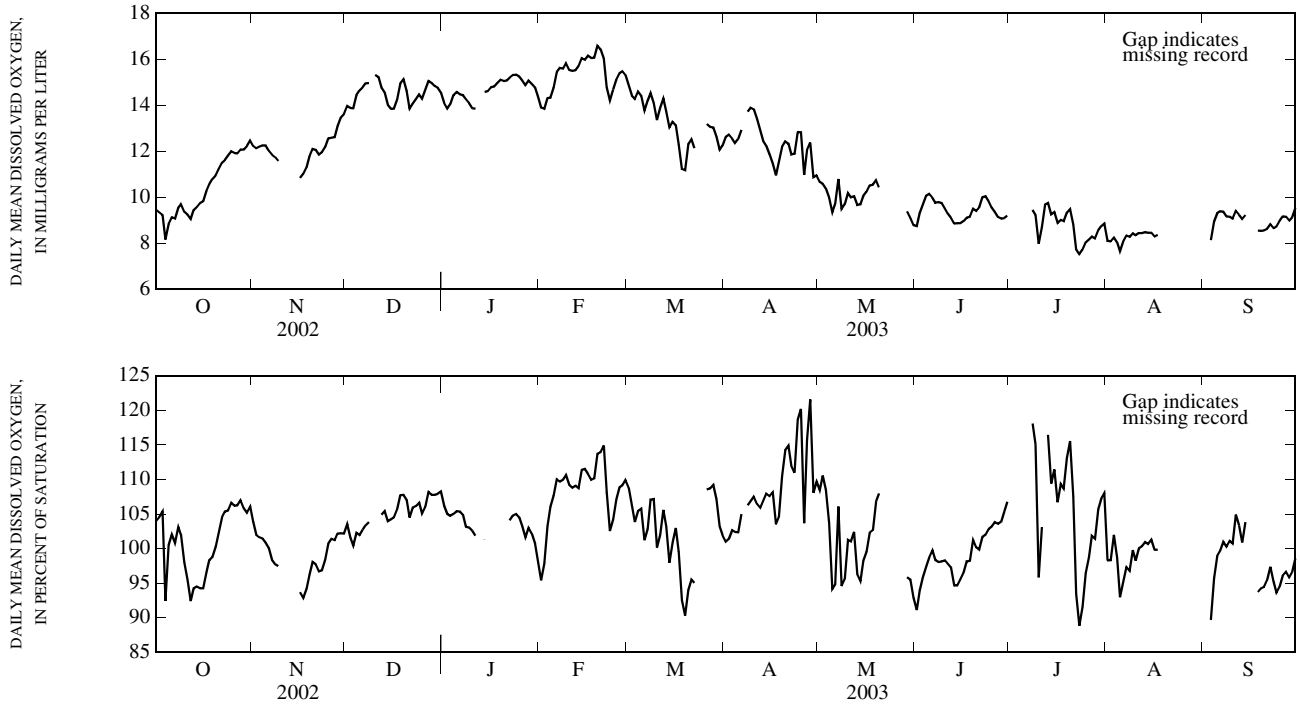


Figure 43. Physical characteristics and concentrations of constituents measured at 01463500 Delaware River at Trenton, water year 2003.

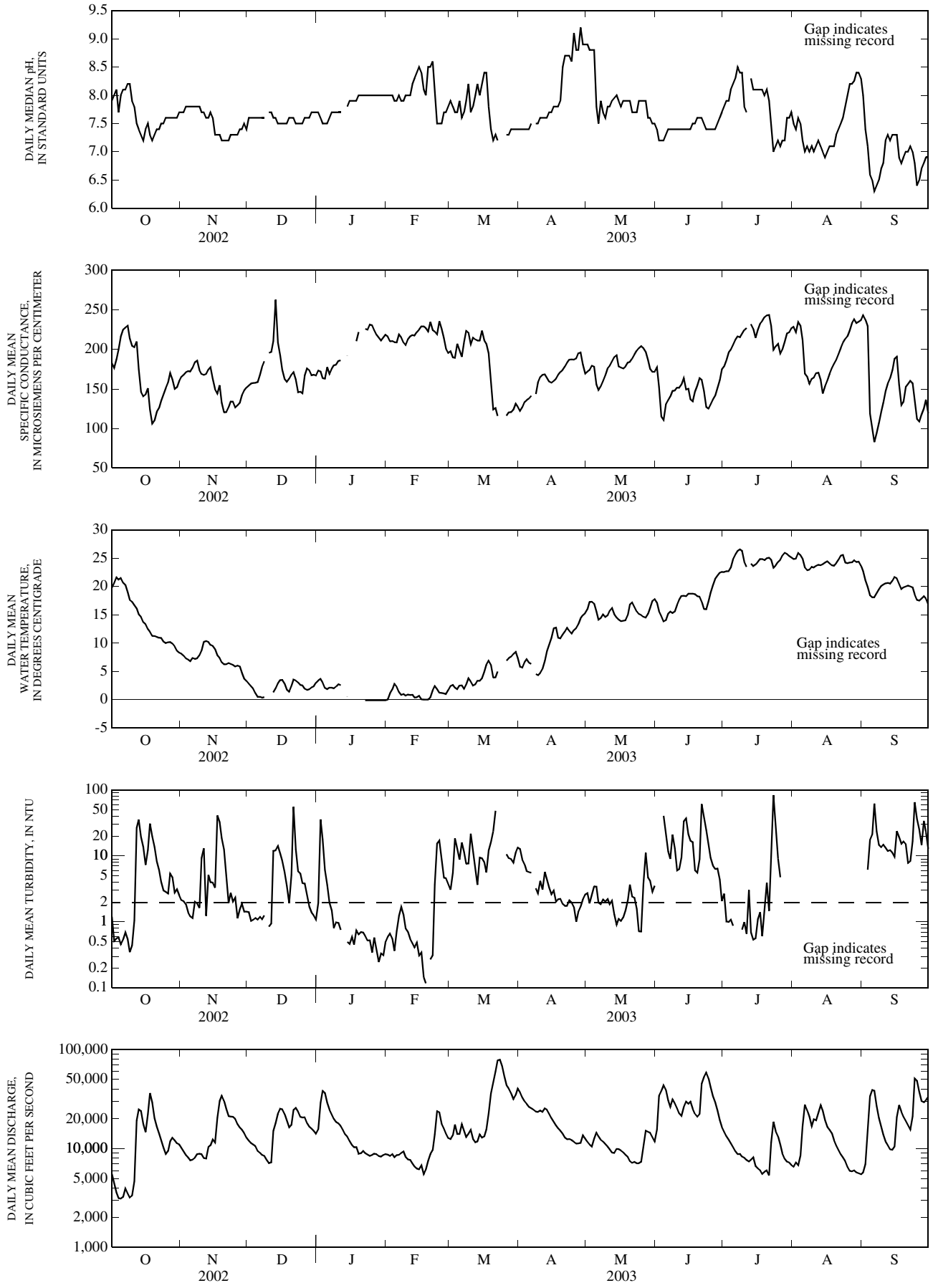
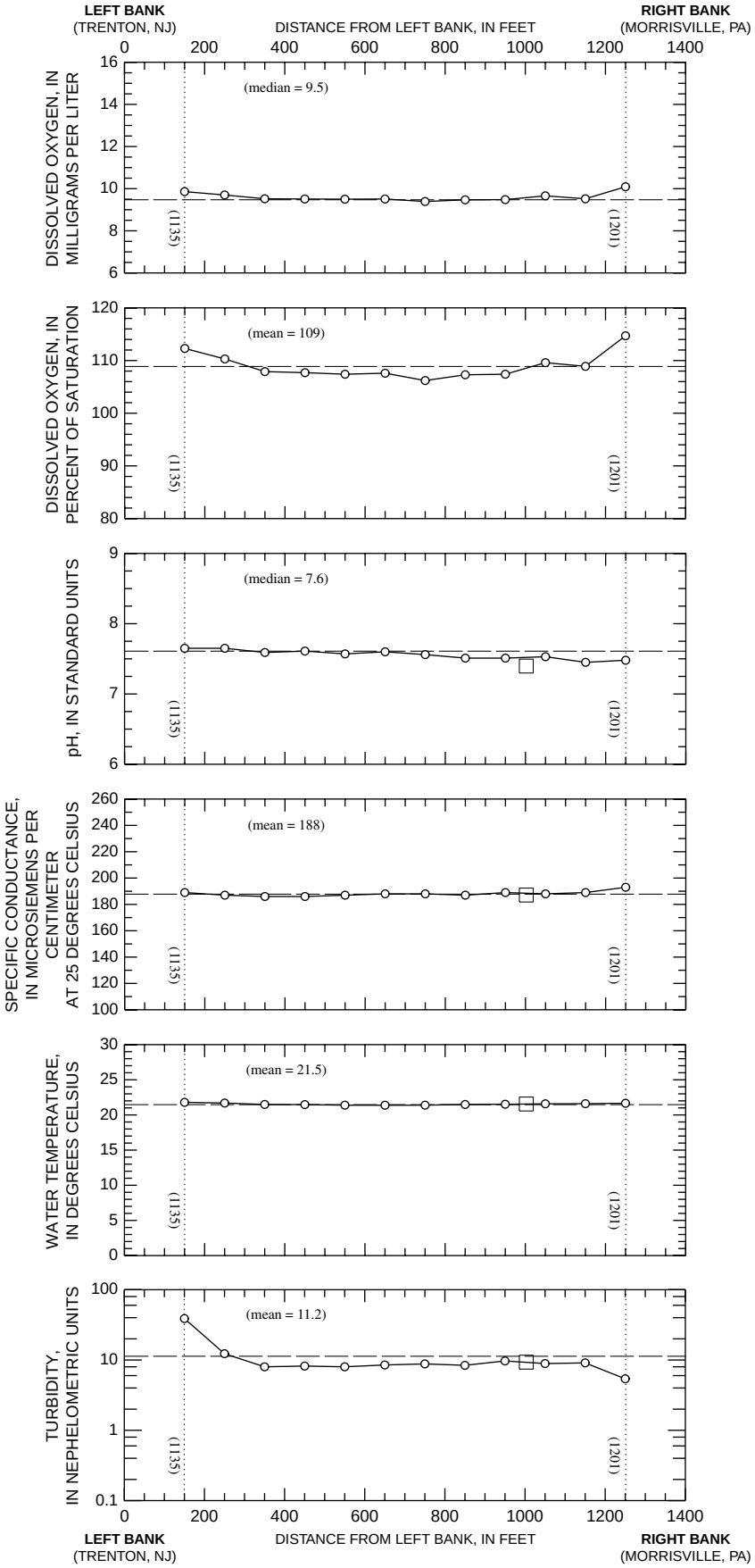


Figure 43. Physical characteristics and concentrations of constituents measured at 01463500 Delaware River at Trenton, water year 2003--continued. [--- instrument detection level; turbidity less than 2.0 NTU are approximate]



EXPLANATION

Water-quality measurement from the Calhoun Street Bridge at specified time and distance

Mean or median of indicated water-quality measurements from the Calhoun Street Bridge

(1201) Time of cross sectional water-quality measurement from the Calhoun Street Bridge

□ Monitor value, recorded 1200 hours

Cross sectional measurements are made periodically to verify that the monitor intake is in a location that is most representative of the river.

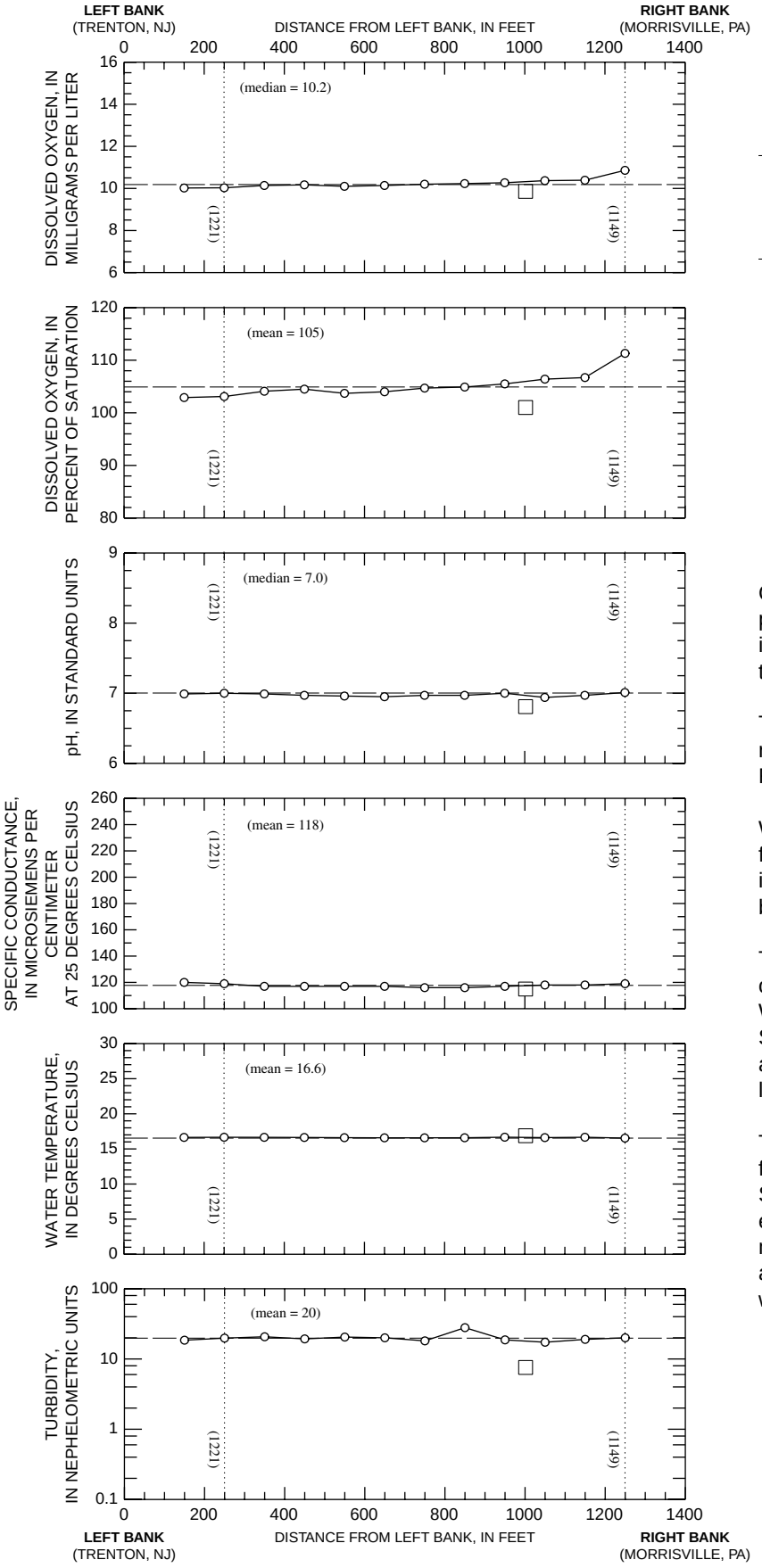
The water-quality monitor is located in the raw-water intake of the Morrisville Water Filtration Plant, Morrisville, PA.

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 10,400 ft^3/s for the Delaware River at Trenton on September 15, 2003, was equalled or exceeded 40 percent of time by all daily mean discharges for the Delaware River at Trenton between water year 1968 and water year 2003.

Figure 44. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, September 15, 2003.



EXPLANATION

Water-quality measurement from the Calhoun Street Bridge at specified time and distance

Mean or median of indicated water-quality measurements from the Calhoun Street Bridge

(1221) Time of cross sectional water-quality measurement from the Calhoun Street Bridge

Monitor value, recorded 1200 hours

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 raw-water intake 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 33,200 ft^3/s for the Delaware River at Trenton on September 30, 2003, was equalled or exceeded 5 percent of time by all daily mean discharges for the Delaware River at Trenton between water year 1968 and water year 2003.

Figure 45. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, September 30, 2003.

01463610 ASSUNPINK CREEK AT EDINBURG, NJ

LOCATION.--Lat 40°15'28", long 74°37'04", Mercer County, Hydrologic Unit 02040105, 0.1 mi west of Edinburg, 0.7 mi upstream of Bridgeroom Run, and 1.7 miles south of Dutch Neck.

DRAINAGE AREA.--25.0 mi^2.

PERIOD OF RECORD.--November 2002 to September 2003.

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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
12...	1000	1.7	0.104	0.080	763	8.0	76	6.5	172	11.0	13.0	44	9.96
FEB													
26...	1100	14	0.141	0.110	772	11.7	80	6.2	132	-4.5	0.6	24	5.32
MAY													
15...	0945	8.4	0.244	0.197	764	8.3	80	6.7	164	17.0	13.6	46	10.1
AUG													
12...	0930	5.9	0.259	0.198	764	6.0	72	6.7	139	24.5	24.0	37	8.59

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
12...	4.73	3.35	9.71	E10	20.4	<0.17	5.1	26.8	--	99	3	0.25	<0.030
FEB													
26...	2.69	2.60	9.81	3	19.8	<0.17	5.6	15.4	67	74	5	0.47	0.183
MAY													
15...	4.98	2.44	10.9	15	23.2	<0.17	4.0	18.6	89	86	2	0.56	0.200
AUG													
12...	3.85	2.72	9.34	20	19.4	<0.17	7.7	11.0	76	83	2	0.45	0.040

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
12...	0.054	0.70	0.004	<0.020	0.06	0.009	0.023	0.95	1.0	0.3	<0.1	0.3	4.1
FEB													
26...	0.193	0.78	0.007	0.034	0.18	0.024	0.090	1.2	1.4	1.5	<0.1	1.5	4.3
MAY													
15...	0.211	1.15	0.045	0.021	0.09	0.017	0.075	1.7	1.8	0.9	<0.1	0.8	4.1
AUG													
12...	0.040	0.21	0.003	0.039	0.08	0.014	0.062	0.65	0.73	0.7	<0.1	0.7	6.4

01463610 ASSUNPINK CREEK AT EDINBURG, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV			
12...	<1.0	--	21
FEB			
26...	E1.1	--	16
MAY			
15...	<1.0	2.60	14
AUG			
12...	E1.2	1.80	25

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

WATER-COLUMN AND BED-MATERIAL TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (00626)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor-ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)
AUG													
12...	0930	--	--	--	--	--	E2	36.9	E.05	19	<0.04	<0.8	0.7
12...	0930	6.28	140	2,900	3.7	<0.2	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)	Arsenic bed sedimnt total, ug/g (01003)	Cadmium bed sedimnt recover-able, ug/g (01028)	Chrom-ium, bed sedimnt recover-able, ug/g (01029)	Cobalt bed sedimnt recover-able, ug/g (01038)	Copper, bed sedimnt recover-able, ug/g (01043)
AUG													
12...	1,400	0.28	64.9	<0.02	2.29	0.5	<0.16	4	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	<1	0.020	4.6	0.730	5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover-able, ug/g (01052)	Mangan-ese, bed sedimnt recover-able, ug/g (01053)	Mercury bed sedimnt recover-able, ug/g (71921)	Nickel, bed sedimnt recover-able, ug/g (01068)	Selen-ium, bed sedimnt total, ug/g (01148)	Zinc, bed sedimnt recover-able, ug/g (01093)	1,2-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49403)	1,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49404)	1Methyl -9H-fluor-ene, bed sed <2 mm, ug/kg (49398)	1-Methyl-phenan-threne, bed sed <2 mm, ug/kg (49410)	1-Methyl-pyrene, bed sed <2 mm, wsv nat ug/kg (49388)	236Tri-methyl-naphth-alene, bed sed <2 mm, ug/kg (49405)
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	2,800	2.8	16	<0.01	1.1	<1	8.1	<50	<50	<50	E3	E6	<50

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	2,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49406)	2-Ethyl naphth-alene bed sed <2 mm wsv nat ug/kg (49948)	2-Methyl-anthra-cene, bed sed <2 mm, ug/kg (49435)	Cyclo-penta-phenan-threne, bed sed <2 mm, ug/kg (49411)	9H-Flour-ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace-naphth-ene, bed sed <2 mm, wsv nat ug/kg (49429)	Ace-naphth-ylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthra-cene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo-[a]-anthra-cene, bed sed <2 mm, ug/kg (49436)	Benzo-[a]-pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo-[b]-fluor-anthene bed sed <2 mm ug/kg (49458)	Benzo-[ghi]-peryl-ene, bed sed <2 mm, ug/kg (49408)	Benzo-[k]-fluor-anthene bed sed <2 mm ug/kg (49397)
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	<50	<50	E7	E2	E2	<50	E9	E12	E27	E28	E26	E14	E23

01463610 ASSUNPINK CREEK AT EDINBURG, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chrysene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, ug/kg (49461)	Fluoranthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,-3-cd]-pyrene, bed sed <2 mm ug/kg (49390)	Isophorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphthalene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenanthrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenanthridine, bed sed <2 mm, wsv nat ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment falldia dst wat percent <.002mm (80294)
AUG													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	E27	E7	E51	E20	<50	E3	<5	<50	E23	E2	E45	1.5	0.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sediment, falldia dst wat percent <.004mm (80157)	Bed sediment falldia dst wat percent <.008mm (80293)	Bed sediment, falldia dst wat percent <.016mm (80282)	Bed sediment, falldia dst wat percent <.031mm (80283)
AUG				
12...	--	--	--	--
12...	0.6	0.7	0.9	1.1

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB													
26...	1100	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
26...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	0.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
26...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

01463610 ASSUNPINK CREEK AT EDINBURG, NJ—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
15...	0945	<0.006	E.025	0.152	0.005	<0.005	0.820	<0.050	<0.010	<0.002	E.118	E.016	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
15...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	0.102	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
15...	<0.022	M	0.114	<0.02	E.080	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
MAY					JUN				
07...	0815	110	100	110	04...	0800	4,600	48,000	>16000
14...	0810	50	100	20					
21...	0930	120	300	130					
28...	0925	380	600	1,300					

Remark codes used in this table:
> -- Greater than

01463850 MIRY RUN AT ROUTE 533, AT MERCERVILLE, NJ

LOCATION.--Lat 40°14'50", long 74°41'13", 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 mi^2.

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 "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report. 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 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)
NOV											
07...	1010	Environmental	10	7.4	0.215	0.166	758	11.1	93	6.9	151
FEB											
04...	0900	Environmental	2.1	4.1	0.143	0.111	744	10.6	83	6.0	319
04...	*0900*	*Split Replicate*	--	--	--	--	--	--	--	--	--
04...	*0901*	*Concurrent Replicate*	--	--	--	--	--	--	--	--	--
MAY											
08...	0920	Environmental	5.0	5.3	0.228	0.173	755	5.4	56	6.4	213
AUG											
05...	0850	Environmental	2.6	6.1	0.249	0.189	759	4.4	51	6.3	188
05...	*0850*	*Split Replicate*	--	--	--	--	--	--	--	--	--
05...	*0851*	*Concurrent Replicate*	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
NOV													
07...	7.0	7.5	43	10.1	4.23	3.64	9.91	E19	16.5	<0.17	5.0	20.8	--
FEB													
04...	5.5	4.0	64	15.6	6.06	3.17	30.5	23	57.7	<0.17	6.4	24.9	167
04...	--	--	*61*	*15.0*	*5.70*	*3.40*	*31.0*	*24*	*60.0*	*<0.10*	--	*26.0*	*163*
04...	--	--	*61*	*15.0*	*5.80*	*3.50*	*31.0*	*24*	*59.0*	*<0.10*	--	*26.0*	*162*
MAY													
08...	17.0	16.7	43	10.7	3.96	2.57	17.9	25	34.2	<0.17	2.4	15.9	106
AUG													
05...	27.0	23.4	45	11.0	4.26	2.83	15.9	24	29.3	<0.17	3.7	13.9	99
05...	--	--	*46*	*11.0*	*4.50*	*3.20*	*16.0*	*26*	*30.0*	*0.10*	--	*13.0*	*97*
05...	--	--	*46*	*11.0*	*4.40*	*3.10*	*15.0*	*25*	*30.0*	*0.10*	--	*13.0*	*95*

01463850 MIRY RUN AT ROUTE 533, AT MERCERVILLE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
NOV													
07...	96	2	0.45	--	0.060	0.101	0.70	0.004	<0.020	--	0.22	0.017	0.061
FEB													
04...	174	4	0.55	--	0.147	0.178	1.94	0.014	<0.020	--	0.19	0.013	0.048
04...	*160*	*6*	*0.38*	*0.70*	*0.140*	*0.170*	*1.70*	*0.016*	*<0.010*	*<0.01*	--	*<0.025*	*0.035*
04...	*170*	*10*	*0.41*	*0.78*	*0.150*	*0.150*	*1.70*	*0.021*	*<0.010*	*<0.01*	--	*<0.025*	*0.034*
MAY													
08...	123	2	0.67	--	0.251	0.288	0.80	0.030	<0.020	--	0.15	0.015	0.060
AUG													
05...	132	6	0.55	--	0.109	0.104	0.83	0.013	0.037	--	0.16	0.022	0.071
05...	*180*	*<10*	*0.60*	*0.86*	*0.096*	*0.096*	*0.780*	*0.015*	*0.013*	*0.02*	--	*<0.050*	*0.067*
05...	*180*	*<10*	*0.63*	*0.89*	*0.100*	*0.098*	*0.780*	*0.014*	*0.014*	*0.02*	--	*<0.050*	*0.056*

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chlorophyll a fluorometric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV									
07...	1.1	1.4	1.4	<0.1	1.4	6.6	E1.8	--	28
FEB									
04...	2.5	2.7	1.2	<0.1	1.1	3.7	E2.3	--	24
04...	*2.1*	*2.4*	--	--	--	*4.2*	--	--	*20*
04...	*2.1*	*2.5*	--	--	--	*4.4*	--	--	*20*
MAY									
08...	1.5	1.6	0.9	<0.1	0.9	5.6	<1.0	12.9	30
AUG									
05...	1.4	1.6	1.1	<0.1	1.1	5.9	<1.0	13.5	33
05...	*1.4*	*1.6*	--	--	--	*5.9*	--	--	*30*
05...	*1.4*	*1.7*	--	--	--	*6.1*	--	--	*30*

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
MAY					JUN				
07...	0835	240	200	110	04...	0815	4,600	240,000	>16000
14...	0825	220	200	300					
21...	0945	470	700	300					
28...	0940	1,040	2,000	2,400					

Remark codes used in this table:

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ

LOCATION.--Lat 40°13'02", long 74°46'07", 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 mi^2.

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, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
26...	0910	148	7.1	0.191	0.149	768	11.9	100	7.1	245	8.5	8.0	70
FEB													
10...	1320	78	5.1	0.089	0.068	754	12.8	100	7.0	515	-1.0	4.5	94
MAY													
20...	1110	58	6.0	0.123	0.094	765	8.9	89	7.1	415	23.5	15.2	110
AUG													
20...	1240	69	5.5	0.167	0.125	765	8.3	97	7.1	349	29.5	23.3	100

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
26...	16.1	7.21	3.55	16.2	34	28.8	<0.17	9.2	25.8	136	144	6	0.45
FEB													
10...	23.6	8.43	4.06	52.6	33	101	0.22	9.0	30.1	271	285	7	0.50
MAY													
20...	24.8	12.1	4.40	30.0	54	57.3	0.26	8.1	29.4	225	261	6	0.68
AUG													
20...	24.4	10.1	4.32	25.3	47	44.4	0.25	7.8	22.9	187	205	6	0.65

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
26...	0.055	0.074	1.89	0.004	0.176	0.06	0.18	0.22	2.3	2.4	0.6	<0.1	0.6
FEB													
10...	0.115	0.112	4.73	0.014	0.430	0.18	0.42	0.53	5.2	5.4	1.2	<0.1	1.1
MAY													
20...	0.091	0.077	5.56	0.054	0.485	0.16	0.54	0.65	6.2	6.4	1.2	<0.1	1.2
AUG													
20...	0.127	0.125	4.00	0.020	0.494	0.07	0.47	0.59	4.6	4.7	0.6	<0.1	0.6

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
26...	5.2	2.0	--	53
FEB				
10...	3.0	E1.8	--	64
MAY				
20...	4.3	E1.6	7.40	85
AUG				
20...	4.9	E1.6	8.40	82

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
07...	0940	130	<100	700
14...	0950	150	400	500
21...	1100	450	1,600	1,300
28...	1105	580	2,100	2,200
JUN				
04...	0930	4,600	12,000	16,000

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

01464280 SOUTH RUN NEAR COOKSTOWN, NJ

LOCATION.--Lat 40°01'38", long 74°33'36", Burlington County, Hydrologic Unit 02040201, at bridge on Browns Mills-Cookstown Road, 1.5 mi south of Cookstown, 2.3 mi upstream from mouth, and 3.1 mi east of Wrightstown.

DRAINAGE AREA.--6.06 mi^2.

PERIOD OF RECORD.--November 2002 to August 2003.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report. 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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
26...	0900	5.5	0.128	0.099	768	9.1	76	6.8	237	8.0	8.0	80	24.5
FEB													
10...	0845	5.7	0.168	0.140	759	10.0	74	7.0	348	5.1	2.5	77	23.9
MAY													
28...	0900	20	0.197	0.153	757	7.4	73	6.7	208	18.5	14.2	59	17.9
AUG													
14...	0930	9.1	0.185	0.142	767	6.8	79	7.1	234	30.0	22.5	83	25.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
26...	4.55	2.46	11.5	43	18.4	<0.17	9.5	32.3	131	142	5	0.56	0.361
FEB													
10...	4.08	4.20	32.3	50	49.3	0.20	8.9	28.7	183	197	8	0.55	0.312
MAY													
28...	3.42	2.48	14.5	26	22.9	<0.17	7.2	22.3	108	129	9	0.59	0.248
AUG													
14...	4.46	2.85	14.7	46	23.4	<0.17	8.8	23.3	133	139	6	0.48	0.222

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
26...	0.351	0.42	0.010	<0.020	0.02	0.006	0.024	0.97	1.0	0.4	<0.1	0.4	3.3
FEB													
10...	0.333	0.29	0.006	<0.020	0.05	0.004	0.026	0.84	0.89	0.5	<0.1	0.5	--
MAY													
28...	0.237	0.28	0.012	<0.020	0.13	0.012	0.054	0.87	1.0	1.1	<0.1	1.1	5.3
AUG													
14...	0.233	0.42	0.022	<0.020	0.08	0.007	0.037	0.90	0.98	0.7	<0.1	0.7	4.9

01464280 SOUTH RUN NEAR COOKSTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV			
26...	<1.0	--	41
FEB			
10...	4.6	--	30
MAY			
28...	E1.6	6.90	34
AUG			
14...	E1.4	3.50	50

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

WATER-COLUMN AND BED-MATERIAL TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (00626)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor-ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover -able, ug/L (01007)	Beryll-ium, water, unfltrd recover -able, ug/L (01012)	Boron, water, unfltrd recover -able, ug/L (01022)
AUG											
14...	*0929*	*Field Blank*	--	--	--	--	--	--	--	--	--
14...	0930	Environmental	--	--	--	--	--	<2	45.5	0.17	41
14...	0930	Bed material	6.54	210	1,200	0.7	<0.2	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover -able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover -able, ug/L (01042)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan-ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover -able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover -able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)
AUG													
14...	--	--	*<0.2*	--	--	*<0.08*	--	--	*<0.02*	--	*<0.06*	--	--
14...	0.10	E.5	--	1.4	1,690	--	0.52	62.5	--	<0.02	--	2.49	0.6
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Silver, water, unfltrd recover -able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover -able, ug/L (01092)	Arsenic bed sedimnt total, ug/g (01003)	Cadmium bed sedimnt recover -able, ug/g (01028)	Chrom-ium, bed sedimnt recover -able, ug/g (01029)	Cobalt bed sedimnt recover -able, ug/g (01038)	Copper, bed sedimnt recover -able, ug/g (01043)	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover -able, ug/g (01052)	Mangan-ese, bed sedimnt recover -able, ug/g (01053)	Mercury bed sedimnt recover -able, ug/g (71921)	Nickel, bed sedimnt recover -able, ug/g (01068)
AUG													
14...	--	*<1*	--	--	--	--	--	--	--	--	--	--	--
14...	<0.16	--	18	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	<1	1.7	1.1	0.310	<2	590	2.6	1.9	<0.01	0.326

01464280 SOUTH RUN NEAR COOKSTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, bed sedimnt total, ug/g (01148)	Zinc, bed sedimnt recoverable, ug/g (01093)	1,2-Dimethylnaphthalene, bed sed <2 mm, ug/kg (49403)	1,6-Dimethylnaphthalene, bed sed <2 mm, ug/kg (49404)	1Methyl-9H-fluorene, bed sed <2 mm, ug/kg (49398)	1-Methylphenanthrene, bed sed <2 mm, ug/kg (49410)	1-Methylpyrene, bed sed <2 mm, wsv nat ug/kg (49388)	236Trimethylnaphthalene, bed sed <2 mm, ug/kg (49405)	2,6-Dimethylnaphthalene, bed sed <2 mm, ug/kg (49406)	2-Ethylnaphthalene bed sed <2 mm wsv nat ug/kg (49948)	2-Methylanthracene, bed sed <2 mm, ug/kg (49435)	Cyclopentaphenanthrene, bed sed <2 mm, ug/kg (49411)	9H-Fluorene, bed sed <2 mm, wsv nat ug/kg (49399)
AUG													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<1	6.9	<50	<50	<50	<50	E12	<50	E13	<50	E10	<50	E10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Acenaphthene, bed sed <2 mm, wsv nat ug/kg (49429)	Acenaphthylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthracene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo-[a]-anthracene, bed sed <2 mm, ug/kg (49436)	Benzo-[a]-pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo-[b]-fluoranthene bed sed <2 mm ug/kg (49458)	Benzo-[ghi]-perylene, bed sed <2 mm, ug/kg (49408)	Benzo-[k]-fluoranthene bed sed <2 mm ug/kg (49397)	Chrysene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, ug/kg (49461)	Fluoranthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,-3-cd]-pyrene, bed sed <2 mm ug/kg (49390)	Isophorone bed sed <2 mm, wsv nat field, ug/kg (49400)
AUG													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<50	E11	E10	E15	E15	E32	<50	E15	E10	<50	E20	E21	<50

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Naphthalene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenanthrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenanthridine, bed sed <2 mm, wsv nat ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment falldia dst wat percent <.002mm (80294)	Bed sediment, falldia dst wat percent <.004mm (80157)	Bed sediment falldia dst wat percent <.008mm (80293)	Bed sediment, falldia dst wat percent <.016mm (80282)	Bed sediment, falldia dst wat percent <.031mm (80283)
AUG												
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	<50	E1	<50	E10	<50	E20	0.5	0.1	0.1	0.2	0.2	0.3

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB													
10...	0845	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	0.2	<0.1	<0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
10...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	0.2

01464280 SOUTH RUN NEAR COOKSTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)
FEB									
10...	<0.1	<0.2	<0.1	<0.1	<0.2	0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)
MAY													
28...	0900	<0.006	E.003	<0.006	<0.004	<0.005	0.015	<0.050	<0.010	<0.002	E.010	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Mala-thion, water, fltrd, ug/L (39532)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)
MAY													
28...	<0.003	<0.004	<0.005	0.008	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	E.003	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Prome-ton, water, fltrd, ug/L (04037)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)
MAY						
28...	<0.022	M	<0.005	0.07	<0.034	<0.009

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

01464280 SOUTH RUN NEAR COOKSTOWN, NJ—Continued

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL				
28...	1035	490	600	500
AUG				
04...	1010	860	500	1,700
11...	1010	360	300	2,200
18...	1005	10,600	3,500	9,000
25...	0955	240	100	170

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ

LOCATION.--Lat 40°10'02", long 74°40'39", 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 mi^2.

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, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
19...	1200	409	33	0.240	0.191	769	10.0	82	6.7	134	10.0	7.0	42
MAR													
05...	1240	458	85	0.196	0.156	755	12.0	88	7.1	134	10.5	2.3	30
MAY													
29...	1145	219	21	0.275	0.216	748	8.9	90	6.7	143	22.5	15.2	36
AUG													
25...	0920	55	10	0.388	0.312	762	8.1	90	7.1	188	22.0	20.1	67

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
19...	12.1	2.79	3.52	6.13	E12	12.4	<0.17	7.9	26.6	--	94	30	0.28
MAR													
05...	8.37	2.24	2.71	10.4	--	20.3	<0.17	5.6	17.7	--	89	77	0.40
MAY													
29...	10.3	2.53	2.36	7.82	13	15.4	<0.17	8.5	20.5	78	96	--	0.39
AUG													
25...	20.1	4.16	3.29	9.40	30	20.2	<0.17	11.1	21.8	112	131	8	0.39

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
19...	0.033	<0.030	0.51	0.003	0.027	0.18	0.026	0.21	0.79	0.97	1.8	<0.1	1.8
MAR													
05...	0.159	0.172	0.60	0.010	<0.020	0.29	0.015	0.26	1.0	1.3	3.2	<0.1	3.2
MAY													
29...	0.104	0.107	0.58	0.012	<0.020	0.25	0.022	0.20	0.97	1.2	3.0	<0.1	3.0
AUG													
25...	0.107	0.111	0.84	0.020	0.054	0.05	0.056	0.146	1.2	1.3	0.5	<0.1	0.5

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
19...	5.4	E1.7	--	25
MAR				
05...	4.3	E1.4	--	E11
MAY				
29...	5.1	E1.3	6.50	24
AUG				
25...	6.7	<1.0	0.800	36

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
MAY				
07...	0900	460	<100	500
14...	0908	<10	100	110
21...	1025	120	200	500
28...	1030	990	1,600	1,100
JUN				
04...	0845	1,900	5,000	9,000

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

01464515 DOCTORS CREEK AT ALLENTOWN, NJ

LOCATION.--Lat 40°10'37", long 74°35'56", Monmouth County, Hydrologic Unit 02040201, at bridge on Breza Road in Allentown, and 0.8 mi downstream from Conines Millpond dam.

DRAINAGE AREA.--17.4 mi^2.

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

REMARKS.--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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
13...	1250	48	24	0.134	0.107	759	8.9	81	6.3	190	10.5	11.0	55
FEB													
10...	1010	15	8.0	0.046	0.040	754	12.9	92	6.5	234	-1.0	1.2	57
JUN													
11...	1040	26	13	0.180	0.144	760	7.9	87	6.5	181	25.5	20.2	48
AUG													
18...	1200	22	19	0.218	0.174	761	6.8	81	7.0	193	26.0	24.3	51

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
13...	14.0	4.90	4.67	9.68	E18	23.2	<0.17	9.3	28.5	--	124	9	0.70
FEB													
10...	13.9	5.44	3.40	14.4	17	33.2	<0.17	10.0	24.8	122	133	6	0.87
JUN													
11...	11.6	4.66	3.02	11.0	19	23.3	<0.17	8.0	18.7	97	118	10	0.53
AUG													
18...	12.1	5.08	3.60	9.89	30	24.2	0.20	9.2	14.5	99	118	8	0.72

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
13...	0.173	0.163	0.55	0.011	0.021	0.17	0.012	0.110	1.2	1.4	1.3	<0.1	1.3
FEB													
10...	0.653	0.661	1.40	0.018	<0.020	0.18	E.003	0.055	2.3	2.5	1.3	<0.1	1.3
JUN													
11...	0.263	0.430	1.17	0.028	<0.020	0.12	0.011	0.081	1.7	1.8	0.8	<0.1	0.8
AUG													
18...	0.378	0.350	0.40	0.019	<0.020	0.21	0.017	0.090	1.1	1.3	1.4	<0.1	1.4

01464515 DOCTORS CREEK AT ALLENTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
13...	3.7	E1.3	--	25
FEB				
10...	1.6	E1.3	--	15
JUN				
11...	3.7	2.2	8.20	24
AUG				
18...	5.0	E1.1	27.8	30

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL				
02...	1024	70	100	230
10...	1000	3,500	1,300	5,000
17...	1133	180	<100	800
24...	1025	900	200	1,100
31...	1046	140	400	500

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

01464527 BLACKS CREEK AT CHESTERFIELD, NJ

LOCATION.--Lat 40°06'34", long 74°38'30", 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 mi^2.

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, 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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
20...	1210	7.6	32	0.190	0.153	766	10.7	89	6.6	197	14.0	7.5	65
FEB													
10...	1000	7.2	14	0.096	0.082	759	13.5	95	7.1	209	6.5	1.1	65
MAY													
20...	0920	7.3	22	0.179	0.145	765	8.5	84	6.8	205	18.0	15.2	66
AUG													
18...	1020	17	50	0.320	0.254	761	7.5	88	7.0	178	22.5	23.3	61

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
20...	18.2	4.82	6.33	6.56	E27	20.1	0.25	11.4	25.2	--	134	16	0.54
FEB													
10...	18.2	4.82	4.45	7.57	27	20.6	0.30	12.6	24.9	116	131	8	0.42
MAY													
20...	18.9	4.54	3.91	8.84	39	20.9	0.39	11.5	19.3	113	141	13	0.39
AUG													
18...	17.2	4.48	5.26	6.06	42	15.8	0.35	10.1	10.1	97	119	40	0.53

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
20...	0.220	0.216	2.39	0.016	0.025	0.17	0.009	0.137	2.9	3.1	1.1	<0.1	1.1
FEB													
10...	0.253	0.252	1.42	0.016	<0.020	0.13	0.011	0.070	1.8	2.0	1.0	<0.1	1.0
MAY													
20...	0.056	0.052	0.39	0.014	<0.020	0.20	0.014	0.126	0.78	0.97	1.3	<0.1	1.3
AUG													
18...	0.050	0.059	0.52	0.011	<0.020	0.39	0.025	0.23	1.0	1.4	2.6	<0.1	2.6

01464527 BLACKS CREEK AT CHESTERFIELD, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
20...	4.3	E2.0	--	39
FEB				
10...	1.9	E1.8	--	21
MAY				
20...	4.0	E1.1	15.6	28
AUG				
18...	7.0	E1.7	27.0	35

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL				
28...	1010	800	200	230
AUG				
04...	0945	460	400	300
11...	0940	250	400	500
18...	0935	9,300	600	800
25...	0930	430	100	130

01464529 BACONS CREEK NEAR MANSFIELD SQUARE, NJ

LOCATION.--Lat 40°06'27", long 74°41'05", Burlington County, Hydrologic Unit 02040201, at bridge on White Pine Road, 300 ft upstream from Fern Brook, 1.3 mi southeast of Mansfield Square, and 5.0 mi northeast of Columbus.

DRAINAGE AREA.--4.41 mi^2.

PERIOD OF RECORD.--Water years 1999-2000.

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 "Accuracy of Records" in the Explanation of Water-Quality Records section of this report.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 20.

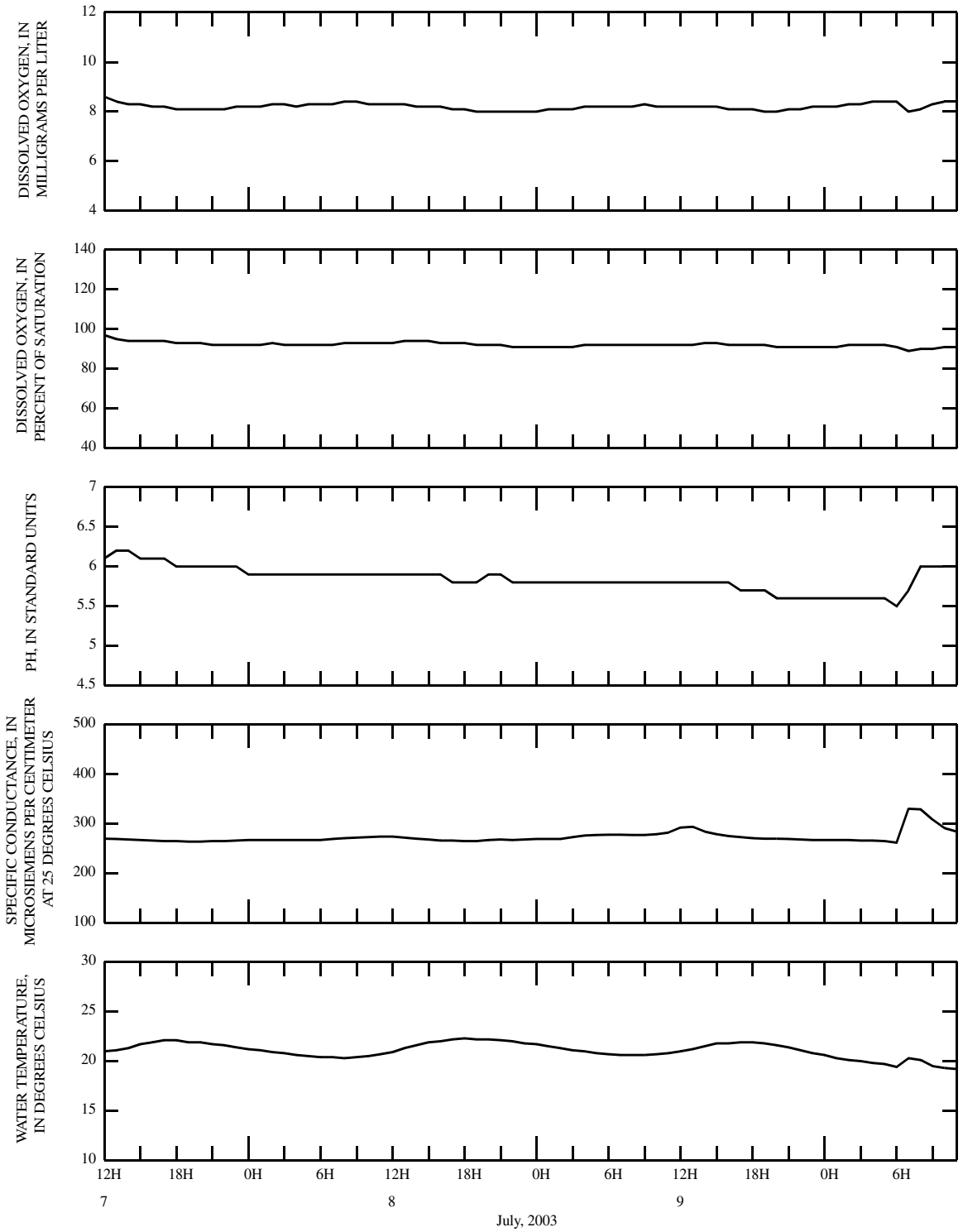


Figure 46. Reconnaissance Study--Physical characteristics and concentrations of constituents at 01464529 Bacons Creek near Mansfield Square, water year 2003.

01464532 BLACKS CREEK AT FIELDSBORO, NJ

LOCATION.--Lat 40°08'31", long 74°43'01", Burlington County, Hydrologic Unit 02040201, at bridge on West Burlington Street, 0.5 mi southwest of Bordentown, 0.7 mi upstream of the mouth, and 0.7 mi northeast of Fieldsboro.

DRAINAGE AREA.-- 23.05 mi^2.

PERIOD OF RECORD.--November 2002 to August 2003.

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 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
19...	0930	30	0.140	0.112	769	10.6	84	6.8	217	8.0	6.0	63	16.7
MAR													
04...	1055	28	0.148	0.123	768	13.7	94	7.0	198	-1.5	0.5	40	9.56
MAY													
13...	0900	9.5	0.107	0.085	752	9.2	90	7.0	303	15.0	14.1	67	17.7
AUG													
26...	1000	10	0.156	0.127	762	8.2	92	7.2	291	28.0	21.4	74	19.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
19...	5.10	5.45	9.11	17	22.2	0.21	12.1	33.5	122	134	19	0.45	0.122
MAR													
04...	3.82	3.31	15.1	6	29.0	<0.17	8.0	23.6	102	109	21	0.38	0.137
MAY													
13...	5.55	4.96	26.0	28	39.7	0.26	9.1	33.5	169	184	12	0.41	0.050
AUG													
26...	6.30	6.06	24.2	35	33.5	0.26	12.3	28.6	171	170	10	0.48	0.087

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
19...	0.127	1.67	0.009	<0.020	0.16	0.011	0.125	2.1	2.3	1.4	<0.1	1.4	3.7
MAR													
04...	0.154	1.19	0.007	0.021	0.12	0.015	0.168	1.6	1.7	1.0	<0.1	1.0	2.4
MAY													
13...	<0.030	3.39	0.005	0.240	0.28	0.22	0.41	3.8	4.1	1.7	<0.1	1.7	3.1
AUG													
26...	0.101	4.04	0.006	0.418	0.10	0.45	0.52	4.5	4.6	0.6	<0.1	0.6	4.1

01464532 BLACKS CREEK AT FIELDSBORO, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV 19...	E1.9	--	33
MAR 04...	<1.0	--	E12
MAY 13...	3.3	50.4	48
AUG 26...	<1.0	8.20	74

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)
AUG 26...	1000	<2	24.4	<0.06	69	0.05	<0.8	5.3	1,910	0.82	76.5	<0.02	5.22

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)
AUG 26...	E.4	<0.16	13

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)
MAR 04...	1055	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01464532 BLACKS CREEK AT FIELDSBORO, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
MAR 04...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	E.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
MAR 04...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY 13...	0900	<0.006	E.008	<0.006	0.009	<0.005	0.021	<0.050	<0.010	<0.002	E.012	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY 13...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	0.043	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY 13...	<0.022	M	0.006	<0.02	<0.034	<0.009

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

01464532 BLACKS CREEK AT FIELDSBORO, NJ—Continued

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL				
28...	0900	1,800	1,100	1,700
AUG				
04...	0930	380	200	700
11...	0915	2,000	1,800	5,000
18...	0915	1,500	700	500
25...	0905	400	200	300

01464578 ANNARICKEN BROOK NEAR JOBSTOWN, NJ

LOCATION.--Lat 40°03'19", long 74°42'07", Burlington County, Hydrologic Unit 02040201, New Jersey Department of Environmental Protection Watershed Management Area 20, at bridge on Skunk Island Road, 0.1 mi upstream of Assiscunk Creek, 1.4 miles north of Jobstown, and 1.6 mi southeast of Columbus.

DRAINAGE AREA.--2.82 mi^2.

PERIOD OF RECORD.--Water years 1997-98.

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 "Accuracy of Records" in the Explanation of Water-Quality Records section of this report.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 20.

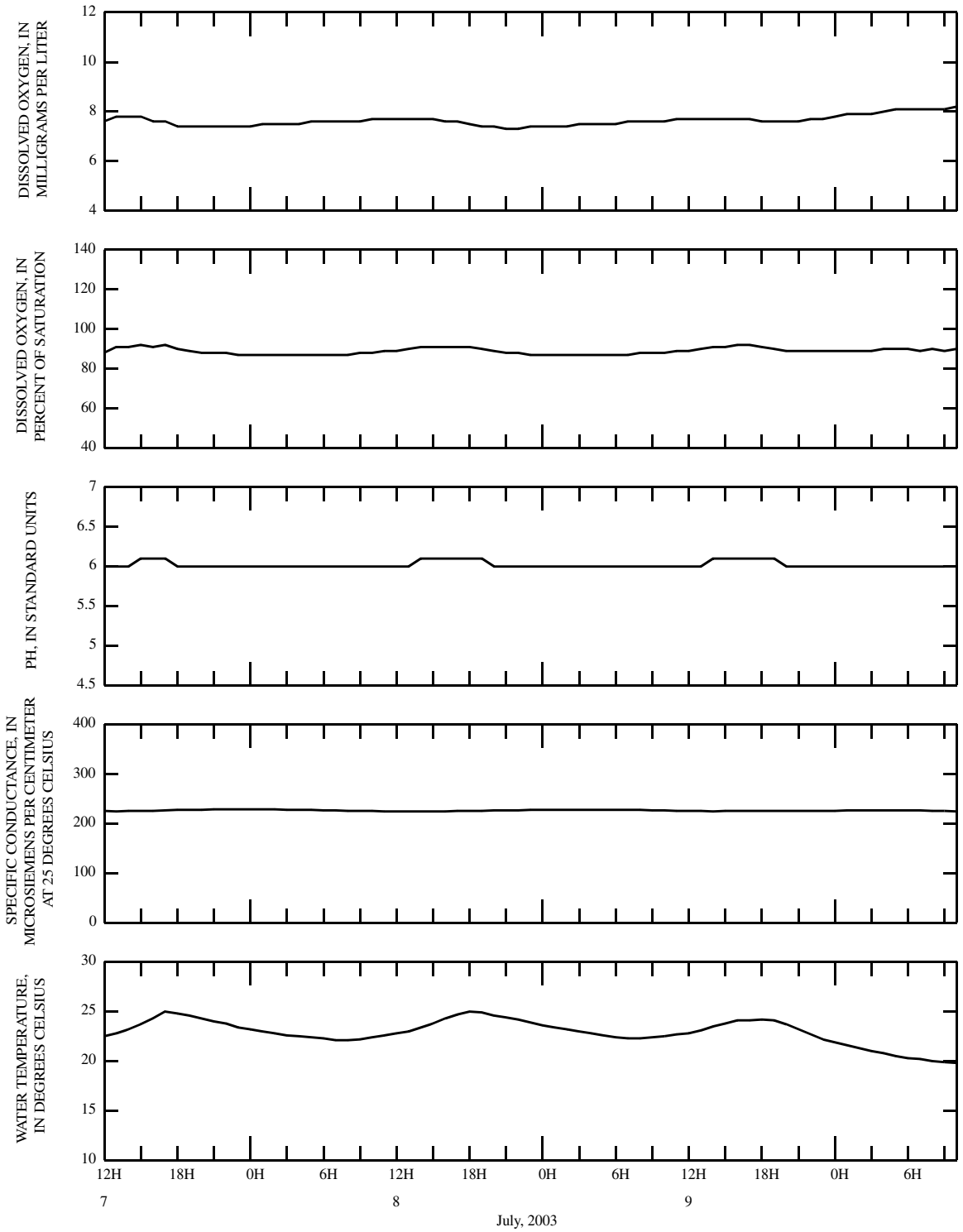


Figure 47. Reconnaissance Study--Physical characteristics and concentrations of constituents at 01464578 Annaricken Brook near Jobstown, water year 2003.

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 mi^2.

PERIOD OF RECORD.--November 1998 to current year.

REMARKS.--Data collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELR NAWQA). For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
NOV											
01...	1210	Environmental	27	12	755	12.7	108	8.2	353	--	8.0
01...	*1211*	*Split Replicate*	--	--	--	--	--	--	--	--	--
DEC											
09...	0950	Environmental	11	--	772	14.9	102	8.0	701	-3.0	0.5
JAN											
08...	1320	Environmental	45	--	740	14.3	113	7.9	869	6.0	4.0
MAR											
07...	0940	Environmental	100	15	768	14.6	100	7.5	557	-2.0	0.4
APR											
08...	0940	Environmental	35	3.4	764	12.9	100	7.4	655	1.5	4.6
MAY											
08...	1200	Environmental	40	21	752	7.7	81	7.4	471	18.0	16.8
JUN											
06...	1010	Environmental	75	22	755	9.5	97	7.5	369	21.0	15.7
JUL											
02...	1230	Environmental	12	--	756	11.6	138	8.1	543	30.5	23.3
SEP											
05...	0930	Environmental	38	14	755	8.2	91	7.4	376	21.5	20.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV												
01...	93	113	31.4	38.1	0.55	<0.04	1.58	0.009	0.06	0.167	9	0.69
01...	*92*	*111*	*32.4*	*37.9*	*0.55*	*<0.04*	*1.61*	*0.009*	*0.06*	*0.114*	*9*	--
DEC												
09...	121	147	96.6	51.4	0.34	E.04	2.56	0.014	0.06	0.104	4	0.12
JAN												
08...	82	100	179	39.4	0.27	E.03	2.00	0.029	0.06	0.090	3	0.40
MAR												
07...	48	58	126	18.7	0.64	0.22	0.97	0.012	0.03	0.083	13	3.4
APR												
08...	93	118	122	37.0	0.63	0.26	1.19	0.070	E.01	0.041	6	0.56
MAY												
08...	78	95	72.0	29.0	0.94	0.05	0.81	0.073	0.02	0.134	25	2.7
JUN												
06...	88	107	42.0	28.5	0.65	E.02	1.34	0.017	0.04	0.119	18	3.6
JUL												
02...	105	125	72.6	38.2	0.39	<0.04	1.54	0.008	0.06	0.089	2	0.06
SEP												
05...	76	92	34.2	27.8	0.70	E.03	0.86	0.019	0.07	0.128	13	1.3

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

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
NOV											
01...	1210	Environmental	<0.006	E.008	<0.006	<0.004	<0.005	0.011	<0.050	<0.010	<0.002
DEC											
09...	0950	Environmental	<0.006	E.018	<0.006	<0.004	<0.005	0.016	<0.050	<0.010	<0.002
JAN											
08...	1320	Environmental	<0.006	E.014	<0.006	<0.004	<0.005	0.015	<0.050	<0.010	<0.002
MAR											
07...	0940	Environmental	<0.006	E.007	<0.006	<0.004	<0.005	0.008	<0.050	<0.010	<0.002
APR											
08...	0940	Environmental	<0.006	E.014	<0.006	<0.004	<0.005	0.014	<0.050	<0.010	<0.002
MAY											
08...	1200	Environmental	<0.006	E.027	0.017	<0.004	<0.005	0.044	<0.050	<0.010	<0.002
JUN											
06...	1010	Environmental	<0.006	E.028	0.011	0.009	<0.005	0.182	<0.050	E.007	<0.005
JUL											
02...	*1200*	*Field Blank*	*<0.006*	*<0.006*	*<0.006*	*<0.004*	*<0.005*	*<0.007*	*<0.050*	*<0.010*	*<0.002*
02...	1230	Environmental	<0.006	E.031	E.005	<0.008	<0.005	0.045	<0.050	<0.010	<0.002
SEP											
05...	0930	Environmental	<0.006	E.007	<0.006	<0.004	<0.005	0.013	<0.050	<0.010	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)
NOV													
01...	E.033	<0.020	<0.006	<0.003	<0.004	0.016	<0.005	<0.002	<0.009	<0.005	<0.005	E.010	<0.027
DEC													
09...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	E.009	<0.027
JAN													
08...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
MAR													
07...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
APR													
08...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	E.007	<0.027
MAY													
08...	E.012	<0.020	<0.006	E.002	<0.004	0.014	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
JUN													
06...	E.053	<0.020	<0.006	<0.003	<0.004	0.013	<0.005	<0.002	<0.009	<0.005	<0.005	E.012	<0.027
JUL													
02...	*<0.041*	*<0.020*	*<0.006*	*<0.003*	*<0.004*	*<0.005*	*<0.005*	*<0.002*	*<0.009*	*<0.005*	*<0.005*	*<0.007*	*<0.027*
02...	E.122	<0.020	<0.006	<0.003	E.003	E.007	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
SEP													
05...	E.116	<0.020	<0.006	<0.003	<0.004	0.010	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
NOV									
01...	0.036	<0.006	<0.007	<0.022	0.02	<0.010	<0.02	<0.034	<0.009
DEC									
09...	E.012	<0.006	<0.007	<0.022	E.01	<0.010	<0.02	<0.034	<0.009
JAN									
08...	E.012	<0.006	<0.007	<0.022	E.01	<0.005	<0.02	<0.034	<0.009
MAR									
07...	E.012	<0.006	<0.007	<0.022	E.01	<0.005	<0.02	<0.034	E.003
APR									
08...	E.008	<0.006	<0.007	<0.022	E.01	<0.010	<0.02	<0.034	<0.009
MAY									
08...	0.024	<0.006	<0.007	<0.022	0.02	0.011	<0.02	<0.034	<0.009
JUN									
06...	0.050	<0.006	<0.007	E.011	0.05	0.006	<0.02	<0.034	E.009
JUL									
02...	*<0.013*	*<0.006*	*<0.007*	*<0.022*	*<0.01*	*<0.005*	*<0.02*	*<0.034*	*<0.009*
02...	E.006	<0.006	<0.007	<0.022	E.01	0.009	<0.02	<0.034	<0.009
SEP									
05...	0.024	<0.006	<0.007	<0.022	0.09	<0.005	<0.02	<0.034	<0.009

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

01465808 SOUTH BRANCH BURRS MILL BROOK NEAR HEDGER HOUSE, NJ

LOCATION.--Lat 39°51'34", long 74°35'55", Burlington County, Hydrologic Unit 02040202, at bridge on Sooy Place Road, 0.5 mi upstream of Slab Causeway Branch, 2.7 mi west of Hedger House, and 4.4 mi northwest of Chatsworth.

DRAINAGE AREA.--7.09 mi^2.

PERIOD OF RECORD.--November 2002 to August 2003.

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 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
26...	1000	1.5	1.01	0.753	768	10.1	--	3.7	--	8.0	6.0	6	0.96
MAR													
06...	0930	1.9	0.862	0.651	754	10.7	--	3.8	--	2.0	0.5	3	0.51
MAY													
13...	1030	1.9	1.68	1.29	752	6.3	63	3.9	83	16.5	14.6	3	0.51
AUG													
27...	1030	3.1	3.29	2.57	758	3.3	39	3.8	81	29.5	23.5	3	0.60

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
26...	0.790	0.33	2.37	5.17	<0.17	4.5	21.4	74	3	0.55	<0.030	<0.030	<0.05
MAR													
06...	0.360	0.43	1.51	2.77	<0.17	3.0	11.8	57	<1	0.46	0.036	0.055	0.07
MAY													
13...	0.357	0.72	1.85	3.91	<0.17	3.7	8.4	79	5	0.72	<0.030	<0.030	<0.05
AUG													
27...	0.427	0.39	1.85	4.40	<0.17	7.8	2.5	134	5	1.3	0.041	0.318	<0.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chlorophyll a fluorometric method, corrctd ug/L (32209)
NOV													
26...	<0.003	--	0.03	0.004	0.007	--	--	0.7	<0.1	0.7	25.0	<1.0	--
MAR													
06...	<0.003	<0.020	0.06	0.004	0.008	0.53	0.59	0.6	<0.1	0.6	18.1	<1.0	--
MAY													
13...	0.003	<0.020	0.06	0.007	0.012	--	--	0.8	<0.1	0.8	29.8	E1.8	5.30
AUG													
27...	0.010	<0.020	0.09	0.012	0.027	--	--	1.2	0.1	1.1	58.4	<1.0	0.700

01465808 SOUTH BRANCH BURRS MILL BROOK NEAR HEDGER HOUSE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alum-inum, water, fltrd, ug/L (01106)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
NOV 26...	365	13	780
MAR 06...	--	E11	--
MAY 13...	--	E12	--
AUG 27...	--	12	4,100

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)
AUG 27...	1030	3	13.9	E.03	10	0.04	E.8	E.5	4,580	2.61	9.9	E.01	1.78

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)
AUG 27...	0.9	<0.16	24

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)
MAR 06...	0930	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01465808 SOUTH BRANCH BURRS MILL BROOK NEAR HEDGER HOUSE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
MAR 06...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
MAR 06...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY 13...	1030	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY 13...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	E.004	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY 13...	<0.022	<0.01	<0.005	<0.02	E.089	<0.009

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

01465808 SOUTH BRANCH BURRS MILL BROOK NEAR HEDGER HOUSE, NJ—Continued

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL				
28...	1110	<10	<100	40
AUG				
04...	0945	<10	<100	40
11...	1115	<10	<100	40
18...	1015	<10	<100	40
25...	1015	10	<100	<20

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

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ

LOCATION.--Lat 39°55'23", long 74°43'04", Burlington County, Hydrologic Unit 02040202, at bridge on Ridge Road, 0.3 mi downstream of Friendship Creek, 0.5 mi north of Retreat, and 1.4 mi southwest of Buddtown.

DRAINAGE AREA.--44.1 mi^2.

PERIOD OF RECORD.--Water years 1975-1982, 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.--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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
14...	0930	1.6	0.530	0.407	765	6.4	54	4.5	110	7.0	8.5	18	4.08
FEB													
25...	0900	1.5	0.528	0.403	771	10.7	73	5.1	85	0.5	0.2	11	2.41
MAY													
06...	0900	2.0	0.618	0.478	760	6.9	66	4.5	80	9.5	13.2	11	2.34
AUG													
21...	0930	7.1	0.708	0.550	765	5.3	64	4.6	60	27.5	24.7	10	2.10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
NOV													
14...	1.98	2.21	5.91	--	9.81	<0.17	6.6	21.9	77	6	0.39	0.035	0.035
FEB													
25...	1.19	1.72	5.51	--	9.58	<0.17	4.3	11.0	61	1	0.35	0.053	0.037
MAY													
06...	1.15	1.58	5.78	--	9.52	<0.17	2.9	12.0	61	4	0.44	<0.030	<0.030
AUG													
21...	1.15	1.25	4.61	<2	8.24	<0.17	3.6	7.4	55	16	0.41	0.042	0.039

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
NOV													
14...	0.14	<0.003	0.025	0.05	0.026	0.045	0.54	0.59	0.5	<0.1	0.5	13.1	E1.6
FEB													
25...	0.21	0.003	0.053	0.05	0.047	0.058	0.56	0.62	0.4	<0.1	0.4	11.6	<1.0
MAY													
06...	0.18	0.004	0.042	0.10	0.044	0.069	0.62	0.73	1.0	<0.1	1.0	12.1	<1.0
AUG													
21...	<0.05	<0.003	0.028	0.28	0.041	0.169	--	--	3.7	<0.1	3.7	13.3	E1.0

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV		
14...	--	15
FEB		
25...	--	E12
MAY		
06...	4.30	13
AUG		
21...	6.30	21

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

WATER-COLUMN AND BED-MATERIAL TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (00626)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor-ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)
AUG													
21...	0930	--	--	--	--	--	E2	35.3	0.07	15	0.05	E.7	1.3
21...	0930	5.70	30	790	0.7	<0.2	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)	Arsenic bed sedimnt total, ug/g (01003)	Cadmium bed sedimnt recover-able, ug/g (01028)	Chrom-ium, bed sedimnt recover-able, ug/g (01029)	Cobalt bed sedimnt recover-able, ug/g (01038)	Copper, bed sedimnt recover-able, ug/g (01043)
AUG													
21...	2,120	1.71	22.2	<0.02	1.31	0.6	<0.16	10	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	<1	0.004	0.7	0.080	<2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover-able, ug/g (01052)	Mangan-ese, bed sedimnt recover-able, ug/g (01053)	Mercury bed sedimnt recover-able, ug/g (71921)	Nickel, bed sedimnt recover-able, ug/g (01068)	Selen-ium, bed sedimnt total, ug/g (01148)	Zinc, bed sedimnt recover-able, ug/g (01093)	1,2-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49403)	1,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49404)	1Methyl -9H-fluor-ene, bed sed <2 mm, ug/kg (49398)	1-Methyl-phenan-threne, bed sed <2 mm, ug/kg (49410)	1-Methyl-pyrene, bed sed <2 mm, wsv nat ug/kg (49388)	236Tri-methyl-naphth-alene, bed sed <2 mm, ug/kg (49405)
AUG													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	320	1.4	1.3	<0.01	0.175	<1	<3.1	<50	<50	E10	<50	E15	<50

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	2,6-Dimethylnaphthalene, bed sed <2 mm, ug/kg (49406)	2-Ethylnaphthalene bed sed <2 mm wsv nat ug/kg (49948)	2-Methylanthracene, bed sed <2 mm, ug/kg (49435)	Cyclopentaphenanthrene, bed sed <2 mm, ug/kg (49411)	9H-Flourene, bed sed <2 mm, wsv nat ug/kg (49399)	Acenaphthene, bed sed <2 mm, wsv nat ug/kg (49429)	Acenaphthylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthracene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo[a]anthracene, bed sed <2 mm, ug/kg (49436)	Benzo[a]pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo[b]fluoranthene bed sed <2 mm ug/kg (49458)	Benzo[ghi]perylene, bed sed <2 mm, ug/kg (49408)	Benzo[k]fluoranthene bed sed <2 mm ug/kg (49397)
AUG													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	E13	E10	E13	<50	E11	<50	E18	E19	E24	E20	E34	<50	E17

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chrysene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, ug/kg (49461)	Fluoranthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno[1,2,3-cd]pyrene, bed sed <2 mm ug/kg (49390)	Isophorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphthalene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenanthrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenanthridine, bed sed <2 mm, wsv nat ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)
AUG												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	E18	<50	E29	E20	<50	E7	<5	<50	E13	<50	E32	0.2

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB													
25...	0900	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
25...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
25...	<0.1	<0.2	0.5	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
06...	0900	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	E.019	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
06...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	<0.013	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
06...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUL					AUG				
28...	1020	1,500	<100	130	11...	1015	120	300	90
AUG					18...	0955	330	200	500
04...	1050	80	<100	230	25...	1010	260	1,700	9,000

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

01465857 SOUTHWEST BRANCH RANCOCAS CREEK AT ELMWOOD ROAD, AT PINE GROVE, NJ

LOCATION.--Lat 39°53'23", long 74°53'00", Burlington County, Hydrologic Unit 02040201, at bridge on Elmwood Road, 0.5 mi north of Pine Grove, 1.1 mi east of Heritage Village, and 2.7 mi upstream of Barton Run.

DRAINAGE AREA.--3.58 mi^2.

PERIOD OF RECORD.--November 2002 to August 2003.

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 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
14...	1045	7.4	0.408	0.326	764	8.0	70	7.2	388	15.0	9.5	170	59.1
FEB													
06...	1045	6.0	0.103	0.081	772	12.1	84	7.4	764	-1.0	0.8	190	64.1
MAY													
01...	1030	5.8	0.079	0.059	762	9.9	95	7.5	463	18.5	13.5	190	64.1
AUG													
07...	1030	5.5	0.214	0.160	759	6.2	70	7.5	383	25.5	21.3	160	54.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
14...	5.88	5.98	8.38	65	17.4	0.29	21.4	97.5	258	287	8	0.49	<0.030
FEB													
06...	6.94	5.96	63.0	74	128	0.35	23.3	83.1	421	453	4	0.34	0.099
MAY													
01...	6.42	6.58	15.4	93	39.3	0.44	22.4	72.1	283	305	3	0.20	<0.030
AUG													
07...	6.36	6.74	13.1	87	28.1	0.35	27.8	56.0	247	269	2	0.52	0.055

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
14...	<0.030	0.53	0.005	0.090	0.07	0.090	0.22	1.0	1.1	0.7	<0.1	0.7	8.4
FEB													
06...	0.124	0.42	0.006	0.033	0.07	0.013	0.102	0.76	0.83	0.5	<0.1	0.5	2.6
MAY													
01...	<0.030	E.04	0.003	0.039	0.08	0.015	0.067	--	E.33	0.5	<0.1	0.4	2.9
AUG													
07...	0.065	0.40	0.014	0.075	0.05	0.080	0.20	0.92	0.97	0.5	<0.1	0.5	5.9

01465857 SOUTHWEST BRANCH RANCOCAS CREEK AT ELMWOOD ROAD, AT PINE GROVE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV 14...	<1.0	--	44
FEB 06...	E1.6	--	29
MAY 01...	E1.1	12.7	47
AUG 07...	<1.0	0.600	57

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)
AUG 07...	1030	E1	73.2	<0.06	60	<0.04	<0.8	2.2	1,080	0.14	34.4	<0.02	4.29

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)
AUG 07...	0.5	<0.16	4

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)
FEB 06...	1045	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01465857 SOUTHWEST BRANCH RANCOCAS CREEK AT ELMWOOD ROAD, AT PINE GROVE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
06...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	0.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
06...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
01...	1030	<0.006	<0.006	<0.006	<0.004	<0.005	E.005	<0.050	<0.010	<0.002	E.009	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
01...	<0.003	<0.004	0.041	E.002	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	E.002	<0.006	<0.007

01465857 SOUTHWEST BRANCH RANCOCAS CREEK AT ELMWOOD ROAD, AT PINE GROVE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
01...	0.024	E.01	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUL					AUG				
28...	1105	3,800	1,200	1,700	11...	1010	2,200	800	2,800
AUG					18...	1050	13,600	6,900	9,000
04...	1055	1,700	1,000	1,100	25...	1055	780	<100	500

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

01465893 LITTLE CREEK AT CHAIRVILLE, NJ

LOCATION.--Lat 39°53'53", long 74°47'18", 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 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
13...	1020	23	1.6	0.921	0.709	762	6.9	63	3.8	105	12.0	11.0	13
MAR													
04...	1050	36	1.2	0.696	0.527	768	10.9	74	3.6	85	5.0	0.0	7
MAY													
07...	1030	5.4	1.4	0.891	0.686	756	8.7	81	4.2	86	22.5	11.8	8
AUG													
19...	0930	3.4	3.0	0.931	0.733	765	7.6	85	4.2	86	23.5	21.1	9

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
13...	2.86	1.41	1.18	5.37	--	7.88	<0.17	6.4	17.1	81	5	0.50	<0.030
MAR													
04...	1.43	0.775	0.67	4.38	--	7.81	<0.17	4.5	11.1	62	2	0.32	<0.030
MAY													
07...	1.67	0.922	1.03	8.05	<2	14.2	<0.17	3.7	6.7	74	<1	0.42	<0.030
AUG													
19...	1.71	1.07	1.12	10.2	<2	17.8	<0.17	6.7	4.0	79	5	0.64	0.071

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
13...	<0.030	<0.05	<0.003	0.024	0.20	0.016	0.025	--	--	0.9	<0.1	0.9	24.4
MAR													
04...	<0.030	0.08	<0.003	<0.020	0.04	0.007	0.012	0.40	0.44	0.3	<0.1	0.3	14.4
MAY													
07...	<0.030	<0.05	<0.003	<0.020	0.04	0.013	0.025	--	--	0.4	<0.1	0.4	17.1
AUG													
19...	0.068	E.04	0.003	<0.020	0.12	0.021	0.038	--	E.80	1.1	<0.1	1.1	16.9

01465893 LITTLE CREEK AT CHAIRVILLE, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Alum-inum, water, fltrd, ug/L (01106)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
NOV					
13...	3.0	--	--	21	--
MAR					
04...	<1.0	--	450	E8.8	442
MAY					
07...	E1.3	6.30	--	17	--
AUG					
19...	<1.0	2.60	--	18	1,310

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL					AUG				
28...	1035	150	<100	40	11...	1030	150	300	210
					18...	1020	330	200	90
					25...	1030	550	<100	230

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

01465965 ONG RUN AT BROWNS MILLS, NJ

LOCATION.--Lat 39°58'35", long 74°34'36", Burlington County, Hydrologic Unit 02040202, at bridge on County Route 667, 0.1 mi upstream of mouth, 0.4 mi northeast of Browns Mills, and 2.3 mi southeast of Pointville.

DRAINAGE AREA.--1.87 mi^2.

PERIOD OF RECORD.--December 2002 to August 2003.

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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
DEC													
11...	0900	1.7	0.110	0.087	764	11.8	86	6.9	128	2.0	2.5	28	5.59
FEB													
24...	0900	6.1	0.263	0.204	768	12.1	83	6.6	122	-1.5	0.5	17	3.32
MAY													
21...	0900	3.5	0.229	0.182	765	8.5	81	6.5	110	16.0	13.1	26	5.30
AUG													
13...	0900	11	0.551	0.438	768	7.1	81	6.7	117	26.5	21.2	30	6.48

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
DEC													
11...	3.52	1.73	9.09	13	14.8	<0.17	7.5	15.4	66	78	3	0.15	0.041
FEB													
24...	2.12	1.39	12.3	5	23.2	<0.17	3.5	9.8	59	75	5	0.19	<0.030
MAY													
21...	3.13	1.38	8.94	14	13.7	<0.17	5.9	11.4	59	74	4	0.21	<0.030
AUG													
13...	3.25	1.82	10.5	18	15.8	<0.17	6.8	7.7	64	87	7	0.73	0.059

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
DEC													
11...	0.041	0.26	<0.003	0.021	0.04	0.005	0.010	0.41	0.44	0.4	<0.1	0.4	3.0
FEB													
24...	<0.030	0.16	<0.003	<0.020	0.14	0.008	0.025	0.35	0.48	1.9	<0.1	1.9	5.7
MAY													
21...	<0.030	0.23	<0.003	<0.020	0.14	0.009	0.027	0.44	0.58	1.5	<0.1	1.5	4.3
AUG													
13...	0.088	0.21	0.003	0.029	0.12	0.020	0.039	0.93	1.1	1.8	<0.1	1.8	10.3

01465965 ONG RUN AT BROWNS MILLS, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC			
11...	E1.6	--	20
FEB			
24...	E1.4	--	E9.5
MAY			
21...	<1.0	8.20	20
AUG			
13...	<1.0	3.10	27

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

WATER-COLUMN AND BED-MATERIAL TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (00626)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor-ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)
AUG													
13...	0900	--	--	--	--	--	<2	47.9	0.08	23	0.09	<0.8	1.1
13...	0900	6.96	240	880	2.7	<0.2	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)	Arsenic bed sedimnt total, ug/g (01003)	Cadmium bed sedimnt recover-able, ug/g (01028)	Chrom-ium, bed sedimnt recover-able, ug/g (01029)	Cobalt bed sedimnt recover-able, ug/g (01038)	Copper, bed sedimnt recover-able, ug/g (01043)
AUG													
13...	2,810	1.66	83.0	<0.02	1.69	E.4	<0.16	10	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	<1	0.120	2.0	0.600	4

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover-able, ug/g (01052)	Mangan-ese, bed sedimnt recover-able, ug/g (01053)	Mercury bed sedimnt recover-able, ug/g (71921)	Nickel, bed sedimnt recover-able, ug/g (01068)	Selen-ium, bed sedimnt total, ug/g (01148)	Zinc, bed sedimnt recover-able, ug/g (01093)	1,2-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49403)	1,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49404)	1Methyl -9H-fluor-ene, bed sed <2 mm, ug/kg (49398)	1-Methyl-phenan-threne, bed sed <2 mm, ug/kg (49410)	1-Methyl-pyrene, bed sed <2 mm, wsv nat ug/kg (49388)	236Tri-methyl-naphth-alene, bed sed <2 mm, ug/kg (49405)
AUG													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	1,000	5.4	13	<0.01	0.590	<1	8.6	<50	E5	<50	E8	E23	<50

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	2,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49406)	2-Ethyl naphth-alene bed sed <2 mm wsv nat ug/kg (49948)	2-Methyl-anthra-cene, bed sed <2 mm, ug/kg (49435)	Cyclo-penta-phenan-threne, bed sed <2 mm, ug/kg (49411)	9H-Flour-ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace-naphth-ene, bed sed <2 mm, wsv nat ug/kg (49429)	Ace-naphth-ylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthra-cene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo-[a]-anthra-cene, bed sed <2 mm, ug/kg (49436)	Benzo-[a]-pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo-[b]-fluor-anthene bed sed <2 mm ug/kg (49458)	Benzo-[ghi]-peryl-ene, bed sed <2 mm, ug/kg (49408)	Benzo-[k]-fluor-anthene bed sed <2 mm ug/kg (49397)
AUG													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	E5	<50	E18	E22	E17	E7	E12	51	220	250	290	E140	250

01465965 ONG RUN AT BROWNS MILLS, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chrysene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, ug/kg (49461)	Fluoranthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,-3-cd]-pyrene, bed sed <2 mm ug/kg (49390)	Isophorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphthalene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenanthrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenanthridine, bed sed <2 mm, wsv nat ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment falldia dst wat percent <.002mm (80294)
AUG													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	290	E44	530	180	<50	E9	E6	<50	200	E12	410	1.6	0.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sediment, falldia dst wat percent <.004mm (80157)	Bed sediment falldia dst wat percent <.008mm (80293)	Bed sediment, falldia dst wat percent <.016mm (80282)	Bed sediment, falldia dst wat percent <.031mm (80283)
AUG				
13...	--	--	--	--
13...	0.3	0.4	0.5	0.7

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB													
24...	0900	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
24...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	E.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
24...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

01465965 ONG RUN AT BROWNS MILLS, NJ—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
21...	0900	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
21...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	<0.013	<0.006	<0.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
21...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUL					AUG				
28...	1100	920	200	700	11...	1030	460	300	800
AUG					18...	1030	1,800	1,200	1,100
04...	1030	400	500	800	25...	1015	440	300	500

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ

LOCATION.--Lat 39°53'06", long 74°30'19", 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 mi^2.

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.--The samples collected Dec. 12, Feb. 13, May 6, and Aug. 7 were collected as part of the Ambient Stream Monitoring Network; the sample on Sept. 5 was collected as part of the U.S. Geological Survey Hydrologic Benchmark Network. 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 ft^3/s less than published in Water-Data Report NJ-03-1. For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report. 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 on Dec. 12, Feb. 13, May 6, and Aug. 7 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. The sample on Sept. 5 was analyzed by the USGS District Water-Quality Laboratory in Troy, New York.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
DEC													
12...	1030	1.8	0.5	0.264	0.197	762	8.5	68	4.3	62	5.0	6.0	6
FEB													
13...	1015	E1.6	0.2	0.203	0.148	761	9.3	70	4.3	58	-5.0	3.6	4
MAY													
06...	1030	2.0	0.3	0.404	0.297	758	3.4	30	4.3	63	13.0	10.4	3
AUG													
07...	1030	1.5	0.3	0.358	0.274	756	2.2	23	4.5	40	24.0	16.8	2
SEP													
05...	0830	--	--	--	--	--	2.5	--	3.6	60	--	17.5	3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
DEC													
12...	0.78	0.905	0.31	2.35	3.30	<0.17	4.8	12.1	39	2	0.17	0.037	0.068
FEB													
13...	0.55	0.568	0.25	1.87	3.59	<0.17	4.8	9.9	24	<1	0.12	<0.030	<0.030
MAY													
06...	0.46	0.413	0.08	1.86	3.37	<0.17	3.7	8.1	36	<1	0.20	<0.030	<0.030
AUG													
07...	0.36	0.369	<0.16	1.80	3.70	<0.17	4.6	3.1	22	1	0.18	<0.020	<0.020
SEP													
05...	0.40	0.40	0.21	1.84	3.6	--	1.76	3.9	--	--	--	--	<0.030

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Partic-ulate nitro-gen, susp, water, mg/L (49570)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC													
12...	E.04	<0.003	<0.020	<0.02	<0.004	<0.004	0.3	<0.1	0.3	7.6	<1.1	--	E7.5
FEB													
13...	E.03	<0.003	<0.020	<0.02	0.004	<0.004	<0.1	<0.1	<0.1	5.3	<1.0	--	<13
MAY													
06...	<0.05	<0.003	<0.020	<0.02	<0.004	<0.004	<0.1	<0.1	<0.1	9.7	<1.0	0.200	E11
AUG													
07...	<0.05	<0.003	<0.020	<0.02	E.002	E.003	<0.1	<0.1	<0.1	9.1	E1.5	0.200	10
SEP													
05...	--	--	--	--	--	--	--	--	--	21.1	--	--	--

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Alum-inum, water, fltrd, ug/L (01106)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)
AUG												
07...	*1028*	*Sampler Blank*	--	--	--	--	--	--	--	*<0.2*	--	--
07...	*1029*	*Field Blank*	--	--	--	--	--	--	--	*0.3*	--	--
07...	1030	Environmental	--	<2	10.0	<0.06	10	<0.04	<0.8	--	E.4	280
SEP												
05...	0830	Environmental	377	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover-able, ug/L (71900)	Mono-meric alum-inum, water, unfltrd ug/L (49287)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Organic mono-meric alum-inum, wat unf ug/L (49288)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
AUG													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	*<0.08*	--	--	*<0.02*	--	--	*<0.06*	--	--	--	--	*<1*	--
07...	--	0.85	6.2	--	<0.02	--	--	0.58	--	E.4	<0.16	--	7
SEP													
05...	--	--	--	--	--	232	--	--	166	--	--	--	--

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)
FEB													
13...	1015	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
13...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
13...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	0.2	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
06...	1030	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
06...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	<0.013	<0.006	<0.007

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
06...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUL					AUG				
28...	1130	<10	<100	<20	11...	1055	<10	<100	<20
AUG					18...	1055	20	100	40
04...	1030	510	100	40	25...	0930	<10	<100	<20

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

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ

LOCATION.--Lat 39°57'22", long 74°37'40", 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 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
DEC													
05...	0715	57	1.5	0.318	0.241	750	11.4	85	4.6	69	-2.0	2.5	6
FEB													
25...	1030	726	1.8	0.525	0.401	771	12.0	83	4.5	70	-1.0	0.9	5
MAY													
29...	0715	187	2.8	0.543	0.422	742	7.0	70	4.4	63	11.0	14.0	4
AUG													
20...	1000	60	6.2	0.536	0.423	767	7.1	80	4.6	48	27.5	21.2	5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
DEC													
05...	1.18	0.789	0.81	3.82	--	5.98	<0.17	5.5	11.9	36	8	0.21	<0.030
FEB													
25...	0.99	0.603	0.75	3.36	--	5.86	<0.17	3.8	9.2	45	3	0.25	<0.030
MAY													
29...	0.91	0.515	0.54	3.91	--	6.64	<0.17	4.0	7.5	40	1	0.23	<0.030
AUG													
20...	1.05	0.500	0.91	4.10	<2	7.23	<0.17	5.8	5.2	38	6	0.26	0.030

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
DEC													
05...	<0.030	0.07	<0.003	0.023	0.04	0.011	0.015	0.28	0.33	0.3	<0.1	0.3	7.3
FEB													
25...	<0.030	0.06	<0.003	0.029	0.02	0.019	0.031	0.31	0.33	0.3	<0.1	0.3	10.9
MAY													
29...	<0.030	<0.05	<0.003	<0.020	0.08	0.007	0.035	--	--	1.1	<0.1	1.1	10.0
AUG													
20...	0.041	0.05	<0.003	<0.020	0.25	0.012	0.071	0.32	0.57	5.2	<0.1	5.2	10.7

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC			
05...	2.3	--	E8.6
FEB			
25...	2.2	--	E6.4
MAY			
29...	<1.0	6.70	12
AUG			
20...	<1.0	6.30	16

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL					AUG				
28...	0950	90	<100	110	11...	1120	60	200	300
AUG					18...	0930	320	100	230
04...	0935	80	<100	220	25...	0900	90	<100	<20

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

01467005 NORTH BRANCH RANCOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ

LOCATION.--Lat 39°59'31", long 74°46'57", 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 mi^2.

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, 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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
13...	0850	247	16	0.178	0.138	762	10.4	95	5.8	151	11.5	11.5	35
FEB													
27...	0910	585	3.7	0.441	0.341	766	13.5	94	5.0	75	-0.5	0.8	13
MAY													
15...	1310	133	6.8	0.344	0.270	767	9.5	92	5.9	114	17.0	14.2	21
AUG													
28...	1330	66	11	0.460	0.367	763	8.2	96	6.7	194	28.5	23.1	29

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
13...	10.4	2.25	2.52	11.0	E5	13.6	<0.17	7.2	34.9	--	99	17	0.38
FEB													
27...	3.51	1.03	1.35	5.56	2	8.91	<0.17	4.4	13.4	41	57	4	0.39
MAY													
15...	5.90	1.41	1.94	10.7	4	14.2	<0.17	5.3	19.9	63	79	9	0.63
AUG													
28...	8.45	1.84	3.88	20.3	10	18.4	<0.17	7.8	38.7	108	131	9	0.65

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
13...	0.202	0.192	0.20	0.003	0.028	0.33	0.022	0.24	0.58	0.91	3.8	<0.1	3.8
FEB													
27...	0.130	0.139	0.15	<0.003	0.044	0.08	0.033	0.128	0.54	0.62	1.1	<0.1	1.1
MAY													
15...	0.336	0.297	0.17	0.018	0.039	0.14	0.031	0.165	0.80	0.94	2.1	<0.1	2.1
AUG													
28...	0.309	0.308	0.38	0.022	0.056	0.16	0.057	0.26	1.0	1.2	2.1	<0.1	2.1

01467005 NORTH BRANCH RANCOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
NOV					
13...	5.2	E1.5	--	30	--
FEB					
27...	9.5	E1.7	--	14	875
MAY					
15...	6.5	<1.0	3.40	21	--
AUG					
28...	8.0	E1.8	1.90	36	--

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL					AUG				
28...	1155	240	<100	2,400	11...	1150	4,800	4,300	9,000
AUG					18...	1125	4,800	1,200	5,000
04...	1120	350	700	3,000	25...	1130	240	100	700

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

01467150 COOPER RIVER AT HADDONFIELD, NJ

LOCATION.--Lat 39°54'11", long 75°01'17", 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 mi^2.

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.--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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
21...	0900	15	12	0.168	0.133	762	9.5	80	7.4	220	11.9	6.2	66
FEB													
05...	0900	24	38	0.139	0.113	760	10.0	73	7.2	863	1.4	2.8	77
MAY													
01...	0900	12	37	0.110	0.085	764	6.6	66	7.3	285	15.6	15.7	72
AUG													
07...	0900	15	35	0.256	0.200	760	4.6	53	6.9	201	23.1	22.6	57

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
21...	18.4	4.83	3.44	11.9	E25	22.7	<0.17	10.9	35.3	--	136	13	0.46
FEB													
05...	22.1	5.21	4.75	158	23	262	<0.17	8.2	29.9	506	518	15	0.61
MAY													
01...	19.8	5.50	3.84	26.4	29	50.3	0.19	10.0	28.9	--	178	22	0.37
AUG													
07...	15.9	4.27	3.02	15.5	32	29.5	<0.17	9.2	16.1	115	129	22	0.60

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
21...	0.180	0.184	0.29	0.008	0.044	0.18	0.040	0.157	0.74	0.93	2.0	<0.1	2.0
FEB													
05...	0.367	0.368	0.43	0.015	<0.020	0.22	0.011	0.182	1.0	1.2	2.0	<0.1	2.0
MAY													
01...	0.168	0.173	0.18	0.007	--	0.39	0.018	0.31	0.55	0.94	3.0	<0.1	3.0
AUG													
07...	0.288	0.338	0.28	0.014	0.133	0.25	0.111	0.40	0.88	1.1	2.0	<0.1	2.0

01467150 COOPER RIVER AT HADDONFIELD, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
21...	4.7	E1.8	--	41
FEB				
05...	3.4	2.3	--	34
MAY				
01...	3.5	<1.0	15.9	41
AUG				
07...	6.6	<1.0	12.2	46

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUN				
02...	1030	4,400	3,400	16,000
09...	0940	1,400	3,300	5,000
16...	0945	440	600	1,700
23...	0915	270	700	1,700
30...	0940	230	500	800

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA

LOCATION.--Lat 39°57'14", long 75°08'16", Philadelphia County, Hydrologic Unit 02040202, on right bank at river end of pier 12, 150 ft upstream from Ben Franklin bridge, and at Philadelphia.

DRAINAGE AREA.--7,993 mi2.

PERIOD OF RECORD.--August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1963 to current year.
pH: October 1967 to current year.
WATER TEMPERATURE: November 1960 to current year.
DISSOLVED OXYGEN: October 1961 to current year.

INSTRUMENTATION.--Water-quality monitor interfaced with a data collection platform.

REMARKS.--Water temperature, pH, and specific conductance records rated good. Dissolved oxygen record rated fair except for period, Aug. 13 to Sept. 30, which is poor. Prior to July 1988, located on edge of pier 11 about 300 ft downstream of pier 12. Further information on this station is given in U.S. Geological Survey Water-Supply Paper 1809-0. Data collection discontinued during winter months. Other interruptions in the record were due to malfunctions of the pump or recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,450 microsiemens, Nov. 20, 1964; minimum, 65 microsiemens, Sept. 15, 1979.
pH: Maximum, 8.7, Oct. 14, 1979; minimum, 4.7, Dec. 29, 1978.
WATER TEMPERATURE: Maximum, 31.0°C, July 13-15, 1966; minimum, 0.0°C, many days during winters.
DISSOLVED OXYGEN: Maximum, 14.1 mg/L, Dec. 14, 1962; minimum, 0.0 mg/L, on many days.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	414	289	341	182	168	175	174	168	170	---	---	---
2	414	292	332	199	174	185	---	---	---	---	---	---
3	397	292	334	198	182	191	---	---	---	---	---	---
4	430	296	354	200	188	194	---	---	---	---	---	---
5	457	309	374	204	195	199	---	---	---	---	---	---
6	439	292	359	207	193	201	---	---	---	---	---	---
7	470	307	380	201	192	197	---	---	---	---	---	---
8	456	298	369	204	194	199	---	---	---	---	---	---
9	489	312	389	203	196	199	---	---	---	---	---	---
10	500	319	396	204	196	200	---	---	---	---	---	---
11	463	307	382	205	198	201	---	---	---	---	---	---
12	404	280	335	207	200	203	---	---	---	---	---	---
13	333	248	283	204	201	203	---	---	---	---	---	---
14	273	238	249	220	202	210	---	---	---	---	---	---
15	256	234	244	226	215	219	---	---	---	---	---	---
16	253	225	239	223	216	220	---	---	---	---	---	---
17	243	201	225	223	210	218	---	---	---	---	---	---
18	230	171	197	219	201	207	---	---	---	---	---	---
19	194	168	176	206	181	195	---	---	---	---	---	---
20	175	167	171	188	177	181	---	---	---	---	---	---
21	174	158	168	181	169	177	---	---	---	---	---	---
22	173	149	163	178	163	172	---	---	---	---	---	---
23	168	144	156	165	151	157	---	---	---	---	---	---
24	165	142	152	158	152	155	---	---	---	---	---	---
25	162	142	151	162	154	157	---	---	---	---	---	---
26	160	145	152	165	158	161	---	---	---	---	---	---
27	153	145	149	173	164	168	---	---	---	---	---	---
28	153	147	150	172	168	170	---	---	---	---	---	---
29	161	150	154	174	165	170	---	---	---	---	---	---
30	164	157	161	172	166	169	---	---	---	---	---	---
31	175	161	168	---	---	---	---	---	---	---	---	---
MONTH	500	142	253	226	151	188	174	168	170	---	---	---

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	160	145	152	226	220	224
2	---	---	---	---	---	---	161	149	154	230	222	227
3	---	---	---	---	---	---	156	145	151	230	220	226
4	---	---	---	---	---	---	153	145	150	233	223	229
5	---	---	---	---	---	---	157	145	151	236	217	228
6	---	---	---	---	---	---	---	151	---	235	215	225
7	---	---	---	---	---	---	---	---	---	235	213	223
8	---	---	---	---	---	---	177	---	---	230	210	220
9	---	---	---	---	---	---	188	168	175	228	212	219
10	---	---	---	---	---	---	183	173	178	226	209	218
11	---	---	---	---	---	---	195	174	184	225	205	216
12	---	---	---	---	---	---	205	183	196	226	207	216
13	---	---	---	---	---	---	---	197	---	226	204	214
14	---	---	---	---	---	---	213	---	---	224	205	215
15	---	---	---	---	---	---	213	202	208	231	207	218
16	---	---	---	---	---	---	210	196	206	232	209	221
17	---	---	---	---	---	---	210	195	203	236	212	223
18	---	---	---	---	---	---	213	196	204	231	215	221
19	---	---	---	---	---	---	210	194	202	232	217	224
20	---	---	---	---	---	---	207	193	201	232	220	225
21	---	---	---	---	---	---	207	195	202	232	222	227
22	---	---	---	---	---	---	208	196	203	231	222	227
23	---	---	---	---	---	---	208	200	205	237	224	231
24	---	---	---	---	---	---	210	203	207	237	227	233
25	---	---	---	---	---	---	214	205	210	239	226	233
26	---	---	---	---	---	---	219	209	214	239	215	227
27	---	---	---	---	---	---	220	212	216	227	215	221
28	---	---	---	---	---	---	221	211	216	229	219	224
29	---	---	---	148	135	142	223	215	220	231	224	228
30	---	---	---	152	144	147	224	217	221	232	225	229
31	---	---	---	151	142	146	---	---	---	231	222	227
MONTH	---	---	---	152	135	145	224	145	193	239	204	224

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	234	214	225	175	166	170	271	244	258	227	218	223
2	226	203	216	179	170	175	268	237	253	230	219	225
3	214	196	204	---	175	---	261	235	248	233	224	229
4	203	160	188	---	---	---	259	236	247	243	228	234
5	163	143	152	---	---	---	254	232	241	249	234	245
6	147	139	143	---	---	---	242	231	236	248	158	214
7	157	144	150	---	---	---	244	235	239	233	133	165
8	163	154	158	215	204	210	243	221	237	186	116	141
9	172	156	165	220	211	216	241	204	226	169	115	134
10	173	165	170	227	217	221	235	192	211	153	116	128
11	178	167	172	230	223	227	223	189	200	138	116	125
12	179	170	175	234	228	231	209	186	194	136	119	127
13	184	173	176	237	232	235	196	184	190	137	123	132
14	182	174	177	240	234	238	194	186	190	137	129	134
15	189	177	182	243	237	241	197	189	192	144	133	137
16	188	182	185	247	240	245	196	191	194	151	141	144
17	188	175	183	255	244	250	198	186	193	179	149	160
18	188	173	180	261	251	256	195	178	188	189	171	179
19	179	167	174	261	254	258	192	178	185	195	172	183
20	177	167	173	263	257	260	189	179	184	199	190	194
21	174	167	171	266	259	263	190	182	186	196	178	188
22	180	172	176	269	261	265	192	184	188	193	169	181
23	180	168	174	271	258	265	195	178	190	191	166	176
24	172	152	163	268	256	261	197	190	193	179	162	169
25	162	148	152	267	258	262	200	194	196	181	160	172
26	154	147	150	273	261	265	204	197	200	171	142	158
27	155	148	151	268	258	264	208	202	205	157	135	146
28	159	151	154	267	252	261	212	205	209	147	129	137
29	158	136	146	271	250	261	219	208	215	136	128	131
30	171	127	150	271	246	261	224	214	219	146	133	139
31	---	---	---	272	243	259	225	217	221	---	---	---
MONTH	234	127	171	273	166	243	271	178	211	249	115	168

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.0	6.9	6.9	6.9	6.8	6.8	6.9	6.9	6.9	---	---	---
2	7.0	6.9	6.9	6.9	6.8	6.9	---	---	---	---	---	---
3	6.9	6.9	6.9	6.9	6.9	6.9	---	---	---	---	---	---
4	6.9	6.9	6.9	6.9	6.9	6.9	---	---	---	---	---	---
5	6.9	6.9	6.9	7.0	6.9	6.9	---	---	---	---	---	---
6	6.9	6.9	6.9	6.9	6.9	6.9	---	---	---	---	---	---
7	6.9	6.9	6.9	6.9	6.9	6.9	---	---	---	---	---	---
8	6.9	6.9	6.9	6.9	6.9	6.9	---	---	---	---	---	---
9	6.9	6.9	6.9	6.9	6.9	6.9	---	---	---	---	---	---
10	6.9	6.9	6.9	6.9	6.8	6.9	---	---	---	---	---	---
11	6.9	6.9	6.9	6.9	6.8	6.9	---	---	---	---	---	---
12	6.9	6.9	6.9	6.9	6.8	6.8	---	---	---	---	---	---
13	7.0	6.9	7.0	6.8	6.8	6.8	---	---	---	---	---	---
14	7.0	7.0	7.0	7.0	6.8	6.9	---	---	---	---	---	---
15	7.0	7.0	7.0	7.0	6.9	6.9	---	---	---	---	---	---
16	7.1	7.0	7.0	7.0	6.9	7.0	---	---	---	---	---	---
17	7.1	7.0	7.0	7.0	6.9	7.0	---	---	---	---	---	---
18	7.1	7.0	7.0	7.0	6.9	7.0	---	---	---	---	---	---
19	7.0	7.0	7.0	7.0	6.9	7.0	---	---	---	---	---	---
20	7.0	7.0	7.0	7.0	6.9	6.9	---	---	---	---	---	---
21	7.0	6.9	7.0	6.9	6.9	6.9	---	---	---	---	---	---
22	7.0	6.9	6.9	6.9	6.9	6.9	---	---	---	---	---	---
23	6.9	6.7	6.9	6.9	6.8	6.9	---	---	---	---	---	---
24	6.8	6.7	6.7	6.9	6.8	6.9	---	---	---	---	---	---
25	6.8	6.7	6.7	6.9	6.8	6.8	---	---	---	---	---	---
26	6.7	6.7	6.7	6.8	6.8	6.8	---	---	---	---	---	---
27	6.7	6.6	6.7	6.9	6.8	6.9	---	---	---	---	---	---
28	6.7	6.6	6.6	6.9	6.9	6.9	---	---	---	---	---	---
29	6.7	6.6	6.6	6.9	6.9	6.9	---	---	---	---	---	---
30	6.8	6.6	6.8	6.9	6.9	6.9	---	---	---	---	---	---
31	6.9	6.8	6.8	---	---	---	---	---	---	---	---	---
MAX	7.1	7.0	7.0	7.0	6.9	7.0	6.9	6.9	6.9	---	---	---
MIN	6.7	6.6	6.6	6.8	6.8	6.8	6.9	6.9	6.9	---	---	---

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	7.4	7.4	7.4	7.3	7.2	7.3
2	---	---	---	---	---	---	7.4	7.4	7.4	7.3	7.2	7.2
3	---	---	---	---	---	---	7.4	7.4	7.4	7.3	7.2	7.2
4	---	---	---	---	---	---	7.4	7.4	7.4	7.2	7.1	7.2
5	---	---	---	---	---	---	7.4	7.4	7.4	7.2	7.1	7.1
6	---	---	---	---	---	---	7.4	7.4	7.4	7.3	7.1	7.2
7	---	---	---	---	---	---	---	---	---	7.3	7.2	7.2
8	---	---	---	---	---	---	---	---	---	7.3	7.2	7.2
9	---	---	---	---	---	---	7.5	7.4	7.5	7.2	7.1	7.2
10	---	---	---	---	---	---	7.6	7.5	7.5	7.2	7.0	7.1
11	---	---	---	---	---	---	7.6	7.5	7.5	7.1	7.0	7.1
12	---	---	---	---	---	---	7.5	7.5	7.5	7.2	6.9	7.0
13	---	---	---	---	---	---	7.5	7.5	7.5	7.2	7.1	7.2
14	---	---	---	---	---	---	7.6	7.5	7.5	7.2	7.1	7.2
15	---	---	---	---	---	---	7.5	7.5	7.5	7.3	7.1	7.2
16	---	---	---	---	---	---	7.6	7.5	7.5	7.3	7.2	7.2
17	---	---	---	---	---	---	7.6	7.5	7.5	7.3	7.2	7.2
18	---	---	---	---	---	---	7.6	7.5	7.5	7.3	7.2	7.2
19	---	---	---	---	---	---	7.6	7.5	7.5	7.3	7.1	7.2
20	---	---	---	---	---	---	7.6	7.5	7.5	7.3	7.1	7.2
21	---	---	---	---	---	---	7.5	7.5	7.5	7.3	7.2	7.2
22	---	---	---	---	---	---	7.5	7.3	7.5	7.3	7.2	7.2
23	---	---	---	---	---	---	7.4	7.3	7.3	7.3	7.1	7.2
24	---	---	---	---	---	---	7.4	7.3	7.3	7.3	7.1	7.2
25	---	---	---	---	---	---	7.4	7.3	7.4	7.2	7.1	7.2
26	---	---	---	---	---	---	7.4	7.3	7.3	7.2	7.1	7.2
27	---	---	---	---	---	---	7.4	7.3	7.3	7.3	7.1	7.2
28	---	---	---	---	---	---	7.4	7.3	7.3	7.2	7.2	7.2
29	---	---	---	7.3	7.3	7.3	7.4	7.3	7.3	7.2	7.1	7.2
30	---	---	---	7.4	7.3	7.3	7.4	7.3	7.3	7.2	7.1	7.2
31	---	---	---	7.4	7.3	7.4	---	---	---	7.1	7.1	7.1
MAX	---	---	---	7.4	7.3	7.4	7.6	7.5	7.5	7.3	7.2	7.3
MIN	---	---	---	7.3	7.3	7.3	7.4	7.3	7.3	7.1	6.9	7.0

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.1	7.0	7.1	7.2	7.1	7.1	7.2	7.1	7.2	7.1	7.0	7.0
2	7.1	7.0	7.1	7.2	7.1	7.1	7.2	7.1	7.2	7.0	6.9	7.0
3	7.2	7.1	7.1	---	---	---	7.2	7.1	7.2	7.0	6.9	6.9
4	7.2	7.1	7.1	---	---	---	7.2	7.1	7.2	7.2	6.9	7.0
5	7.2	7.0	7.1	---	---	---	7.2	7.1	7.1	7.4	7.1	7.2
6	7.1	7.0	7.0	---	---	---	7.2	7.1	7.1	7.4	7.2	7.3
7	7.0	7.0	7.0	---	---	---	7.3	7.1	7.2	7.3	7.0	7.1
8	7.1	7.0	7.0	7.2	7.1	7.1	7.4	7.2	7.2	7.1	6.9	7.0
9	7.1	7.0	7.1	7.2	7.0	7.1	7.3	7.3	7.3	7.0	6.8	6.9
10	7.1	7.0	7.1	7.1	7.0	7.0	7.3	7.2	7.2	7.0	6.8	6.8
11	7.1	7.0	7.1	7.1	6.9	7.0	7.2	7.2	7.2	6.9	6.8	6.8
12	7.1	7.0	7.1	7.1	6.9	7.0	7.2	7.1	7.1	6.8	6.8	6.8
13	7.1	7.0	7.1	7.1	7.0	7.0	7.2	7.1	7.1	6.8	6.8	6.8
14	7.1	7.0	7.1	7.0	7.0	7.0	7.1	7.0	7.1	6.8	6.8	6.8
15	7.1	7.0	7.1	7.1	7.0	7.0	7.2	7.0	7.2	6.9	6.8	6.8
16	7.2	7.0	7.1	7.1	7.0	7.0	7.2	7.1	7.1	6.9	6.8	6.8
17	7.2	7.1	7.1	7.1	7.0	7.0	7.2	7.1	7.2	7.2	6.8	7.0
18	7.2	7.1	7.1	7.1	7.0	7.0	7.2	7.1	7.2	7.2	7.1	7.2
19	7.1	7.1	7.1	7.1	7.0	7.0	7.2	7.1	7.1	7.3	7.1	7.2
20	7.1	7.0	7.0	7.1	7.0	7.0	7.2	7.1	7.1	7.3	7.2	7.2
21	7.1	7.0	7.0	7.1	7.0	7.1	7.2	7.2	7.2	7.2	7.1	7.1
22	7.2	7.1	7.1	7.2	7.0	7.1	7.2	7.1	7.2	7.1	7.0	7.1
23	7.2	7.1	7.1	7.3	7.1	7.1	7.2	7.1	7.1	7.1	6.9	7.0
24	7.1	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.1	7.1	6.9	7.0
25	7.1	7.0	7.0	7.2	7.1	7.2	7.2	7.1	7.1	7.1	7.0	7.1
26	7.0	7.0	7.0	7.1	7.0	7.1	7.3	7.1	7.2	7.1	7.0	7.1
27	7.0	7.0	7.0	7.1	7.0	7.0	7.2	7.2	7.2	7.1	6.9	7.0
28	7.1	7.0	7.1	7.1	7.0	7.0	7.2	7.1	7.2	7.0	6.9	6.9
29	7.1	7.0	7.1	7.0	7.0	7.0	7.2	7.0	7.1	6.9	6.9	6.9
30	7.2	7.0	7.1	7.2	7.0	7.0	7.1	7.0	7.0	7.0	6.9	7.0
31	---	---	---	7.2	7.1	7.1	7.1	7.0	7.0	---	---	---
MAX	7.2	7.1	7.1	7.3	7.1	7.2	7.4	7.3	7.3	7.4	7.2	7.3
MIN	7.0	7.0	7.0	7.0	6.9	7.0	7.1	7.0	7.0	6.8	6.8	6.8

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	22.5	22.5	22.5	11.0	10.5	11.0	6.5	5.5	6.0	---	---	---
2	23.0	22.5	22.5	11.0	10.5	10.5	---	---	---	---	---	---
3	23.0	22.5	23.0	10.5	10.0	10.0	---	---	---	---	---	---
4	23.0	23.0	23.0	10.0	10.0	10.0	---	---	---	---	---	---
5	23.0	23.0	23.0	10.0	9.5	10.0	---	---	---	---	---	---
6	23.0	22.5	22.5	10.0	9.5	10.0	---	---	---	---	---	---
7	22.5	22.5	22.5	9.5	9.0	9.5	---	---	---	---	---	---
8	22.5	22.0	22.0	9.5	9.0	9.5	---	---	---	---	---	---
9	22.0	21.5	21.5	9.5	9.0	9.5	---	---	---	---	---	---
10	21.5	21.5	21.5	10.0	9.0	9.5	---	---	---	---	---	---
11	21.5	21.0	21.0	10.0	9.5	10.0	---	---	---	---	---	---
12	21.0	20.5	20.5	10.0	10.0	10.0	---	---	---	---	---	---
13	20.5	20.0	20.5	10.5	10.0	10.0	---	---	---	---	---	---
14	20.0	19.5	19.5	10.5	10.0	10.0	---	---	---	---	---	---
15	19.5	18.0	19.0	10.5	10.0	10.0	---	---	---	---	---	---
16	19.0	17.0	18.0	10.0	10.0	10.0	---	---	---	---	---	---
17	18.0	16.0	17.0	10.0	10.0	10.0	---	---	---	---	---	---
18	17.0	15.0	15.5	10.0	10.0	10.0	---	---	---	---	---	---
19	15.0	14.0	14.5	10.0	9.0	9.5	---	---	---	---	---	---
20	14.5	13.5	14.0	9.5	8.5	9.0	---	---	---	---	---	---
21	14.0	13.0	13.5	8.5	8.0	8.0	---	---	---	---	---	---
22	13.5	13.0	13.5	8.5	8.0	8.0	---	---	---	---	---	---
23	13.5	13.0	13.0	8.0	7.0	7.5	---	---	---	---	---	---
24	13.0	12.5	12.5	7.5	7.0	7.0	---	---	---	---	---	---
25	12.5	12.5	12.5	7.5	7.0	7.5	---	---	---	---	---	---
26	12.5	12.5	12.5	7.5	7.0	7.5	---	---	---	---	---	---
27	12.5	12.5	12.5	7.5	7.0	7.5	---	---	---	---	---	---
28	12.5	12.0	12.5	7.0	7.0	7.0	---	---	---	---	---	---
29	12.0	12.0	12.0	7.0	6.5	6.5	---	---	---	---	---	---
30	12.0	11.5	11.5	6.5	6.0	6.5	---	---	---	---	---	---
31	11.5	11.0	11.0	---	---	---	---	---	---	---	---	---
MONTH	23.0	11.0	17.4	11.0	6.0	9.0	6.5	5.5	6.0	---	---	---

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	9.0	8.5	9.0	15.5	14.5	15.0
2	---	---	---	---	---	---	9.0	8.5	8.5	16.0	15.0	15.5
3	---	---	---	---	---	---	9.0	8.0	8.5	16.5	15.5	16.0
4	---	---	---	---	---	---	8.5	7.5	8.0	16.5	16.0	16.0
5	---	---	---	---	---	---	8.0	7.5	7.5	16.5	16.0	16.5
6	---	---	---	---	---	---	7.5	7.5	7.5	16.5	16.0	16.5
7	---	---	---	---	---	---	---	---	---	17.0	16.0	16.5
8	---	---	---	---	---	---	---	---	---	17.0	16.5	17.0
9	---	---	---	---	---	---	7.0	6.5	6.5	17.0	17.0	17.0
10	---	---	---	---	---	---	6.5	6.0	6.5	17.0	17.0	17.0
11	---	---	---	---	---	---	6.5	5.5	6.0	17.5	17.0	17.0
12	---	---	---	---	---	---	6.0	5.5	6.0	17.5	17.0	17.0
13	---	---	---	---	---	---	6.5	6.0	6.0	17.0	16.0	16.5
14	---	---	---	---	---	---	---	---	---	16.5	16.0	16.5
15	---	---	---	---	---	---	9.5	7.5	8.5	16.5	16.0	16.0
16	---	---	---	---	---	---	11.0	8.5	10.0	16.5	15.5	16.0
17	---	---	---	---	---	---	11.0	10.0	10.5	16.0	15.0	15.5
18	---	---	---	---	---	---	11.0	10.0	10.5	15.5	15.0	15.0
19	---	---	---	---	---	---	11.5	10.5	11.0	15.5	15.0	15.5
20	---	---	---	---	---	---	12.5	11.0	11.5	16.0	15.5	15.5
21	---	---	---	---	---	---	12.5	11.5	12.0	16.0	15.5	15.5
22	---	---	---	---	---	---	13.0	12.0	12.5	16.0	15.5	15.5
23	---	---	---	---	---	---	13.0	12.5	12.5	15.5	15.5	15.5
24	---	---	---	---	---	---	12.5	12.5	12.5	15.5	15.5	15.5
25	---	---	---	---	---	---	13.0	12.5	12.5	15.5	15.5	15.5
26	---	---	---	---	---	---	13.0	13.0	13.0	15.5	15.0	15.5
27	---	---	---	---	---	---	13.5	13.0	13.0	15.5	15.0	15.5
28	---	---	---	---	---	---	14.0	13.5	13.5	16.0	15.5	15.5
29	---	---	---	9.5	8.5	9.0	14.5	14.0	14.0	16.5	15.5	16.0
30	---	---	---	9.5	9.0	9.5	15.0	14.0	14.5	17.0	16.0	16.5
31	---	---	---	9.5	9.0	9.0	---	---	---	17.0	16.5	16.5
MONTH	---	---	---	9.5	8.5	9.2	15.0	5.5	10.1	17.5	14.5	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.0	16.5	17.0	24.0	22.5	23.5	26.0	25.5	26.0	26.0	25.5	26.0
2	17.5	16.5	17.0	24.0	23.0	23.5	26.0	26.0	26.0	25.5	25.0	25.5
3	18.0	17.0	17.5	---	---	---	26.5	26.0	26.0	25.0	25.0	25.0
4	17.5	16.0	17.0	---	---	---	26.5	26.0	26.5	25.0	24.5	24.5
5	16.0	15.0	15.5	---	---	---	26.5	26.5	26.5	24.5	23.0	24.0
6	15.5	15.0	15.0	---	---	---	26.5	26.5	26.5	24.0	20.0	21.5
7	15.5	15.0	15.0	26.0	---	---	26.5	26.5	26.5	22.5	19.5	20.5
8	16.0	15.5	15.5	26.0	25.5	26.0	26.5	25.5	26.0	21.0	19.5	20.0
9	16.5	15.5	16.0	26.5	26.0	26.0	26.5	25.0	26.0	21.0	20.0	20.0
10	17.5	16.5	17.0	26.0	25.5	26.0	26.0	25.0	25.5	20.5	20.0	20.0
11	17.5	17.0	17.5	26.0	25.5	25.5	25.5	24.5	25.0	20.5	20.0	20.0
12	18.5	17.5	18.0	26.0	25.5	25.5	25.5	24.5	25.0	20.5	20.0	20.5
13	19.5	18.0	19.0	26.0	25.5	26.0	25.5	25.0	25.0	20.5	20.5	20.5
14	20.5	19.0	19.5	26.0	25.5	26.0	25.5	25.0	25.5	21.0	20.5	21.0
15	20.5	20.0	20.5	26.0	25.5	26.0	26.0	25.5	25.5	21.5	21.0	21.5
16	20.5	20.0	20.5	26.0	26.0	26.0	26.0	25.5	25.5	22.0	21.5	21.5
17	20.5	20.0	20.0	26.0	26.0	26.0	26.0	25.5	25.5	22.5	21.5	22.0
18	20.5	20.0	20.0	26.0	26.0	26.0	26.0	25.5	25.5	22.0	22.0	22.0
19	20.5	20.0	20.0	26.0	26.0	26.0	26.0	25.5	25.5	22.0	22.0	22.0
20	20.5	20.0	20.0	26.0	26.0	26.0	26.0	25.5	26.0	22.5	22.0	22.0
21	20.0	19.5	19.5	26.5	26.0	26.0	26.5	26.0	26.0	22.0	21.5	22.0
22	19.5	18.5	19.0	26.5	26.0	26.5	26.5	26.0	26.5	22.0	21.5	21.5
23	18.5	17.5	18.0	26.5	26.0	26.5	26.5	26.0	26.5	22.0	21.5	21.5
24	18.0	17.5	17.5	26.5	26.0	26.0	26.0	26.0	26.0	21.5	21.0	21.5
25	18.5	18.0	18.0	26.5	26.0	26.5	26.0	25.5	26.0	21.0	20.0	21.0
26	20.5	18.5	19.5	26.5	26.0	26.5	26.0	25.5	26.0	21.0	19.5	20.0
27	21.0	19.5	20.5	26.5	26.5	26.5	26.0	25.5	26.0	20.0	19.0	19.5
28	22.0	20.5	21.5	26.5	26.5	26.5	26.0	26.0	26.0	20.0	19.0	19.5
29	23.0	21.5	22.0	26.5	26.0	26.5	26.5	26.0	26.0	19.5	19.0	19.0
30	23.5	22.0	22.5	26.5	26.0	26.0	26.5	26.0	26.0	19.0	19.0	19.0
31	---	---	---	26.0	26.0	26.0	26.0	26.0	26.0	---	---	---
MONTH	23.5	15.0	18.5	26.5	22.5	25.9	26.5	24.5	25.9	26.0	19.0	21.5

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA—Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.5	4.5	4.9	9.6	9.1	9.4	11.6	11.0	11.4	---	---	---
2	5.3	4.6	4.9	9.7	9.4	9.6	---	---	---	---	---	---
3	5.0	4.4	4.7	9.8	9.4	9.6	---	---	---	---	---	---
4	4.9	4.3	4.6	10.0	9.6	9.7	---	---	---	---	---	---
5	4.8	4.2	4.5	10.0	9.6	9.7	---	---	---	---	---	---
6	5.2	4.4	4.8	9.9	9.4	9.6	---	---	---	---	---	---
7	5.2	4.7	4.9	10.2	9.7	9.9	---	---	---	---	---	---
8	5.4	4.8	5.1	10.2	9.7	9.9	---	---	---	---	---	---
9	5.4	5.0	5.2	10.2	9.7	10	---	---	---	---	---	---
10	5.3	5.0	5.2	10.3	9.8	10.0	---	---	---	---	---	---
11	5.5	4.9	5.2	10.2	9.7	9.9	---	---	---	---	---	---
12	5.7	4.8	5.2	9.9	9.5	9.7	---	---	---	---	---	---
13	6.5	5.3	5.9	9.7	9.4	9.5	---	---	---	---	---	---
14	6.4	6.0	6.3	9.8	9.3	9.5	---	---	---	---	---	---
15	7.2	6.3	6.6	9.9	9.4	9.6	---	---	---	---	---	---
16	7.7	6.5	7.1	9.9	9.4	9.7	---	---	---	---	---	---
17	8.2	6.9	7.5	9.7	9.5	9.6	---	---	---	---	---	---
18	8.6	7.4	8.2	9.9	9.4	9.6	---	---	---	---	---	---
19	9.0	8.2	8.6	10.4	9.7	10.1	---	---	---	---	---	---
20	9.1	8.7	8.9	10.5	10.1	10.3	---	---	---	---	---	---
21	9.2	8.8	9.0	10.8	10.3	10.5	---	---	---	---	---	---
22	9.3	8.9	9.1	10.7	10.3	10.5	---	---	---	---	---	---
23	9.2	9.0	9.1	11.1	10.5	10.9	---	---	---	---	---	---
24	9.3	9.0	9.1	11.1	10.8	11.0	---	---	---	---	---	---
25	9.2	8.9	9.1	11.1	10.8	11.0	---	---	---	---	---	---
26	9.1	8.7	8.9	11.0	10.8	10.9	---	---	---	---	---	---
27	9.1	8.7	8.9	10.9	10.5	10.7	---	---	---	---	---	---
28	9.2	8.7	9.0	10.9	10.6	10.8	---	---	---	---	---	---
29	9.3	8.8	9.0	11.2	10.7	10.9	---	---	---	---	---	---
30	9.3	8.9	9.0	11.2	10.8	11.1	---	---	---	---	---	---
31	9.3	9.0	9.2	---	---	---	---	---	---	---	---	---
MONTH	9.3	4.2	7.0	11.2	9.1	10.1	11.6	11.0	11.4	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.6	10.5	10.5	10.4	9.8	10.0
2	---	---	---	---	---	---	10.8	10.5	10.6	10.1	9.5	9.7
3	---	---	---	---	---	---	11.1	10.5	10.7	9.8	9.4	9.5
4	---	---	---	---	---	---	11.3	10.6	11.0	9.6	9.0	9.2
5	---	---	---	---	---	---	11.3	10.9	11.1	9.1	8.5	8.7
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	11.5	11.1	11.3	---	---	---
10	---	---	---	---	---	---	11.8	11.4	11.6	---	---	---
11	---	---	---	---	---	---	12.0	11.6	11.8	---	---	---
12	---	---	---	---	---	---	11.9	11.7	11.8	---	---	---
13	---	---	---	---	---	---	---	---	---	7.7	6.4	7.0
14	---	---	---	---	---	---	---	---	---	8.0	6.8	7.4
15	---	---	---	---	---	---	11.3	10.8	11.1	8.5	7.1	7.7
16	---	---	---	---	---	---	10.9	10.4	10.6	8.7	7.3	8.0
17	---	---	---	---	---	---	10.7	10.4	10.5	8.9	7.7	8.2
18	---	---	---	---	---	---	10.6	10.3	10.4	9.1	7.8	8.4
19	---	---	---	---	---	---	10.3	10.1	10.2	9.1	7.6	8.4
20	---	---	---	---	---	---	10.2	9.8	10.0	8.8	7.5	8.3
21	---	---	---	---	---	---	9.9	9.6	9.8	8.7	7.4	8.1
22	---	---	---	---	---	---	9.6	9.4	9.6	8.3	7.1	7.8
23	---	---	---	---	---	---	10.0	9.5	9.8	8.2	7.1	7.7
24	---	---	---	---	---	---	10.5	10.0	10.2	8.2	7.2	7.7
25	---	---	---	---	---	---	10.8	10.3	10.5	8.2	7.1	7.6
26	---	---	---	---	---	---	10.8	10.3	10.5	8.2	7.2	7.8
27	---	---	---	---	---	---	10.7	10.3	10.5	8.3	7.6	7.9
28	---	---	---	---	---	---	10.7	10.4	10.5	8.0	7.7	7.8
29	---	---	---	10.9	10.6	10.7	10.4	10.2	10.3	7.8	7.4	7.6
30	---	---	---	10.6	10.4	10.5	10.5	10.1	10.3	7.7	7.4	7.5
31	---	---	---	10.6	10.5	10.6	---	---	---	7.5	7.2	7.4
MONTH	---	---	---	10.9	10.4	10.6	12.0	9.4	10.6	10.4	6.4	8.1

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA—Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.3	6.7	6.9	7.4	6.8	7.2	5.2	4.4	4.6	5.3	4.5	4.8
2	7.6	6.5	7.0	7.3	6.9	7.0	4.8	4.2	4.4	4.9	4.1	4.5
3	7.7	7.0	7.5	---	---	---	5.2	4.1	4.6	4.7	4.1	4.4
4	8.2	7.0	7.7	---	---	---	5.1	4.4	4.7	5.1	4.2	4.6
5	8.9	8.0	8.5	---	---	---	4.8	4.2	4.5	6.0	4.6	5.2
6	8.8	8.3	8.5	---	---	---	5.3	4.1	4.6	7.1	5.1	6.4
7	8.6	8.1	8.4	---	---	---	5.6	4.5	5.1	7.1	6.0	6.8
8	8.6	7.9	8.3	6.9	6.2	6.5	5.8	4.8	5.2	7.0	6.6	6.8
9	8.5	8.1	8.3	6.6	5.8	6.3	5.6	4.7	5.3	7.0	6.5	6.8
10	8.3	8.0	8.2	6.3	5.2	5.8	5.6	4.8	5.2	7.1	6.7	6.9
11	8.2	7.9	8.1	5.7	4.8	5.3	5.7	4.9	5.4	7.2	6.6	6.9
12	8.1	7.8	7.9	5.6	4.7	5.1	5.9	4.9	5.4	7.2	6.6	6.9
13	7.9	7.4	7.7	5.4	4.7	5.0	5.7	5.2	5.5	7.2	6.5	6.7
14	7.8	7.2	7.5	5.4	4.7	4.9	6.0	5.3	5.6	7.0	6.2	6.6
15	7.5	6.9	7.2	5.3	4.7	4.9	6.1	5.4	5.7	7.1	6.0	6.5
16	7.4	6.9	7.2	5.3	4.6	4.8	5.9	5.3	5.6	6.9	5.8	6.2
17	7.4	7.0	7.2	5.1	4.5	4.8	6.0	5.2	5.6	7.5	6.3	6.8
18	7.5	7.0	7.2	5.0	4.4	4.7	6.1	5.3	5.7	7.1	6.7	6.9
19	7.4	6.9	7.1	5.1	4.3	4.7	5.9	5.2	5.6	7.1	6.8	7.0
20	7.3	6.8	7.0	5.0	4.3	4.7	6.0	5.3	5.7	7.1	6.6	6.9
21	7.3	6.7	7.0	5.2	4.5	4.8	6.2	5.3	5.7	6.7	6.4	6.6
22	7.6	7.0	7.4	5.4	4.6	5.0	6.6	5.5	5.9	6.6	6.1	6.4
23	7.9	7.4	7.6	6.3	4.6	5.3	6.7	5.7	6.2	6.3	5.5	6.0
24	8.1	7.6	7.9	6.0	4.9	5.6	7.0	5.8	6.4	6.6	5.6	6.1
25	8.1	7.6	7.9	6.0	5.2	5.5	6.9	5.9	6.4	6.9	6.3	6.6
26	8.0	7.6	7.8	6.0	5.1	5.5	6.5	5.6	6.1	6.5	5.7	6.0
27	7.6	7.2	7.4	5.8	5.1	5.5	5.6	5.0	5.4	6.1	5.5	5.8
28	7.4	7.0	7.2	5.4	4.8	5.1	6.0	4.0	4.9	6.1	5.6	5.8
29	7.2	6.4	6.9	5.2	4.6	4.9	6.0	5.1	5.4	5.6	4.7	5.2
30	7.5	6.5	7.0	5.5	4.5	4.8	5.8	4.9	5.2	6.2	4.7	5.4
31	---	---	---	5.4	4.7	5.0	5.5	4.7	5.0	---	---	---
MONTH	8.9	6.4	7.6	7.4	4.3	5.3	7.0	4.0	5.4	7.5	4.1	6.2

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
APR 2003									
01...	1222	1028	1028	88	1	10.9	7.5	153	8.6
01...	1224	1028	1028	88	5	10.8	7.5	154	8.6
01...	1226	1028	1028	288	1	10.9	7.4	152	8.7
01...	1228	1028	1028	288	6	10.9	7.4	153	8.7
01...	1229	1028	1028	288	10	10.9	7.4	152	8.7
01...	1230	1028	1028	288	15	10.9	7.4	152	8.7
01...	1231	1028	1028	288	20	10.9	7.4	151	8.7
01...	1232	1028	1028	288	25	10.9	7.4	151	8.7
01...	1233	1028	1028	288	30	10.9	7.4	151	8.7
01...	1240	1028	1028	450	1	10.9	7.4	151	8.7
01...	1241	1028	1028	450	5	10.9	7.5	151	8.7
01...	1242	1028	1028	450	10	11.0	7.5	151	8.7
01...	1243	1028	1028	450	15	10.8	7.5	151	8.7
01...	1244	1028	1028	450	20	10.9	7.5	151	8.7
01...	1245	1028	1028	450	25	10.8	7.5	151	8.7
01...	1246	1028	1028	450	30	10.9	7.5	151	8.7
01...	1255	1028	1028	700	1	10.8	7.5	152	8.8
01...	1256	1028	1028	700	5	10.8	7.5	152	8.8
01...	1257	1028	1028	700	10	10.8	7.5	151	8.8
01...	1258	1028	1028	700	15	10.8	7.5	152	8.8
01...	1259	1028	1028	700	20	10.8	7.5	152	8.8
01...	1300	1028	1028	700	25	10.8	7.5	152	8.8
01...	1301	1028	1028	700	30	10.8	7.5	152	8.8
01...	1308	1028	1028	910	1	10.8	7.5	152	8.8
01...	1309	1028	1028	910	5	10.8	7.5	151	8.8
01...	1310	1028	1028	910	10	10.8	7.5	152	8.8
01...	1311	1028	1028	910	15	10.8	7.5	152	8.8
01...	1312	1028	1028	910	20	10.8	7.5	152	8.8
01...	1313	1028	1028	910	25	10.8	7.5	152	8.8
01...	1314	1028	1028	910	30	10.8	7.5	152	8.8
01...	1315	1028	1028	910	35	10.8	7.5	152	8.8
01...	1316	1028	1028	910	40	10.8	7.5	152	8.8
01...	1325	1028	1028	1150	1	10.8	7.5	152	8.8
01...	1326	1028	1028	1150	5	10.8	7.5	152	8.8
01...	1327	1028	1028	1150	10	10.8	7.5	152	8.8
01...	1328	1028	1028	1150	15	10.8	7.5	152	8.8
01...	1329	1028	1028	1150	20	10.8	7.5	152	8.8
01...	1330	1028	1028	1150	25	10.8	7.5	152	8.8
01...	1331	1028	1028	1150	30	10.8	7.5	152	8.8
01...	1332	1028	1028	1150	35	10.8	7.5	152	8.8
01...	1333	1028	1028	1150	40	10.8	7.5	152	8.8
01...	1337	1028	1028	1370	1	10.8	7.5	153	8.8
01...	1338	1028	1028	1370	5	10.8	7.5	153	8.8
01...	1339	1028	1028	1370	10	10.8	7.5	153	8.8
01...	1340	1028	1028	1370	15	10.8	7.5	153	8.8
01...	1341	1028	1028	1370	20	10.8	7.5	153	8.8
01...	1342	1028	1028	1370	25	10.8	7.5	153	8.8
01...	1343	1028	1028	1370	30	10.8	7.5	154	8.8
01...	1344	1028	1028	1370	35	10.8	7.5	154	8.8
01...	1345	1028	1028	1370	40	10.8	7.5	154	8.8
01...	1346	1028	1028	1370	45	10.8	7.5	154	8.9
01...	1347	1028	1028	1550	1	10.9	7.4	154	8.8
01...	1348	1028	1028	1550	5	10.8	7.5	154	8.8
01...	1349	1028	1028	1550	10	10.8	7.4	154	8.8
01...	1350	1028	1028	1550	15	10.8	7.4	154	8.8
01...	1351	1028	1028	1550	20	10.8	7.5	154	8.8
01...	1352	1028	1028	1550	25	10.8	7.5	154	8.8
01...	1353	1028	1028	1550	30	10.8	7.5	154	8.8
01...	1354	1028	1028	1550	35	10.8	7.5	154	8.8
01...	1355	1028	1028	1550	40	10.8	7.4	154	8.8
01...	1356	1028	1028	1550	45	10.8	7.5	154	8.8
01...	1357	1028	1028	1770	1	10.8	7.4	155	8.8
01...	1358	1028	1028	1770	5	10.8	7.5	155	8.8
01...	1359	1028	1028	1770	10	10.8	7.5	155	8.8
01...	1400	1028	1028	1770	15	10.8	7.5	155	8.8
01...	1401	1028	1028	1770	20	10.8	7.5	155	8.8
01...	1402	1028	1028	1770	25	10.8	7.4	155	8.8
01...	1403	1028	1028	1770	30	10.8	7.5	155	8.8
01...	1404	1028	1028	1770	35	10.8	7.5	155	8.8
01...	1405	1028	1028	1770	40	10.8	7.4	155	8.9
01...	1406	1028	1028	1770	45	10.8	7.4	155	8.9
01...	1407	1028	1028	1770	50	10.8	7.5	155	8.9
01...	1408	1028	1028	2010	1	10.8	7.4	157	8.9
01...	1409	1028	1028	2010	5	10.7	7.4	157	8.9
01...	1410	1028	1028	2010	10	10.7	7.4	157	8.9
01...	1411	1028	1028	2010	15	10.7	7.5	157	8.9
01...	1412	1028	1028	2010	20	10.7	7.5	157	8.9
01...	1413	1028	1028	2010	25	10.7	7.5	157	8.9
01...	1414	1028	1028	2010	30	10.7	7.5	157	8.9
01...	1415	1028	1028	2010	35	10.7	7.4	157	8.9
01...	1416	1028	1028	2010	40	10.7	7.5	157	8.9
01...	1417	1028	1028	2010	45	10.7	7.5	157	8.9
01...	1418	1028	1028	2010	50	10.7	7.5	157	8.9
01...	1419	1028	1028	2160	0	--	--	--	--

01467312 NEWTON CREEK AT WEST COLLINGSWOOD, NJ

LOCATION.--Lat 39°54'05", long 75°05'41", Camden County, Hydrologic Unit 02040202, at bridge on State Route 168 (Mount Ephraim Avenue/Black Horse Pike), 0.4 mi southwest of West Collingswood, 1.5 mi east of Gloucester City, 1.9 mi west of Collingswood, and 2.6 mi upstream of Newton Creek.

DRAINAGE AREA.--4.51 mi^2.

PERIOD OF RECORD.--Water years 1964, 1965, 1967, 2003 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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
DEC													
19...	0845	5.8	0.178	0.147	766	8.9	66	7.3	321	5.0	3.0	70	16.4
FEB													
19...	1000	4.2	0.059	0.048	770	11.6	105	6.8	324	7.0	11.4	73	16.6
MAY													
29...	0900	6.0	0.114	0.091	752	9.5	98	7.7	222	16.2	16.1	55	12.2
AUG													
27...	1000	10	0.078	0.059	760	8.2	100	9.0	230	26.8	25.6	65	14.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
DEC													
19...	7.02	3.23	27.8	E37	52.0	<0.17	8.8	20.3	--	182	3	0.52	0.243
FEB													
19...	7.72	2.77	35.2	E42	66.3	<0.17	10.3	21.0	--	204	3	0.44	0.306
MAY													
29...	5.94	2.39	15.5	34	30.9	<0.17	5.2	14.8	112	124	6	0.37	0.056
AUG													
27...	7.28	2.74	16.9	42	35.2	<0.17	10.9	13.6	127	141	20	0.47	0.109

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
DEC													
19...	0.222	1.37	0.027	<0.020	0.11	0.012	0.048	1.9	2.0	0.7	<0.1	0.7	4.2
FEB													
19...	0.295	1.94	0.027	<0.020	0.20	E.003	0.035	2.4	2.6	0.8	<0.1	0.8	1.7
MAY													
29...	0.051	1.14	0.034	<0.020	0.32	0.019	0.058	1.5	1.8	1.4	<0.1	1.4	3.0
AUG													
27...	0.146	0.27	0.028	<0.020	0.64	0.010	0.080	0.74	1.4	4.7	<0.1	4.5	3.3

01467312 NEWTON CREEK AT WEST COLLINGSWOOD, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chlorophyll a fluorometric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC 19...	3.2	--	28
FEB 19...	E1.9	--	23
MAY 29...	3.6	28.5	20
AUG 27...	4.9	96.2	30

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)
AUG 27...	1000	E1	88.0	<0.06	27	E.03	<0.8	2.1	870	1.82	96.7	<0.02	1.40

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, unfltrd recoverable, ug/L (01092)
AUG 27...	0.7	<0.16	7

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
FEB 19...	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01467312 NEWTON CREEK AT WEST COLLINGSWOOD, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB													
19...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	0.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
FEB									
19...	2.3	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
29...	0900	<0.006	E.013	<0.006	<0.004	<0.005	0.037	E.006	<0.010	<0.002	<0.041	<0.020	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
29...	<0.003	<0.004	0.039	0.011	<0.002	<0.009	<0.005	<0.005	<0.007	E.013	E.008	<0.006	<0.007

01467312 NEWTON CREEK AT WEST COLLINGSWOOD, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
29...	0.029	E.01	0.012	<0.02	<0.034	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUN				
02...	0930	2,000	2,700	5,000
09...	0910	800	11,000	9,000
16...	0920	110	400	800
23...	0850	280	2,300	16,000
30...	0915	40	300	500

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ

LOCATION.--Lat 39°50'04", long 75°04'01", 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 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
20...	0900	26	9.0	0.157	0.124	769	10.2	81	6.4	180	10.0	6.0	58
MAR													
05...	1040	88	33	0.153	0.121	756	12.2	92	7.3	289	6.5	3.5	43
MAY													
15...	0950	61	9.4	0.144	0.116	764	8.3	80	6.7	196	--	13.4	55
SEP													
08...	0910	81	11	0.200	0.161	762	6.3	68	6.5	173	23.5	19.0	45

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
20...	17.9	3.36	2.67	8.94	E24	15.7	<0.17	9.7	33.1	--	121	27	0.23
MAR													
05...	12.8	2.68	2.68	34.7	20	57.6	<0.17	6.2	19.5	151	166	24	0.32
MAY													
15...	16.8	3.20	3.03	13.8	31	24.9	<0.17	8.5	21.4	113	129	13	0.35
SEP													
08...	13.3	2.90	3.23	11.2	27	19.0	<0.17	9.1	17.6	95	103	11	0.29

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
20...	0.081	0.054	0.36	<0.003	0.032	0.28	0.016	0.24	0.60	0.87	2.4	<0.1	2.4
MAR													
05...	0.203	0.141	0.58	0.016	<0.020	0.21	0.013	0.22	0.90	1.1	2.7	<0.1	2.7
MAY													
15...	0.069	0.100	0.59	0.021	0.026	0.15	0.019	0.167	0.94	1.1	1.7	<0.1	1.7
SEP													
08...	0.075	0.120	0.52	0.011	0.023	0.13	0.024	0.21	0.82	0.95	1.4	<0.1	1.4

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
20...	3.7	2.5	--	202
MAR				
05...	3.4	<1.0	--	182
MAY				
15...	2.8	<1.0	4.80	200
SEP				
08...	3.5	E1.3	3.30	179

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUN				
02...	0845	3,700	500	800
09...	0840	1,100	2,600	2,400
16...	0855	280	400	230
23...	0827	300	500	1,300
30...	0850	1,200	900	2,400

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 mi^2.

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.--Data collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELR NAWQA). For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
NOV											
14...	0840	Environmental	80	759	11.6	97	7.3	153	10.5	7.6	34
DEC											
10...	1040	Environmental	93	765	14.4	98	7.4	183	1.5	0.1	--
10...	*1041*	*Split Replicate*	--	--	--	--	--	--	--	--	--
JAN											
14...	0950	Environmental	68	761	14.8	102	7.1	169	-4.0	0.0	29
MAR											
11...	1100	Environmental	133	762	14.2	100	7.1	147	10.0	1.1	21
APR											
15...	0820	Environmental	118	757	11.7	105	7.4	145	16.0	10.2	28
MAY											
13...	1030	Environmental	55	749	10.3	101	7.4	156	16.0	13.7	35
JUN											
11...	1310	Environmental	133	753	9.6	102	7.4	143	25.5	17.6	30
JUL											
14...	1120	Environmental	68	760	9.6	104	7.8	152	28.5	19.6	36
SEP											
02...	0840	Environmental	209	755	8.9	97	7.5	136	25.0	19.2	32

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV										
14...	10.2	16.4	0.41	<0.04	1.04	E.006	E.01	0.051	5	0.99
DEC										
10...	14.6	15.4	0.14	<0.04	1.99	<0.008	<0.02	0.015	1	0.35
10...	*14.1*	*15.5*	*0.14*	*<0.04*	*1.99*	*<0.008*	*<0.02*	*0.014*	*1*	--
JAN										
14...	14.9	14.4	0.12	<0.04	2.25	<0.008	<0.02	0.016	<1	--
MAR										
11...	15.8	11.9	0.21	<0.04	1.34	E.004	E.02	0.036	4	1.6
APR										
15...	13.0	12.6	--	--	--	--	--	--	2	0.76
MAY										
13...	13.3	11.8	0.23	<0.04	1.20	E.007	E.01	0.034	5	0.80
JUN										
11...	11.8	12.3	--	--	--	--	--	--	8	3.0
JUL										
14...	12.0	11.3	0.17	<0.04	1.42	<0.008	E.01	0.033	3	0.55
SEP										
02...	11.0	10.0	0.52	<0.04	1.15	0.009	0.03	0.161	58	33

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

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
NOV											
14...	0840	Environmental	<0.006	E.017	<0.006	<0.004	<0.005	0.013	<0.050	<0.010	<0.002
JAN											
14...	0950	Environmental	<0.006	E.033	<0.006	<0.004	<0.005	0.012	<0.050	<0.010	<0.002
MAR											
11...	1100	Environmental	<0.006	E.018	<0.006	<0.004	<0.005	<0.010	<0.050	<0.010	<0.002
APR											
15...	0820	Environmental	<0.006	E.025	<0.006	<0.004	<0.005	0.010	<0.050	<0.010	<0.002
MAY											
13...	1030	Environmental	<0.006	E.027	<0.006	<0.004	<0.005	0.019	<0.050	<0.010	<0.002
JUN											
11...	*1309*	*Field Blank*	*<0.006*	*<0.006*	*<0.006*	*<0.004*	*<0.005*	*<0.007*	*<0.050*	*<0.010*	*<0.002*
11...	1310	Environmental	<0.006	E.034	<0.006	<0.004	<0.005	0.152	<0.050	<0.010	<0.002
JUL											
14...	1120	Environmental	<0.006	E.028	<0.006	<0.004	<0.005	0.029	<0.050	<0.010	<0.002
SEP											
02...	0840	Environmental	<0.006	E.018	<0.006	<0.004	<0.005	0.016	<0.050	<0.010	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)
NOV													
14...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
JAN													
14...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
MAR													
11...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
APR													
15...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	E.005	<0.005	<0.005	<0.007	<0.027
MAY													
13...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
JUN													
11...	*<0.041*	*<0.020*	*<0.006*	*<0.003*	*<0.004*	*<0.005*	*<0.005*	*<0.002*	*<0.009*	*<0.005*	*<0.005*	*<0.007*	*<0.027*
11...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
JUL													
14...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
SEP													
02...	<0.041	<0.020	<0.006	<0.003	<0.004	0.007	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
NOV									
14...	E.009	<0.006	<0.007	<0.022	M	0.019	<0.02	<0.034	<0.009
JAN									
14...	E.008	<0.006	<0.007	<0.022	<0.01	0.023	<0.02	<0.034	<0.009
MAR									
11...	E.010	<0.006	<0.007	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009
APR									
15...	E.006	<0.006	<0.007	<0.022	0.06	0.077	<0.02	<0.034	<0.009
MAY									
13...	E.009	<0.006	<0.007	<0.022	E.01	0.139	<0.02	E.005	<0.009
JUN									
11...	*<0.013*	*<0.006*	*<0.007*	*<0.022*	*<0.01*	*<0.005*	*<0.02*	*<0.034*	*<0.009*
11...	0.048	<0.006	<0.007	<0.022	E.01	0.022	<0.02	<0.034	<0.009
JUL									
14...	E.010	<0.006	<0.007	<0.022	<0.01	0.019	<0.02	<0.034	<0.009
SEP									
02...	0.016	<0.006	<0.007	<0.022	E.01	0.019	<0.02	<0.034	<0.009

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

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 mi^2.

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.--Data collected as part of the Delaware River Basin National Water-Quality Assessment Program (NAWQA). For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
NOV											
21...	1000	Environmental	5,380	760	12.2	103	7.7	294	7.5	7.9	63
DEC											
18...	*1119*	*Field Blank*	--	--	--	--	--	--	--	--	--
18...	1120	Environmental	6,340	773	14.1	105	7.6	294	3.0	3.6	53
JAN											
16...	1110	Environmental	2,700	767	14.4	102	7.7	375	0.0	1.4	66
MAR											
12...	1130	Environmental	4,900	762	13.6	103	7.7	342	9.5	3.7	55
APR											
23...	1150	Environmental	3,300	757	10.3	100	8.1	345	19.0	13.4	65
MAY											
15...	1120	Environmental	1,570	764	10.1	102	7.7	437	18.0	15.9	76
JUN											
05...	1200	Environmental	16,700	755	10.0	98	7.3	210	22.0	13.9	42
JUL											
15...	1040	Environmental	1,730	763	9.3	112	8.0	425	27.5	24.4	73
SEP											
03...	1130	Environmental	3,560	757	9.1	104	7.8	405	22.5	21.2	77

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV										
21...	20.5	32.0	0.54	0.08	3.89	0.026	0.08	0.125	8	118
DEC										
18...	*<0.20*	*<0.2*	*<0.10*	*<0.04*	*<0.06*	*<0.008*	*<0.02*	*<0.004*	*<1*	--
18...	26.0	28.5	0.47	0.14	3.81	0.029	0.07	0.110	6	103
JAN										
16...	35.9	40.6	0.51	0.27	4.19	0.085	0.10	0.145	3	21
MAR										
12...	40.1	29.6	0.64	0.26	2.81	0.037	0.09	0.141	8	103
APR										
23...	32.4	40.8	--	--	--	--	--	--	125	1,110
MAY										
15...	41.1	52.7	0.71	0.05	3.09	0.082	0.17	0.28	10	42
JUN										
05...	17.4	19.5	--	--	--	--	--	--	107	4,840
JUL										
15...	36.4	56.8	0.43	<0.04	3.40	0.031	0.15	0.21	5	22
SEP										
03...	36.6	66.0	0.56	0.07	2.42	0.027	0.15	0.22	10	100

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

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
NOV											
21...	1000	Environmental	<0.006	E.030	<0.006	<0.004	<0.005	0.049	<0.050	<0.010	<0.002
JAN											
16...	1110	Environmental	<0.006	E.032	<0.006	<0.004	<0.005	0.025	<0.050	<0.010	<0.002
MAR											
12...	1130	Environmental	<0.006	E.035	<0.006	<0.004	<0.005	0.024	<0.050	<0.010	<0.002
APR											
23...	1150	Environmental	<0.006	E.038	<0.006	<0.004	<0.005	0.031	<0.050	<0.010	<0.002
MAY											
15...	1120	Environmental	<0.006	E.035	<0.006	<0.004	<0.005	0.042	<0.050	<0.010	<0.002
15...	*1121*	*Split Replicate*	*<0.006*	*E.035*	*<0.006*	*<0.004*	*<0.005*	*0.041*	*<0.050*	*<0.010*	*<0.002*
JUN											
05...	1200	Environmental	<0.006	E.093	0.047	0.008	<0.005	0.865	<0.050	<0.010	<0.002
JUL											
15...	1040	Environmental	<0.006	E.038	0.015	<0.004	<0.005	0.129	<0.050	<0.010	<0.002
SEP											
03...	1130	Environmental	<0.006	E.036	<0.006	<0.004	<0.005	0.054	<0.050	<0.010	<0.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)
NOV													
21...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	E.005	<0.027
JAN													
16...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
MAR													
12...	<0.041	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
APR													
23...	E.008	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	E.005	<0.027
MAY													
15...	<0.041	<0.020	<0.006	<0.003	<0.004	0.007	<0.005	<0.002	<0.009	<0.005	<0.005	E.007	<0.027
15...	*E.008*	*<0.020*	*<0.006*	*<0.003*	*<0.004*	*0.006*	*<0.005*	*<0.002*	*<0.009*	*<0.005*	*<0.005*	*E.007*	*<0.027*
JUN													
05...	E.023	<0.020	<0.006	<0.003	<0.004	0.012	<0.005	<0.002	<0.009	<0.005	<0.005	E.005	<0.027
JUL													
15...	E.006	<0.020	<0.006	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027
SEP													
03...	E.009	<0.020	<0.006	<0.003	<0.004	0.006	<0.005	<0.002	<0.009	<0.005	<0.005	E.007	<0.027

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
NOV									
21...	0.049	<0.006	<0.007	<0.022	E.01	0.014	E.01	<0.034	<0.009
JAN									
16...	0.016	<0.006	<0.007	<0.022	E.01	<0.010	<0.02	<0.034	<0.009
MAR									
12...	0.020	<0.006	<0.007	<0.022	<0.01	0.020	<0.02	<0.034	<0.009
APR									
23...	0.015	<0.006	<0.007	<0.022	E.01	0.027	<0.02	<0.034	<0.009
MAY									
15...	0.021	<0.006	<0.007	<0.022	E.01	0.017	E.01	<0.034	<0.009
15...	*0.021*	*<0.006*	*<0.007*	*<0.022*	*E.01*	*0.017*	*<0.02*	*<0.034*	*<0.009*
JUN									
05...	0.489	<0.006	<0.007	E.012	0.01	0.054	E.01	<0.034	<0.009
JUL									
15...	0.038	<0.006	<0.007	<0.022	0.03	0.024	E.01	<0.034	<0.009
SEP									
03...	0.021	<0.006	<0.007	<0.022	0.03	0.028	E.01	<0.034	<0.009

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

01475042 MANTUA CREEK AT MANTUA AVENUE, AT WENONAH, NJ

LOCATION.--Lat 39°47'27", long 75°09'37", Gloucester County, Hydrologic Unit 02040202, at bridge on Mantua Avenue, 0.1 mi downstream of Chestnut Branch, 0.5 mi west of Wenonah, and 0.5 mi east of Mantua

DRAINAGE AREA.-- 29.2 mi^2.

PERIOD OF RECORD.--November 2002 to August 2003.

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 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
14...	1000	4.6	0.174	0.137	762	8.2	71	7.6	249	8.0	9.0	77	23.2
MAR													
05...	1000	20	0.148	0.116	754	12.6	96	7.7	252	7.6	3.3	54	15.7
MAY													
13...	1000	6.0	0.167	0.131	752	7.8	77	7.5	210	13.2	14.0	64	18.6
AUG													
20...	1000	5.3	0.203	0.158	766	6.7	75	7.5	233	22.5	21.2	71	21.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
14...	4.73	3.73	14.3	29	17.0	0.20	13.4	56.6	153	159	8	0.26	0.041
MAR													
05...	3.59	3.12	26.1	21	40.6	<0.17	8.1	31.0	145	163	11	0.30	0.109
MAY													
13...	4.36	3.22	16.9	35	24.9	0.17	11.9	33.1	138	148	9	0.28	0.078
AUG													
20...	4.43	3.89	20.4	39	23.0	0.24	15.9	35.3	151	159	7	0.26	0.040

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
14...	0.040	0.55	0.004	0.033	0.12	0.028	0.083	0.81	0.92	0.6	<0.1	0.6	4.7
MAR													
05...	0.103	0.95	0.009	<0.020	0.18	0.017	0.107	1.2	1.4	1.4	<0.1	1.4	3.5
MAY													
13...	0.080	0.82	0.014	0.028	0.10	0.018	0.094	1.1	1.2	0.9	<0.1	0.8	3.7
AUG													
20...	0.041	0.68	0.006	0.031	0.12	0.033	0.098	0.94	1.1	0.6	<0.1	0.5	4.2

01475042 MANTUA CREEK AT MANTUA AVENUE, AT WENONAH, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV 14...	<1.0	--	40
MAR 05...	<1.0	--	25
MAY 13...	E1.6	5.80	36
AUG 20...	<1.0	2.30	52

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

WATER-COLUMN TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)
AUG 20...	1000	E1	59.8	0.15	51	0.29	E.5	2.6	1,490	0.69	76.8	<0.02	5.54

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)
AUG 20...	E.4	<0.16	13

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)
MAR 05...	1000	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	0.1	<0.1	<0.1

01475042 MANTUA CREEK AT MANTUA AVENUE, AT WENONAH, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
MAR													
05...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	0.6

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
MAR									
05...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
13...	1000	<0.006	E.016	E.005	0.005	<0.005	0.027	E.018	<0.010	<0.002	E.024	E.019	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
13...	E.002	<0.004	0.008	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	0.030	<0.006	<0.007

01475042 MANTUA CREEK AT MANTUA AVENUE, AT WENONAH, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
13...	E.007	E.01	0.014	E.01	E.053	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUL				
09...	0905	240	300	500
16...	0925	1,550	300	2,400
23...	0930	--	20,000	>16000
30...	0935	4,500	3,100	5,000
AUG				
06...	0940	2,400	700	1,100

Remark codes used in this table:

01477050 DELAWARE RIVER AT CHESTER, PA

LOCATION.--Lat 39°50'33", long 75°21'28", Delaware County, Hydrologic Unit 02040202, in the pumping house of Kimberly-Clark Paper Company at Chester.

DRAINAGE AREA.--10,300 mi2, approximately.

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: December 1961 to current year.
DISSOLVED OXYGEN: December 1961 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1961. Probes interfaced with a data collection platform since the 1986 water year.

REMARKS.--Specific conductance, pH, and water temperature records rated good. Dissolved oxygen record rated fair. Data collection discontinued during winter months. Other interruptions in the record were due to malfunctions of the instrumentation. Prior to April 1981 sampling site located at auxiliary tidal-gaging station at the end of Reynolds Aluminum Company pier, 0.5 mi downstream from Chester Creek in Chester (latitude 39°50'12", longitude 75°22'00").

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 5,900 microsiemens, Oct. 7, 1965; minimum, 103 microsiemens, June 2, 1984, Apr. 9, 1987.
pH: Maximum, 8.7, Sept. 13, 14, 1971, Oct. 16, 1979; minimum, 5.5, Dec. 10, 11, 1969.
WATER TEMPERATURE: Maximum, 33.0°C, July 21, 1977, Aug. 3, 1999; minimum, 0.0°C, many days during winters.
DISSOLVED OXYGEN: Maximum, 16.3 mg/L, Mar. 28, 1993; minimum, 0.0 mg/L, on many days.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2820	1290	1870	231	221	226	---	---	---	---	---	---
2	2630	1250	1760	236	225	230	---	---	---	---	---	---
3	2700	1270	1770	237	226	231	---	---	---	---	---	---
4	2850	1270	1980	236	229	233	---	---	---	---	---	---
5	3530	1480	2190	237	229	233	---	---	---	---	---	---
6	2960	1290	1980	238	230	233	---	---	---	---	---	---
7	3500	1480	2230	238	230	233	---	---	---	---	---	---
8	3220	1430	2090	240	233	237	---	---	---	---	---	---
9	3530	1540	2280	250	234	241	---	---	---	---	---	---
10	3540	1540	2290	251	240	244	---	---	---	---	---	---
11	3260	1410	2180	255	242	248	---	---	---	---	---	---
12	2430	1170	1710	253	245	249	---	---	---	---	---	---
13	1790	880	1290	259	248	251	---	---	---	---	---	---
14	1120	602	818	257	246	251	---	---	---	---	---	---
15	991	520	702	263	250	256	---	---	---	---	---	---
16	875	465	631	268	254	262	---	---	---	---	---	---
17	715	364	498	270	245	259	---	---	---	---	---	---
18	514	319	382	272	252	261	---	---	---	---	---	---
19	380	297	331	269	237	254	---	---	---	---	---	---
20	321	265	291	251	232	240	---	---	---	---	---	---
21	290	251	271	238	231	235	---	---	---	---	---	---
22	277	238	259	237	227	232	---	---	---	---	---	---
23	263	232	249	245	217	228	---	---	---	---	---	---
24	259	229	245	226	215	220	---	---	---	---	---	---
25	254	235	245	224	214	220	---	---	---	---	---	---
26	254	232	243	214	204	209	---	---	---	---	---	---
27	244	220	234	207	198	203	---	---	---	---	---	---
28	234	216	227	203	198	201	---	---	---	---	---	---
29	255	217	227	203	197	199	---	---	---	---	---	---
30	230	220	226	201	195	197	---	---	---	---	---	---
31	230	220	225	---	---	---	---	---	---	---	---	---
MONTH	3540	216	1030	272	195	234	---	---	---	---	---	---

01477050 DELAWARE RIVER AT CHESTER, PA—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	208	185	196	276	267	272
2	---	---	---	---	---	---	207	191	201	277	269	273
3	---	---	---	---	---	---	214	193	201	283	270	276
4	---	---	---	---	---	---	212	197	205	287	277	282
5	---	---	---	---	---	---	213	202	208	297	280	287
6	---	---	---	---	---	---	214	197	207	294	278	285
7	---	---	---	---	---	---	211	201	206	285	275	281
8	---	---	---	---	---	---	216	201	210	282	274	278
9	---	---	---	---	---	---	223	208	217	290	274	278
10	---	---	---	---	---	---	236	210	223	281	274	277
11	---	---	---	---	---	---	249	211	232	283	275	280
12	---	---	---	---	---	---	264	232	246	291	276	281
13	---	---	---	---	---	---	267	239	253	285	275	280
14	---	---	---	---	---	---	258	245	252	282	277	279
15	---	---	---	---	---	---	250	241	247	---	---	---
16	---	---	---	---	---	---	255	241	246	---	---	---
17	---	---	---	---	---	---	251	243	246	294	285	288
18	---	---	---	---	---	---	257	241	248	296	282	289
19	---	---	---	---	---	---	261	247	253	292	278	285
20	---	---	---	---	---	---	260	249	253	286	272	280
21	---	---	---	---	---	---	257	249	252	282	273	278
22	---	---	---	---	---	---	279	246	257	280	272	277
23	---	---	---	---	---	---	263	254	257	284	274	278
24	---	---	---	---	---	---	263	254	258	282	273	278
25	---	---	---	---	---	---	265	255	260	282	274	277
26	---	---	---	---	---	---	268	256	262	278	247	268
27	---	---	---	190	165	177	268	260	264	276	255	266
28	---	---	---	186	164	175	265	258	262	289	266	280
29	---	---	---	186	166	177	266	259	263	285	272	280
30	---	---	---	195	168	182	281	261	269	285	258	273
31	---	---	---	199	175	189	---	---	---	279	258	269
MONTH	---	---	---	199	164	180	281	185	238	297	247	278

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	282	257	267	209	198	203	309	302	305	255	246	251
2	276	259	263	214	199	206	313	298	307	258	249	254
3	268	254	260	218	200	211	315	298	308	269	252	257
4	262	225	249	225	206	213	318	301	309	272	259	265
5	238	212	228	225	209	217	320	303	311	278	265	270
6	222	196	210	223	211	216	316	298	307	269	260	265
7	213	196	201	235	213	219	317	297	306	266	258	262
8	211	190	198	228	215	222	308	272	291	268	253	261
9	213	190	203	235	219	229	306	267	285	264	253	259
10	211	195	203	242	224	234	293	256	270	264	238	253
11	209	194	201	257	230	240	279	252	265	254	223	245
12	210	195	202	252	230	243	276	252	263	250	229	240
13	217	197	206	276	236	251	265	238	255	255	220	238
14	218	202	210	278	242	257	256	225	242	239	201	229
15	222	204	215	267	248	259	249	225	237	233	199	219
16	222	206	216	270	253	262	244	225	234	259	180	222
17	225	214	220	273	256	265	242	227	235	229	193	214
18	230	213	220	280	263	271	253	225	239	208	181	195
19	230	212	221	288	270	278	243	230	236	222	181	195
20	---	---	---	291	275	283	241	233	236	203	184	190
21	---	---	---	297	278	287	274	230	245	209	190	201
22	---	---	---	298	286	292	251	233	241	220	193	211
23	---	---	---	310	290	298	244	231	238	223	200	213
24	---	---	---	337	297	321	248	235	241	229	208	221
25	---	---	---	335	308	325	245	236	240	227	192	213
26	---	---	---	326	297	316	245	237	240	205	193	198
27	---	---	---	324	304	314	248	236	243	209	191	200
28	---	---	---	323	301	310	260	243	250	213	199	205
29	---	---	---	321	298	310	257	241	247	208	195	200
30	---	---	---	315	299	307	251	242	245	205	188	196
31	---	---	---	309	301	305	258	246	250	---	---	---
MONTH	282	190	221	337	198	263	320	225	262	278	180	228

01477050 DELAWARE RIVER AT CHESTER, PA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.3	7.2	7.3	7.1	7.0	7.1	---	---	---	---	---	---
2	7.3	7.2	7.2	7.2	7.0	7.1	---	---	---	---	---	---
3	7.3	7.1	7.2	7.2	7.0	7.1	---	---	---	---	---	---
4	7.3	7.2	7.2	7.1	7.0	7.1	---	---	---	---	---	---
5	7.3	7.2	7.2	7.1	7.0	7.1	---	---	---	---	---	---
6	7.3	7.2	7.2	7.2	7.0	7.0	---	---	---	---	---	---
7	7.3	7.2	7.3	7.2	7.1	7.2	---	---	---	---	---	---
8	7.3	7.2	7.3	7.2	7.1	7.2	---	---	---	---	---	---
9	7.4	7.2	7.3	7.2	7.1	7.1	---	---	---	---	---	---
10	7.4	7.2	7.3	7.1	7.0	7.0	---	---	---	---	---	---
11	7.4	7.3	7.4	7.0	6.9	7.0	---	---	---	---	---	---
12	7.4	7.2	7.3	7.0	7.0	7.0	---	---	---	---	---	---
13	7.3	7.2	7.2	7.1	7.0	7.1	---	---	---	---	---	---
14	7.2	7.1	7.1	7.2	7.0	7.1	---	---	---	---	---	---
15	7.2	7.2	7.2	7.1	7.0	7.1	---	---	---	---	---	---
16	7.3	7.2	7.3	7.1	7.0	7.1	---	---	---	---	---	---
17	7.3	7.2	7.3	7.2	7.1	7.2	---	---	---	---	---	---
18	7.3	7.2	7.2	7.3	7.1	7.2	---	---	---	---	---	---
19	7.3	7.3	7.3	7.3	7.1	7.2	---	---	---	---	---	---
20	7.3	7.3	7.3	7.1	6.9	7.0	---	---	---	---	---	---
21	7.3	7.2	7.2	7.1	6.9	7.0	---	---	---	---	---	---
22	7.2	7.2	7.2	7.0	7.0	7.0	---	---	---	---	---	---
23	7.2	7.2	7.2	7.2	7.0	7.1	---	---	---	---	---	---
24	7.2	7.2	7.2	7.2	7.0	7.1	---	---	---	---	---	---
25	7.2	7.2	7.2	7.2	6.9	7.0	---	---	---	---	---	---
26	7.2	7.1	7.2	7.0	6.8	7.0	---	---	---	---	---	---
27	7.2	7.0	7.1	7.1	6.9	7.0	---	---	---	---	---	---
28	7.1	7.0	7.1	7.2	6.9	7.0	---	---	---	---	---	---
29	7.1	7.1	7.1	7.1	7.0	7.1	---	---	---	---	---	---
30	7.2	7.1	7.1	7.1	7.0	7.0	---	---	---	---	---	---
31	7.1	7.0	7.1	---	---	---	---	---	---	---	---	---
MAX	7.4	7.3	7.4	7.3	7.1	7.2	---	---	---	---	---	---
MIN	7.1	7.0	7.1	7.0	6.8	7.0	---	---	---	---	---	---

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	7.3	7.3	7.3	7.1	7.1	7.1
2	---	---	---	---	---	---	7.3	7.3	7.3	7.1	7.0	7.1
3	---	---	---	---	---	---	7.3	7.3	7.3	7.1	7.0	7.0
4	---	---	---	---	---	---	7.3	7.3	7.3	7.0	6.9	7.0
5	---	---	---	---	---	---	7.3	7.3	7.3	7.0	6.9	7.0
6	---	---	---	---	---	---	7.3	7.3	7.3	7.2	7.0	7.0
7	---	---	---	---	---	---	7.4	7.3	7.3	7.2	7.1	7.1
8	---	---	---	---	---	---	7.4	7.3	7.4	7.1	7.1	7.1
9	---	---	---	---	---	---	7.4	7.4	7.4	7.1	7.0	7.1
10	---	---	---	---	---	---	7.4	7.4	7.4	7.0	7.0	7.0
11	---	---	---	---	---	---	7.5	7.4	7.5	7.0	7.0	7.0
12	---	---	---	---	---	---	7.5	7.4	7.5	7.0	7.0	7.0
13	---	---	---	---	---	---	7.5	7.4	7.4	7.1	7.0	7.1
14	---	---	---	---	---	---	7.4	7.4	7.4	7.1	7.0	7.1
15	---	---	---	---	---	---	7.4	7.4	7.4	---	---	---
16	---	---	---	---	---	---	7.4	7.3	7.4	---	---	---
17	---	---	---	---	---	---	7.4	7.3	7.4	7.3	7.2	7.3
18	---	---	---	---	---	---	7.4	7.4	7.4	7.2	7.2	7.2
19	---	---	---	---	---	---	7.4	7.4	7.4	7.2	7.1	7.2
20	---	---	---	---	---	---	7.4	7.3	7.3	7.2	7.1	7.1
21	---	---	---	---	---	---	7.3	7.3	7.3	7.1	7.1	7.1
22	---	---	---	---	---	---	7.4	7.2	7.3	7.1	7.1	7.1
23	---	---	---	---	---	---	7.4	7.4	7.4	7.1	7.1	7.1
24	---	---	---	---	---	---	7.5	7.4	7.4	7.1	7.1	7.1
25	---	---	---	---	---	---	7.5	7.4	7.4	7.1	7.1	7.1
26	---	---	---	---	---	---	7.4	7.4	7.4	7.1	7.1	7.1
27	---	---	---	7.2	7.2	7.2	7.4	7.3	7.4	7.1	7.1	7.1
28	---	---	---	7.2	7.2	7.2	7.4	7.3	7.3	7.2	7.1	7.1
29	---	---	---	7.2	7.2	7.2	7.3	7.3	7.3	7.2	7.1	7.1
30	---	---	---	7.2	7.2	7.2	7.3	7.1	7.2	7.2	7.1	7.1
31	---	---	---	7.3	7.2	7.2	---	---	---	7.1	7.1	7.1
MAX	---	---	---	7.3	7.2	7.2	7.5	7.4	7.5	7.3	7.2	7.3
MIN	---	---	---	7.2	7.2	7.2	7.3	7.1	7.2	7.0	6.9	7.0

01477050 DELAWARE RIVER AT CHESTER, PA—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.1	7.1	7.1	7.2	7.1	7.1	7.2	7.1	7.1	6.9	6.9	6.9
2	7.2	7.1	7.1	7.1	7.1	7.1	7.2	7.1	7.1	7.0	6.9	6.9
3	7.2	7.1	7.2	7.1	7.1	7.1	7.2	7.1	7.1	7.0	6.9	6.9
4	7.2	7.1	7.2	7.1	7.1	7.1	7.2	7.1	7.1	7.0	6.9	6.9
5	7.1	7.1	7.1	7.2	7.1	7.1	7.1	7.1	7.1	6.9	6.9	6.9
6	7.2	7.1	7.1	7.2	7.1	7.2	7.1	7.1	7.1	7.0	6.9	6.9
7	7.1	7.1	7.1	7.3	7.2	7.2	7.1	7.0	7.0	7.0	6.9	7.0
8	7.1	7.1	7.1	7.3	7.2	7.2	7.0	7.0	7.0	7.1	7.0	7.0
9	7.1	7.1	7.1	7.2	7.1	7.2	7.0	7.0	7.0	7.2	7.0	7.1
10	7.1	7.1	7.1	7.2	7.0	7.1	7.0	7.0	7.0	7.1	7.1	7.1
11	7.1	7.0	7.0	7.1	7.0	7.0	7.0	7.0	7.0	7.1	7.0	7.1
12	7.0	6.9	6.9	7.1	7.0	7.0	7.0	7.0	7.0	7.2	7.1	7.1
13	6.9	6.9	6.9	7.1	7.0	7.0	7.1	7.0	7.0	7.2	7.1	7.1
14	7.0	6.9	6.9	7.1	7.0	7.1	7.0	7.0	7.0	7.1	6.9	7.0
15	7.0	6.9	6.9	7.1	7.0	7.1	7.0	6.9	7.0	7.0	6.9	7.0
16	7.1	6.9	7.0	7.1	7.0	7.1	7.0	6.9	6.9	7.0	6.9	6.9
17	7.1	7.0	7.1	7.1	7.0	7.1	7.0	6.9	6.9	7.0	6.9	6.9
18	7.1	7.0	7.0	7.1	7.0	7.1	7.0	6.9	6.9	7.1	6.9	6.9
19	7.0	7.0	7.0	7.1	7.0	7.1	7.0	6.9	7.0	7.3	7.0	7.1
20	7.0	7.0	7.0	7.1	7.0	7.1	7.0	6.9	6.9	7.0	7.0	7.0
21	7.1	7.0	7.0	7.2	7.1	7.1	7.0	6.9	6.9	7.0	6.9	7.0
22	7.0	7.0	7.0	7.2	7.2	7.2	7.0	6.9	7.0	7.0	6.9	7.0
23	7.0	7.0	7.0	7.2	7.1	7.2	7.0	6.9	6.9	7.0	7.0	7.0
24	7.1	7.0	7.1	7.3	7.2	7.2	7.0	6.9	7.0	7.0	7.0	7.0
25	7.1	7.0	7.1	7.2	7.2	7.2	7.1	7.0	7.0	7.0	7.0	7.0
26	7.1	7.0	7.1	7.2	7.1	7.2	7.0	7.0	7.0	7.0	6.9	6.9
27	7.1	7.0	7.0	7.2	7.1	7.1	7.0	7.0	7.0	7.0	6.9	7.0
28	7.1	7.0	7.0	7.2	7.1	7.1	7.0	7.0	7.0	7.0	7.0	7.0
29	7.1	7.0	7.1	7.2	7.1	7.1	7.0	6.9	7.0	7.0	7.0	7.0
30	7.1	7.0	7.1	7.2	7.1	7.2	7.0	6.9	6.9	7.0	6.9	7.0
31	---	---	---	7.2	7.1	7.2	7.0	6.9	6.9	---	---	---
MAX	7.2	7.1	7.2	7.3	7.2	7.2	7.2	7.1	7.1	7.3	7.1	7.1
MIN	6.9	6.9	6.9	7.1	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.9

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	23.5	23.0	23.0	12.0	11.5	11.5	---	---	---	---	---	---
2	24.0	23.0	23.5	11.5	10.5	11.0	---	---	---	---	---	---
3	24.5	23.5	24.0	11.5	10.5	11.0	---	---	---	---	---	---
4	24.0	23.5	24.0	11.0	10.0	10.5	---	---	---	---	---	---
5	24.5	23.5	24.0	10.5	10.0	10.5	---	---	---	---	---	---
6	24.0	23.0	23.5	10.5	10.5	10.5	---	---	---	---	---	---
7	23.5	23.0	23.0	10.5	10.0	10.5	---	---	---	---	---	---
8	23.0	22.0	22.5	10.5	10.0	10.0	---	---	---	---	---	---
9	22.0	22.0	22.0	10.5	10.0	10.5	---	---	---	---	---	---
10	22.0	21.5	22.0	11.0	10.5	10.5	---	---	---	---	---	---
11	21.5	21.0	21.0	12.0	11.0	11.5	---	---	---	---	---	---
12	21.0	20.5	21.0	11.5	11.0	11.5	---	---	---	---	---	---
13	21.0	20.5	20.5	11.5	11.0	11.5	---	---	---	---	---	---
14	20.5	20.0	20.0	11.5	10.5	11.0	---	---	---	---	---	---
15	20.0	19.0	19.5	11.0	11.0	11.0	---	---	---	---	---	---
16	19.5	18.5	19.0	11.0	11.0	11.0	---	---	---	---	---	---
17	18.5	18.0	18.5	11.0	10.0	10.5	---	---	---	---	---	---
18	18.5	17.5	18.0	10.5	9.5	10.0	---	---	---	---	---	---
19	18.0	16.5	17.0	10.0	9.0	9.5	---	---	---	---	---	---
20	17.0	16.0	16.5	10.0	9.5	9.5	---	---	---	---	---	---
21	16.5	15.5	16.0	10.0	9.5	10.0	---	---	---	---	---	---
22	16.0	15.0	15.5	10.0	9.5	10.0	---	---	---	---	---	---
23	15.5	15.0	15.5	10.0	8.5	9.0	---	---	---	---	---	---
24	15.0	14.5	15.0	9.0	8.5	8.5	---	---	---	---	---	---
25	14.5	14.0	14.5	9.0	8.5	8.5	---	---	---	---	---	---
26	14.5	14.0	14.0	9.0	8.5	8.5	---	---	---	---	---	---
27	14.0	13.5	14.0	8.5	8.0	8.5	---	---	---	---	---	---
28	14.0	13.5	13.5	8.0	7.5	7.5	---	---	---	---	---	---
29	13.5	13.0	13.5	7.5	6.5	7.0	---	---	---	---	---	---
30	13.0	12.0	12.5	7.0	6.5	7.0	---	---	---	---	---	---
31	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
MONTH	24.5	11.5	18.7	12.0	6.5	9.9	---	---	---	---	---	---

01477050 DELAWARE RIVER AT CHESTER, PA—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.5	9.5	10.0	17.0	15.0	16.0
2	---	---	---	---	---	---	10.5	9.5	10.0	18.0	16.0	16.5
3	---	---	---	---	---	---	10.5	10.0	10.0	17.5	16.5	17.0
4	---	---	---	---	---	---	10.5	10.0	10.0	17.5	16.5	17.0
5	---	---	---	---	---	---	10.0	9.5	9.5	17.0	16.0	16.5
6	---	---	---	---	---	---	9.5	9.0	9.5	16.5	16.0	16.5
7	---	---	---	---	---	---	9.5	9.0	9.0	17.5	16.0	16.5
8	---	---	---	---	---	---	9.0	8.0	8.5	17.5	16.5	17.0
9	---	---	---	---	---	---	8.0	7.5	8.0	17.5	16.5	17.0
10	---	---	---	---	---	---	8.0	7.5	7.5	17.5	17.0	17.0
11	---	---	---	---	---	---	7.5	7.5	7.5	18.5	17.0	17.5
12	---	---	---	---	---	---	8.0	7.5	7.5	18.5	17.5	18.0
13	---	---	---	---	---	---	9.0	8.0	8.0	18.0	17.0	17.5
14	---	---	---	---	---	---	9.0	8.0	8.5	18.0	17.0	17.5
15	---	---	---	---	---	---	10.5	8.5	9.0	---	---	---
16	---	---	---	---	---	---	11.0	9.0	10.0	---	---	---
17	---	---	---	---	---	---	10.5	9.5	10.0	16.5	15.5	16.0
18	---	---	---	---	---	---	9.5	9.0	9.5	16.0	15.5	16.0
19	---	---	---	---	---	---	11.0	9.5	10.0	16.5	15.5	16.0
20	---	---	---	---	---	---	11.5	10.0	10.5	17.0	16.0	16.5
21	---	---	---	---	---	---	12.0	10.5	11.5	17.0	16.5	17.0
22	---	---	---	---	---	---	12.5	11.0	12.0	17.0	16.5	16.5
23	---	---	---	---	---	---	12.5	11.5	12.0	16.5	16.5	16.5
24	---	---	---	---	---	---	13.0	12.0	12.5	16.5	16.0	16.5
25	---	---	---	---	---	---	13.5	12.0	12.5	16.5	16.0	16.5
26	---	---	---	---	---	---	13.5	12.5	13.0	16.5	15.5	16.0
27	---	---	---	10.0	8.5	9.0	14.5	13.0	13.5	16.5	15.5	16.0
28	---	---	---	10.0	9.0	9.5	15.5	13.5	14.5	16.5	16.0	16.5
29	---	---	---	10.5	9.5	10.0	16.0	14.5	15.0	17.0	16.0	16.5
30	---	---	---	10.5	9.5	10.0	16.5	15.0	15.5	17.5	16.5	17.0
31	---	---	---	10.5	9.5	10.0	---	---	---	17.5	17.0	17.0
MONTH	---	---	---	10.5	8.5	9.7	16.5	7.5	10.5	18.5	15.0	16.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.5	17.0	17.0	23.5	22.0	23.0	27.0	26.5	26.5	26.5	26.5	26.5
2	17.5	16.5	17.0	24.0	23.0	23.5	27.5	26.5	27.0	26.5	26.0	26.0
3	17.5	17.0	17.0	24.0	23.0	23.5	27.5	27.0	27.0	26.0	25.0	25.5
4	17.0	16.0	16.5	24.5	23.5	24.0	27.5	27.0	27.0	25.5	25.0	25.5
5	17.0	16.5	16.5	25.5	24.0	24.5	27.5	27.0	27.0	25.5	25.0	25.0
6	17.0	16.5	16.5	26.0	24.5	25.0	27.0	26.5	27.0	25.0	24.5	24.5
7	17.0	16.5	16.5	26.5	25.0	25.5	27.0	26.5	26.5	25.0	24.0	24.5
8	16.5	16.0	16.5	26.5	25.5	26.0	27.0	26.0	26.5	24.5	23.5	24.0
9	17.0	16.0	16.5	27.0	26.0	26.5	26.5	26.5	26.5	24.5	23.0	24.0
10	18.0	16.5	17.0	26.5	26.0	26.0	26.5	26.0	26.5	24.0	22.5	23.0
11	18.5	17.0	17.5	26.5	25.5	26.0	27.0	26.5	26.5	23.0	22.0	22.5
12	19.0	18.0	18.5	26.5	25.5	26.0	27.5	26.0	26.5	23.0	21.5	22.5
13	20.0	18.5	19.0	26.5	25.5	26.0	27.5	26.5	26.5	22.5	21.5	22.0
14	20.5	19.0	19.5	26.5	26.0	26.0	27.5	26.5	26.5	22.5	22.0	22.0
15	21.0	20.0	20.5	27.0	26.0	26.5	27.5	26.5	26.5	23.0	22.0	22.5
16	21.0	20.5	20.5	27.0	26.0	26.5	27.0	26.5	27.0	22.5	22.0	22.0
17	21.0	20.5	20.5	27.0	26.5	26.5	27.0	26.5	26.5	22.5	22.0	22.0
18	21.0	20.5	21.0	27.0	26.5	26.5	27.0	26.5	26.5	22.0	21.5	21.5
19	21.5	21.0	21.0	27.0	26.5	26.5	27.0	26.5	26.5	22.0	21.0	21.5
20	21.5	20.5	21.0	27.0	26.5	26.5	27.0	26.5	27.0	22.5	21.5	22.0
21	20.5	19.5	20.0	27.5	26.5	27.0	27.5	27.0	27.0	22.5	22.0	22.5
22	19.5	19.0	19.5	27.5	27.0	27.0	28.0	27.0	27.5	23.0	22.0	22.5
23	20.0	19.0	19.5	27.5	27.0	27.0	28.0	27.0	27.5	23.0	22.5	22.5
24	20.0	19.0	19.5	27.5	26.5	27.0	27.0	26.5	27.0	22.5	22.0	22.0
25	20.0	19.0	19.5	27.5	26.5	26.5	27.0	26.0	26.5	22.5	21.5	22.0
26	21.0	19.5	20.0	27.5	26.5	27.0	27.5	26.5	27.0	22.5	21.5	22.0
27	21.5	20.0	20.5	27.5	26.5	27.0	27.5	26.5	27.0	22.5	21.5	22.0
28	21.5	20.5	21.0	27.5	26.5	27.0	27.5	26.5	27.0	22.0	21.0	21.5
29	22.5	21.0	21.5	27.5	26.5	27.0	28.0	26.5	27.0	21.0	20.0	20.5
30	23.0	21.5	22.5	27.5	26.5	27.0	27.5	27.0	27.0	20.0	19.5	20.0
31	---	---	---	27.0	26.5	26.5	27.0	26.5	27.0	---	---	---
MONTH	23.0	16.0	19.0	27.5	22.0	26.0	28.0	26.0	26.8	26.5	19.5	22.9

01477050 DELAWARE RIVER AT CHESTER, PA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.6	5.6	6.1	8.6	8.3	8.4	---	---	---	---	---	---
2	6.5	5.6	6.0	9.0	8.4	8.6	---	---	---	---	---	---
3	6.4	5.4	5.8	9.0	8.4	8.8	---	---	---	---	---	---
4	6.4	5.4	6.0	8.9	8.4	8.7	---	---	---	---	---	---
5	6.6	5.5	6.1	8.9	8.5	8.7	---	---	---	---	---	---
6	6.5	5.3	6.0	9.0	8.5	8.7	---	---	---	---	---	---
7	6.6	5.6	6.2	9.1	8.8	8.9	---	---	---	---	---	---
8	6.8	5.8	6.3	9.2	8.8	9.0	---	---	---	---	---	---
9	6.7	5.7	6.2	9.2	8.9	9.0	---	---	---	---	---	---
10	6.6	5.7	6.2	9.0	8.9	8.9	---	---	---	---	---	---
11	6.9	6.0	6.5	9.1	8.9	9.0	---	---	---	---	---	---
12	6.7	5.9	6.4	9.0	8.8	8.9	---	---	---	---	---	---
13	6.3	5.4	5.8	8.9	8.8	8.8	---	---	---	---	---	---
14	5.9	5.4	5.7	8.8	8.6	8.7	---	---	---	---	---	---
15	6.3	5.7	5.9	8.8	8.6	8.7	---	---	---	---	---	---
16	6.8	6.1	6.5	8.9	8.6	8.7	---	---	---	---	---	---
17	6.8	6.6	6.7	9.3	8.8	9.1	---	---	---	---	---	---
18	7.0	6.7	6.8	9.9	9.0	9.5	---	---	---	---	---	---
19	7.4	6.5	7.0	10.0	9.6	9.8	---	---	---	---	---	---
20	7.7	7.1	7.4	9.8	9.6	9.7	---	---	---	---	---	---
21	7.8	7.2	7.5	9.6	9.4	9.5	---	---	---	---	---	---
22	7.9	7.2	7.7	9.6	9.4	9.5	---	---	---	---	---	---
23	8.1	7.4	7.8	10.4	9.4	9.9	---	---	---	---	---	---
24	8.2	7.6	7.9	10.4	10.0	10.2	---	---	---	---	---	---
25	8.3	7.8	8.0	10.5	9.8	10.1	---	---	---	---	---	---
26	8.5	8.0	8.3	10.4	9.6	10.1	---	---	---	---	---	---
27	8.4	8.0	8.2	10.4	9.9	10.1	---	---	---	---	---	---
28	8.2	7.9	8.0	10.5	9.9	10.2	---	---	---	---	---	---
29	8.4	7.8	8.0	10.9	10.1	10.5	---	---	---	---	---	---
30	8.5	8.0	8.2	11.0	10.3	10.6	---	---	---	---	---	---
31	8.4	8.2	8.3	---	---	---	---	---	---	---	---	---
MONTH	8.5	5.3	6.9	11.0	8.3	9.3	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.3	10.2	10.2	9.2	7.8	8.7
2	---	---	---	---	---	---	10.2	10.0	10.1	8.9	7.9	8.5
3	---	---	---	---	---	---	10.1	9.8	10	8.6	7.4	8.1
4	---	---	---	---	---	---	10.0	9.7	9.9	8.1	6.1	7.5
5	---	---	---	---	---	---	10.2	9.9	10.0	8.0	6.9	7.6
6	---	---	---	---	---	---	10.3	9.9	10.1	7.8	6.9	7.3
7	---	---	---	---	---	---	10.5	10.1	10.3	7.1	6.5	6.8
8	---	---	---	---	---	---	10.6	10.3	10.5	6.8	6.2	6.5
9	---	---	---	---	---	---	10.7	10.3	10.5	6.5	5.6	6.1
10	---	---	---	---	---	---	10.8	10.6	10.7	5.8	5.2	5.5
11	---	---	---	---	---	---	10.9	10.8	10.8	---	---	---
12	---	---	---	---	---	---	11.0	10.8	10.9	---	---	---
13	---	---	---	---	---	---	11.1	10.9	10.9	---	---	---
14	---	---	---	---	---	---	11.3	10.9	11.0	---	---	---
15	---	---	---	---	---	---	11.2	10.9	11.0	---	---	---
16	---	---	---	---	---	---	11.1	10.7	10.9	---	---	---
17	---	---	---	---	---	---	11.0	10.8	10.9	7.6	7.3	7.5
18	---	---	---	---	---	---	11.0	10.8	10.9	7.5	7.0	7.2
19	---	---	---	---	---	---	10.9	10.6	10.8	7.1	6.8	7.0
20	---	---	---	---	---	---	10.8	10.4	10.6	6.8	6.5	6.7
21	---	---	---	---	---	---	10.6	10.2	10.4	6.5	6.1	6.4
22	---	---	---	---	---	---	10.3	9.6	10	6.3	6.1	6.2
23	---	---	---	---	---	---	9.8	9.5	9.7	6.5	6.2	6.3
24	---	---	---	---	---	---	10.0	9.7	9.8	6.8	6.4	6.7
25	---	---	---	---	---	---	9.9	9.6	9.7	6.8	6.5	6.6
26	---	---	---	---	---	---	9.7	9.4	9.6	7.5	6.5	6.9
27	---	---	---	10.7	10.4	10.5	9.6	9.2	9.4	7.1	6.6	6.9
28	---	---	---	10.6	10.4	10.5	9.5	9.0	9.3	7.3	6.3	6.6
29	---	---	---	10.6	10.3	10.4	9.3	8.9	9.1	7.7	6.8	7.2
30	---	---	---	10.3	10.1	10.2	9.2	8.8	9.0	7.6	7.1	7.2
31	---	---	---	10.3	10.1	10.2	---	---	---	7.2	6.9	7.0
MONTH	---	---	---	10.7	10.1	10.4	11.3	8.8	10.2	9.2	5.2	7.0

01477050 DELAWARE RIVER AT CHESTER, PA—Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.3	6.6	6.9	7.6	6.9	7.2	5.5	5.0	5.2	4.7	4.4	4.5
2	7.6	6.8	7.1	7.4	6.9	7.3	5.3	4.8	5.1	4.8	4.4	4.5
3	7.6	7.1	7.2	7.4	6.8	7.1	5.4	4.8	5.1	4.8	4.5	4.6
4	7.4	7.1	7.2	7.3	6.6	6.9	5.4	4.9	5.1	4.6	4.1	4.4
5	7.4	7.1	7.3	7.2	6.7	7.0	5.3	4.9	5.0	4.1	3.7	3.8
6	7.6	7.2	7.4	7.4	6.6	7.0	4.9	4.7	4.8	4.2	3.6	3.8
7	7.6	7.2	7.4	7.9	6.8	7.3	4.8	4.4	4.6	4.7	3.6	4.1
8	7.6	7.4	7.5	7.6	7.0	7.2	4.7	4.3	4.5	5.2	3.9	4.6
9	7.7	7.4	7.5	7.0	6.2	6.5	4.7	4.0	4.2	6.0	4.4	5.2
10	7.6	7.2	7.4	6.4	5.2	5.6	4.9	4.1	4.4	6.0	5.2	5.6
11	7.3	7.0	7.2	5.6	4.8	5.1	5.0	4.2	4.5	6.1	5.5	5.8
12	7.1	6.9	7.0	5.1	4.5	4.8	4.8	4.2	4.5	6.5	5.8	6.1
13	6.9	6.6	6.8	5.2	4.5	4.8	4.5	4.1	4.3	6.5	6.3	6.4
14	6.7	6.4	6.5	4.9	4.3	4.6	4.5	4.1	4.2	6.4	5.8	6.1
15	6.6	6.3	6.4	4.9	4.4	4.6	4.6	3.9	4.2	6.1	5.7	5.8
16	7.0	6.3	6.6	4.9	4.5	4.7	4.6	4.0	4.3	6.2	5.4	5.7
17	7.0	6.6	6.8	4.8	4.5	4.6	4.6	4.1	4.3	5.7	5.4	5.5
18	7.0	6.5	6.7	4.7	4.4	4.5	4.6	4.2	4.4	6.4	5.6	5.9
19	6.5	6.1	6.3	4.8	4.4	4.6	4.7	4.3	4.5	7.4	6.4	7.0
20	6.5	6.0	6.1	4.9	4.5	4.7	4.6	4.4	4.5	6.7	6.2	6.5
21	7.0	6.3	6.6	5.3	4.8	5.0	4.7	4.4	4.6	6.3	5.9	6.1
22	6.6	6.3	6.4	5.4	5.1	5.3	4.8	4.5	4.7	6.0	5.8	5.9
23	7.1	6.5	6.7	5.3	5.0	5.1	4.9	4.5	4.7	6.2	5.8	6.0
24	7.2	6.9	7.0	5.5	4.8	5.0	5.2	4.6	4.8	6.3	5.8	6.0
25	7.2	6.8	7.0	5.5	4.8	5.0	5.4	4.8	5.0	6.4	5.9	6.1
26	7.1	6.8	6.9	5.7	4.8	5.1	5.2	4.9	5.0	6.4	6.0	6.2
27	7.0	6.5	6.8	5.9	5.2	5.4	5.0	4.7	4.9	6.7	6.0	6.2
28	7.0	6.6	6.8	5.5	5.1	5.3	4.9	4.6	4.7	6.5	6.2	6.3
29	7.2	6.6	6.9	5.6	4.9	5.2	4.9	4.2	4.7	6.7	6.3	6.4
30	7.5	6.8	7.1	6.2	4.9	5.4	4.8	4.5	4.7	6.8	6.6	6.6
31	---	---	---	5.9	5.3	5.6	4.8	4.4	4.6	---	---	---
MONTH	7.7	6.0	6.9	7.9	4.3	5.6	5.5	3.9	4.6	7.4	3.6	5.6

01477050 DELAWARE RIVER AT CHESTER, PA—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Sample location, cross section ft from rt bank (72103)	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduct-ance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)
APR 2003									
03...	1021	1028	1028	129	1	10.8	7.3	212	10.0
03...	1022	1028	1028	129	5	10.8	7.3	212	10.0
03...	1024	1028	1028	450	1	10.9	7.3	192	9.7
03...	1025	1028	1028	450	5	10.9	7.3	192	9.7
03...	1026	1028	1028	450	10	10.9	7.3	193	9.7
03...	1027	1028	1028	450	15	10.9	7.3	193	9.7
03...	1028	1028	1028	450	20	10.9	7.3	194	9.7
03...	1029	1028	1028	450	25	10.9	7.3	194	9.7
03...	1030	1028	1028	650	1	11.0	7.3	181	9.4
03...	1031	1028	1028	650	5	11.0	7.3	180	9.4
03...	1032	1028	1028	650	10	11.0	7.4	179	9.4
03...	1033	1028	1028	650	15	11.0	7.3	179	9.4
03...	1034	1028	1028	650	20	11.0	7.4	177	9.4
03...	1035	1028	1028	650	25	11.0	7.4	179	9.4
03...	1036	1028	1028	650	30	11.0	7.4	180	9.4
03...	1037	1028	1028	870	1	11.0	7.4	181	9.4
03...	1038	1028	1028	870	5	11.0	7.4	181	9.4
03...	1039	1028	1028	870	10	10.9	7.4	181	9.4
03...	1040	1028	1028	870	15	10.9	7.4	181	9.4
03...	1041	1028	1028	870	20	10.9	7.4	181	9.4
03...	1042	1028	1028	870	25	10.9	7.4	181	9.4
03...	1043	1028	1028	870	30	10.9	7.4	181	9.4
03...	1044	1028	1028	1130	1	11.0	7.4	171	9.3
03...	1045	1028	1028	1130	5	11.0	7.4	171	9.3
03...	1046	1028	1028	1130	10	11.0	7.4	170	9.3
03...	1047	1028	1028	1130	15	11.0	7.4	170	9.3
03...	1048	1028	1028	1130	20	11.0	7.4	171	9.3
03...	1049	1028	1028	1130	25	11.0	7.4	170	9.3
03...	1050	1028	1028	1130	30	11.0	7.4	171	9.3
03...	1051	1028	1028	1130	35	11.0	7.4	171	9.3
03...	1052	1028	1028	1130	40	11.0	7.4	172	9.3
03...	1053	1028	1028	1130	45	11.0	7.4	171	9.3
03...	1054	1028	1028	1390	1	11.0	7.4	165	9.3
03...	1055	1028	1028	1390	5	11.0	7.4	165	9.3
03...	1056	1028	1028	1390	10	11.0	7.4	165	9.3
03...	1057	1028	1028	1390	15	11.0	7.4	165	9.3
03...	1058	1028	1028	1390	20	11.0	7.4	165	9.3
03...	1059	1028	1028	1390	25	11.0	7.4	166	9.3
03...	1100	1028	1028	1390	30	11.0	7.4	166	9.3
03...	1101	1028	1028	1390	35	11.0	7.4	165	9.3
03...	1102	1028	1028	1390	40	11.0	7.4	166	9.3
03...	1103	1028	1028	1390	45	11.0	7.4	166	9.3
03...	1104	1028	1028	1390	50	11.0	7.4	166	9.3
03...	1105	1028	1028	1650	1	11.0	7.4	187	9.3
03...	1106	1028	1028	1650	5	11.0	7.4	188	9.3
03...	1107	1028	1028	1650	10	11.0	7.4	188	9.3
03...	1108	1028	1028	1650	15	11.0	7.4	187	9.3
03...	1109	1028	1028	1650	20	11.0	7.4	188	9.3
03...	1110	1028	1028	1650	25	11.0	7.4	187	9.3
03...	1111	1028	1028	1650	30	11.0	7.4	187	9.3
03...	1112	1028	1028	1650	35	11.0	7.4	188	9.3
03...	1113	1028	1028	1650	40	11.0	7.4	187	9.3
03...	1114	1028	1028	1650	45	11.0	7.4	187	9.3
03...	1115	1028	1028	1650	50	11.0	7.4	188	9.3
03...	1116	1028	1028	2050	1	11.0	7.4	165	9.4
03...	1117	1028	1028	2050	5	11.0	7.4	165	9.4
03...	1118	1028	1028	2050	10	11.0	7.4	165	9.4
03...	1119	1028	1028	2050	15	11.0	7.4	166	9.4
03...	1120	1028	1028	2050	20	11.0	7.4	165	9.4
03...	1121	1028	1028	2050	25	10.9	7.4	166	9.4
03...	1122	1028	1028	2050	30	10.9	7.4	166	9.4
03...	1123	1028	1028	2050	35	10.9	7.4	167	9.4
03...	1124	1028	1028	2350	1	11.0	7.4	168	9.5
03...	1125	1028	1028	2350	5	11.0	7.4	168	9.5
03...	1126	1028	1028	2350	10	10.9	7.3	168	9.5
03...	1127	1028	1028	2350	15	10.9	7.3	168	9.5
03...	1128	1028	1028	2700	1	10.9	7.3	168	9.5
03...	1129	1028	1028	2700	5	10.9	7.3	168	9.5
03...	1130	1028	1028	2700	10	10.9	7.4	168	9.5
03...	1131	1028	1028	3100	1	10.9	7.4	168	9.5
03...	1132	1028	1028	3100	5	10.9	7.4	168	9.5
03...	1133	1028	1028	3100	10	10.9	7.4	168	9.5
03...	1134	1028	1028	3500	1	10.9	7.4	167	9.5
03...	1135	1028	1028	3500	5	10.9	7.4	168	9.5
03...	1136	1028	1028	3500	10	10.9	7.4	168	9.5
03...	1137	1028	1028	3850	1	10.9	7.4	167	9.5
03...	1138	1028	1028	3850	5	10.9	7.4	167	9.5
03...	1139	1028	1028	3850	10	10.9	7.4	167	9.5
03...	1140	1028	1028	4250	1	11.0	7.4	167	9.5
03...	1141	1028	1028	4250	5	10.9	7.4	167	9.5
03...	1142	1028	1028	4250	10	10.9	7.4	167	9.5
03...	1143	1028	1028	4250	15	11.0	7.4	167	9.5
03...	1144	1028	1028	4600	1	10.9	7.4	168	9.5
03...	1145	1028	1028	4600	5	10.9	7.4	168	9.5
03...	1146	1028	1028	4600	10	11.0	7.4	168	9.5
03...	1147	1028	1028	4860	1	11.0	7.4	168	9.6

01477050 DELAWARE RIVER AT CHESTER, PA—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Sample location, cross section ft from rt bank (72103)	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduct-ance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)
APR 2003									
03...	1148	1028	1028	4860	5	11.0	7.4	170	9.6
03...	1149	1028	1028	4860	10	11.0	7.4	170	9.6
03...	1150	1028	1028	4860	15	11.0	7.4	170	9.6
03...	1151	1028	1028	5150	0	--	--	--	--

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

LOCATION.--Lat 39°44'26", long 75°15'33", 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 mi^2.

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.--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 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
DEC													
04...	0930	23	4.7	0.104	0.083	775	11.7	82	7.0	284	0.3	1.5	85
MAR													
05...	1000	117	28	0.184	0.145	756	12.2	91	6.9	196	7.5	3.2	42
MAY													
14...	1000	36	6.7	0.198	0.157	760	8.1	79	7.0	202	18.5	13.6	63
AUG													
07...	1000	34	7.6	0.227	0.179	760	6.2	71	7.0	208	25.0	22.1	69

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
DEC													
04...	26.8	4.41	3.90	13.9	33	25.4	0.21	11.9	46.2	158	166	9	0.66
MAR													
05...	12.1	2.76	3.50	16.2	15	27.2	<0.17	6.2	21.6	104	124	29	0.47
MAY													
14...	19.0	3.70	3.52	9.44	26	18.9	<0.17	9.9	26.8	113	124	5	0.71
AUG													
07...	20.7	4.15	3.53	9.75	36	19.7	<0.17	9.4	21.8	116	126	1	0.71

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
DEC													
04...	0.312	0.315	1.16	0.100	0.044	0.14	0.028	0.092	1.8	2.0	0.8	<0.1	0.8
MAR													
05...	0.192	0.175	1.12	0.009	0.030	0.19	0.032	0.190	1.6	1.8	2.7	<0.1	2.7
MAY													
14...	0.377	0.380	1.22	0.039	0.060	0.07	0.071	0.137	1.9	2.0	0.5	<0.1	0.5
AUG													
07...	0.161	0.161	1.17	0.065	0.051	0.07	0.061	0.134	1.9	1.9	0.7	<0.1	0.7

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC				
04...	3.0	E1.6	--	57
MAR				
05...	3.7	<1.1	--	29
MAY				
14...	4.3	E1.4	1.10	32
AUG				
07...	5.5	<1.0	0.800	38

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
JUL				
09...	0925	360	6,200	16,000
16...	0950	380	100	1,400
23...	0950	--	1,400	1,300
30...	0955	330	100	210
AUG				
06...	1005	480	300	230

01477440 OLDMANS CREEK AT JESSUPS MILL, NJ

LOCATION.--Lat 39°39'44", long 75°13'52", Salem County, Hydrologic Unit 02040202, at bridge on Monroeville Road, 0.1 mi north of Jessups Mill, 0.2 mi upstream of Algokin Lake, 0.7 mi downstream of Kettle Run, and 0.7 mi southeast of Lincoln.

DRAINAGE AREA.--4.15 mi^2.

PERIOD OF RECORD.--Water years 2000, 2003 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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV													
19...	1045	1.6	0.334	0.248	768	9.9	79	6.2	214	10.0	6.0	69	15.2
MAR													
05...	1030	5.5	0.248	0.186	755	11.3	86	6.0	157	7.0	3.8	47	10.2
MAY													
14...	1000	2.7	0.277	0.211	758	8.8	82	6.5	190	14.5	12.0	61	13.3
AUG													
26...	1000	1.8	0.175	0.135	760	7.9	85	7.0	233	24.5	18.6	78	16.7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV													
19...	7.43	3.66	7.13	E6	19.9	<0.17	8.6	40.1	--	141	8	0.49	<0.030
MAR													
05...	5.11	3.02	5.92	--	14.7	<0.17	6.1	22.8	--	99	7	0.38	0.048
MAY													
14...	6.67	3.13	6.31	10	18.8	<0.17	6.1	26.4	105	133	5	0.39	<0.030
AUG													
26...	8.91	3.82	7.65	19	25.6	<0.17	8.3	28.3	132	147	7	0.30	<0.020

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV													
19...	<0.030	3.20	<0.003	<0.020	0.07	0.008	0.015	3.7	3.8	0.5	<0.1	0.5	9.4
MAR													
05...	0.050	3.83	0.005	<0.020	0.12	0.008	0.030	4.2	4.3	1.4	<0.1	1.4	6.0
MAY													
14...	<0.030	4.26	<0.003	<0.020	0.04	0.007	0.015	4.7	4.7	0.4	<0.1	0.4	6.3
AUG													
26...	<0.020	4.82	0.003	<0.020	0.04	0.007	0.015	5.1	5.2	0.4	<0.1	0.3	4.2

01477440 OLDMANS CREEK AT JESSUPS MILL, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV			
19...	E1.4	--	26
MAR			
05...	<1.0	--	15
MAY			
14...	<1.0	0.900	22
AUG			
26...	<1.3	0.700	22

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

WATER-COLUMN AND BED-MATERIAL TRACE-ELEMENT ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (00626)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor-ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryll-ium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)
AUG													
26...	1000	6.10	300	740	2.5	<0.2	--	--	--	--	--	--	--
26...	1000	--	--	--	--	--	<2	117	E.05	18	E.02	<0.8	0.7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)	Arsenic bed sedimnt total, ug/g (01003)	Cadmium bed sedimnt recover-able, ug/g (01028)	Chrom-ium, bed sedimnt recover-able, ug/g (01029)	Cobalt bed sedimnt recover-able, ug/g (01038)	Copper, bed sedimnt recover-able, ug/g (01043)
AUG													
26...	--	--	--	--	--	--	--	--	<1	0.030	1.6	1.3	<2
26...	220	0.23	30.7	<0.02	2.02	1.1	<0.16	3	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover-able, ug/g (01052)	Mangan-ese, bed sedimnt recover-able, ug/g (01053)	Mercury bed sedimnt recover-able, ug/g (71921)	Nickel, bed sedimnt recover-able, ug/g (01068)	Selen-ium, bed sedimnt total, ug/g (01148)	Zinc, bed sedimnt recover-able, ug/g (01093)	1,2-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49403)	1,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49404)	1Methyl -9H-fluor-ene, bed sed <2 mm, ug/kg (49398)	1-Methyl-phenan-threne, bed sed <2 mm, ug/kg (49410)	1-Methyl-pyrene, bed sed <2 mm, wsv nat ug/kg (49388)	236Tri-methyl-naphth-alene, bed sed <2 mm, ug/kg (49405)
AUG													
26...	1,500	2.6	29	<0.01	0.832	<1	5.4	<50	<50	<50	<50	<50	<50
26...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	2,6-Di-methyl-naphth-alene, bed sed <2 mm, ug/kg (49406)	2-Ethyl naphth-alene bed sed <2 mm wsv nat ug/kg (49948)	2-Methyl-anthra-cene, bed sed <2 mm, ug/kg (49435)	Cyclo-penta-phenan-threne, bed sed <2 mm, ug/kg (49411)	9H-Flour-ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace-naphth-ene, bed sed <2 mm, wsv nat ug/kg (49429)	Ace-naphth-ylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthra-cene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo-[a]-anthra-cene, bed sed <2 mm, ug/kg (49436)	Benzo-[a]-pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo-[b]-fluor-anthene bed sed <2 mm ug/kg (49458)	Benzo-[ghi]-peryl-ene, bed sed <2 mm, ug/kg (49408)	Benzo-[k]-fluor-anthene bed sed <2 mm ug/kg (49397)
AUG													
26...	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
26...	--	--	--	--	--	--	--	--	--	--	--	--	--

01477440 OLDMANS CREEK AT JESSUPS MILL, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Chrysene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, ug/kg (49461)	Fluoranthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,-3-cd]-pyrene, bed sed <2 mm ug/kg (49390)	Isophorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphthalene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenanthrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenanthridine, bed sed <2 mm, wsv nat ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment falldia dst wat percent <.002mm (80294)
AUG													
26...	<50	<50	<50	<50	<50	<50	<5	<50	<50	<50	<50	3.1	1.6
26...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sediment, falldia dst wat percent <.004mm (80157)	Bed sediment falldia dst wat percent <.008mm (80293)	Bed sediment, falldia dst wat percent <.016mm (80282)	Bed sediment, falldia dst wat percent <.031mm (80283)
AUG				
26...	1.9	2.1	2.4	2.7
26...	--	--	--	--

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

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)
MAR													
05...	1030	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
MAR													
05...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
MAR									
05...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

01477440 OLDMANS CREEK AT JESSUPS MILL, NJ—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
MAY													
14...	1000	<0.006	E.039	E.004	0.010	<0.005	0.092	E.050	<0.010	0.002	E.011	E.014	<0.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Malathion, water, fltrd, ug/L (39532)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
MAY													
14...	<0.003	<0.004	<0.005	<0.005	E.002	<0.009	<0.005	<0.005	<0.007	<0.027	0.155	0.006	E.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
MAY						
14...	<0.022	E.01	0.037	<0.02	E.013	<0.009

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUL				
09...	0940	250	300	800
16...	1005	740	800	2,400
23...	1010	--	21,000	>16000
30...	1010	690	300	1,300
AUG				
06...	1020	1,020	1,300	3,000

Remark codes used in this table:

01482500 SALEM RIVER AT WOODSTOWN, NJ

LOCATION.--Lat 39°38'36", long 75°19'51", Salem County, Hydrologic Unit 02040206, downstream from Memorial Lake Dam at Woodstown, 0.2 mi upstream from small brook, and 0.3 mi downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi^2.

PERIOD OF RECORD.--Water years 1973 to current year.

REMARKS.--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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
21...	1310	21	23	0.364	0.285	759	11.1	95	6.8	245	13.0	8.5	88
FEB													
26...	1220	38	29	0.274	0.226	771	14.6	100	6.4	188	-0.1	0.5	53
MAY													
20...	1240	14	15	0.216	0.168	769	9.5	100	7.5	258	24.0	18.1	89
AUG													
28...	1000	7.1	47	0.265	0.201	763	8.5	106	8.9	271	25.5	26.3	91

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV													
21...	19.8	9.28	7.31	8.09	E28	20.9	<0.17	9.4	44.7	--	169	17	0.96
FEB													
26...	12.3	5.53	5.47	5.93	19	14.8	<0.17	6.1	23.5	96	117	13	1.7
MAY													
20...	20.0	9.56	5.16	8.91	34	23.5	<0.17	7.5	35.1	143	165	14	0.82
AUG													
28...	19.7	10.3	6.47	9.04	49	27.2	<0.17	4.4	28.1	136	180	28	0.75

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
NOV													
21...	0.205	0.212	2.32	0.038	0.063	0.20	0.077	0.17	3.3	3.5	1.5	<0.1	1.5
FEB													
26...	0.755	0.765	2.30	0.029	0.092	0.28	0.105	0.21	4.0	4.3	1.8	<0.1	1.8
MAY													
20...	0.132	0.135	2.83	0.101	0.023	0.25	0.039	0.138	3.6	3.9	1.7	<0.1	1.7
AUG													
28...	0.034	0.042	0.33	0.030	0.020	1.85	0.042	0.32	1.1	2.9	8.0	<0.1	8.0

01482500 SALEM RIVER AT WOODSTOWN, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV				
21...	9.1	3.1	--	25
FEB				
26...	9.0	3.3	--	16
MAY				
20...	5.5	E2.0	8.40	22
AUG				
28...	7.3	E2.2	206	29

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

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Entero-cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, ECbroth water, MPN/ 100 mL (31615)
AUG				
06...	1145	340	1,300	2,400
13...	1155	120	200	500
20...	1135	<10	<100	270
27...	1145	10	<100	<20
SEP				
03...	1130	200	200	1,400

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

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE

LOCATION.--Lat 39°30'03", long 75°34'07", New Castle County, Delaware, Hydrologic Unit 02040205, on dock on streamward side of jetty about 0.4 mi downstream from Reedy Island near Port Penn.

DRAINAGE AREA.--11,200 mi2, approximately.

PERIOD OF RECORD.--Water year 1997 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: February 1970 to current year.
WATER TEMPERATURES: February 1970 to current year.
DISSOLVED OXYGEN: February 1970 to current year.

INSTRUMENTATION.--Water-quality monitor since February 1970. Probes interfaced with a data collection platform since the 1986 water year. Probes placed in sit since July 1998.

REMARKS.--Specific conductance and water temperature records rated good. Dissolved oxygen record rated poor, except for periods Mar. 1-8, Apr. 28 to May 11, June 13-29, and July 10 to Aug. 19, which are good. pH records rated good except for period Oct. 27 to Nov. 8, which is fair. Interruptions in the record were due to malfunctions of the equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 35,600 microsiemens, Nov. 15, 1978; minimum, 100 microsiemens, several days in 1969, 1970, 1974 and 1979.
pH: Maximum, 8.9, Mar. 4, 1980; minimum, 5.4, Dec. 31, 1972.
WATER TEMPERATURE: Maximum, 32.5°C, July 23, 1987; minimum, 0.0°C, many days during winters.
DISSOLVED OXYGEN: Maximum, 17.1 mg/L, Dec. 16, 19, 1976; minimum, 0.3 mg/L, Sept. 16, 17, 1971.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 22,000 microsiemens, Oct. 5; minimum, 175 microsiemens, Mar. 31.
pH: Maximum 8.0, Feb. 17-20; minimum, 6.8, June 25-27.
WATER TEMPERATURE: Maximum, 29.0°C, Aug. 22; minimum recorded, 0.0°C, many days during winter.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L, Mar. 9-12; minimum recorded, 3.8 mg/L, Aug. 17.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20600	14400	16600	16600	7700	12400	6000	1490	3070	8540	1760	3550
2	19400	14100	15700	15000	7680	10400	8120	1490	2900	8950	1770	3700
3	20100	13800	15600	15200	7490	9980	6940	1420	2330	8200	1660	3900
4	22000	14500	17100	17100	7950	10900	10100	1620	4080	6700	796	2800
5	22000	14800	17400	16300	8020	10800	10500	2200	5040	5340	898	1690
6	19500	14300	16300	16500	8010	11400	12400	3520	6600	4280	924	1440
7	21300	15000	17400	14200	7500	9670	12100	3610	6480	2410	672	1020
8	20800	14600	16700	16400	7460	10800	9540	3510	5050	3840	700	1630
9	20700	15100	17100	12100	6990	8580	8660	2900	4760	4940	720	1990
10	20700	15100	17300	14200	6980	9150	10200	3390	6060	6650	890	3290
11	19700	15400	17200	12500	6720	8940	12500	4000	7230	6840	1590	3120
12	18600	14200	16400	11200	5990	8040	12100	5070	8440	8300	1690	4960
13	20500	13800	16500	13400	6150	9490	10600	3550	6980	11000	3590	7460
14	18200	12100	14300	14700	6290	10500	13000	4240	8540	11600	3210	7560
15	18700	11600	14500	13200	6450	9250	9080	3070	5580	14300	4610	9510
16	19200	12700	15600	13900	6080	8650	9520	2220	4850	13100	5140	8580
17	18700	11300	14500	15900	7330	11300	10100	2580	5320	14800	5450	8790
18	17400	9980	12800	13900	4770	8230	11400	2590	5960	14000	5790	8600
19	17400	8700	12300	6720	3250	4800	10400	3140	5330	15000	6220	9910
20	12700	7970	9630	9110	3030	4350	10000	3050	5280	10600	4600	7670
21	14000	7100	9520	9540	2470	4310	8370	2080	4170	10800	4070	6100
22	14400	6520	9640	10000	2470	4670	5290	1970	2740	9870	3640	6030
23	12300	6690	9130	5810	1630	3060	5650	1360	2420	8320	3230	4930
24	12900	6460	8520	4280	1630	2230	4540	1220	1970	12100	3140	6770
25	14100	6800	9240	5630	1590	2350	8140	1230	3170	15000	6070	11000
26	14500	6850	10200	8520	1580	3300	2900	1060	1580	16900	6240	10300
27	13500	6570	9530	8230	1950	4200	6960	902	2840	13100	4830	9030
28	13500	6100	9040	10200	2000	5250	7260	1110	3030	16100	7610	11300
29	13800	5760	9820	9550	1960	5180	8950	1120	3290	15200	6690	10700
30	15000	7460	11200	8470	2210	4180	9090	1340	3480	16400	8060	10900
31	17800	8740	13100	---	---	---	9350	1760	3790	17400	8740	12000
MONTH	22000	5760	13500	17100	1580	7550	13000	902	4590	17400	672	6460

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	18400	8320	12700	11000	3200	5510	3610	249	654	8520	2840	4710
2	16600	9000	12300	10400	3340	5170	2070	277	490	8610	2880	4290
3	14000	8480	10200	6290	2040	3430	1360	282	462	7660	2830	4350
4	15600	9050	11100	6760	1710	2830	2330	285	706	9590	2950	4770
5	11600	7000	9020	4880	1590	2460	2780	374	959	8610	2830	4510
6	11100	6890	8040	5050	1440	2320	2940	271	618	7360	2790	4130
7	12800	6980	9150	4430	945	2200	975	302	458	7980	2390	3830
8	13000	7250	9620	5250	995	2030	3320	367	1180	7560	2500	3940
9	13400	6640	9090	4790	997	1820	3840	708	2270	7920	2540	4430
10	13800	5700	9080	4160	1030	1860	5030	1190	3590	7830	2540	4090
11	13700	5920	10100	5070	1230	3170	8640	3590	5320	9650	2600	4640
12	15600	6640	10800	7110	1680	4150	10300	3050	7230	10000	2980	5450
13	13200	5860	8800	7250	2320	4930	11500	2880	6040	8390	2530	4540
14	15300	4840	9060	9670	3740	7070	9270	2570	4810	9830	2520	4480
15	14200	6570	9270	11300	4190	7300	9270	2120	3990	9830	2650	4560
16	14600	6840	10400	12100	3360	6430	6050	1990	3190	9630	3200	5610
17	19500	11400	14500	10900	3970	6420	8020	2160	3840	11100	3770	6800
18	20400	10600	15700	9720	3920	6110	9730	2820	5530	12000	3860	6160
19	17600	10800	14000	10800	3610	5850	8660	2660	4660	10400	3870	5610
20	17700	10500	13000	8120	2580	4780	8270	2510	4260	10200	3760	5400
21	16300	9820	12500	6420	1510	2970	8190	2640	4210	9380	3650	5050
22	16800	9620	12200	2520	1030	1660	7960	2650	4030	8140	3650	5160
23	16200	6810	11100	1480	753	1020	6060	2420	3230	10600	3800	6090
24	8070	4860	6080	884	485	657	6600	2040	3310	9610	4280	6640
25	6370	3570	4610	660	409	528	7650	2360	4190	10200	4590	7080
26	7740	3050	4550	612	403	506	8360	2730	4830	9690	4240	6200
27	10400	2990	5150	705	427	536	9530	2890	4770	9900	3620	5790
28	10300	2910	5600	568	400	473	9120	2780	4330	9900	3360	5190
29	---	---	---	485	377	422	9120	2730	4120	9280	3090	4910
30	---	---	---	463	312	391	8370	2560	4140	9720	3040	5000
31	---	---	---	2740	175	426	---	---	---	10300	3120	5360
MONTH	20400	2910	9920	12100	175	3080	11500	249	3380	12000	2390	5120

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10900	2670	4940	6800	1240	2820	9630	3550	6010	13200	6730	9680
2	10700	2590	4700	7730	1420	3220	9580	3690	5480	12500	6940	9250
3	9460	2120	4140	8070	1550	3070	9350	3400	5180	14100	7020	9850
4	7940	1460	3120	5960	1550	3160	8120	3300	4830	12300	6750	8870
5	5750	808	2130	6250	1700	2910	7750	2960	4440	11600	5200	7190
6	4380	590	1340	6140	1640	2790	7820	2320	3890	11800	4080	6560
7	3510	646	1410	6880	1760	3120	6090	2080	3280	10600	3650	5960
8	1940	532	911	7500	1840	3400	6840	1660	2920	11200	3460	5550
9	2930	447	1000	9660	1940	3800	6260	1640	2620	11600	4010	6480
10	2250	504	714	10000	2110	4000	6260	1420	2350	12900	4040	7210
11	2070	464	637	9810	2730	5060	4200	1240	1920	12000	4000	6410
12	2680	554	665	9810	2730	4610	3030	1030	1630	11700	4360	7090
13	2680	498	677	9140	2670	4230	2790	894	1430	12700	4640	8400
14	2860	452	716	8630	2760	4450	1690	849	1180	10900	4920	7350
15	934	389	522	8220	2920	4500	1560	798	1100	10800	4270	6970
16	833	370	496	8800	2990	4990	4250	794	1490	8210	3100	5120
17	650	317	450	7430	2960	4200	4730	741	1540	7980	2460	4710
18	456	324	387	8680	2980	4760	7190	832	2240	10200	3380	6620
19	402	324	365	7500	3190	4590	6810	969	3250	14600	6350	9500
20	402	307	370	9100	3200	5270	7220	1200	3490	9690	2740	5070
21	372	251	311	9420	3640	5700	7850	1270	3880	11300	3090	5420
22	263	220	245	7980	3050	4860	9830	1630	5240	13000	3060	6660
23	2260	218	364	7780	2480	4090	11400	2150	5930	10700	3360	6470
24	4080	216	854	7020	2040	3550	13300	3030	8170	10100	2280	4200
25	5740	238	1450	7600	1660	3070	14800	4310	9200	7160	1420	3080
26	5840	343	1910	8710	1790	3790	15400	4970	8850	5780	1280	2400
27	6710	621	2540	8710	1510	3580	16100	5550	9660	4080	1060	2110
28	7970	790	2620	9320	1560	3420	15300	6160	9420	4310	900	1900
29	8640	916	3040	10000	1960	5040	15200	6720	9770	4330	816	1620
30	7760	1220	2880	11800	2800	5460	14500	6680	9630	3700	618	1210
31	---	---	---	10500	3280	5410	13700	6520	9170	---	---	---
MONTH	10900	216	1530	11800	1240	4090	16100	741	4810	14600	618	5960
YEAR	22000	175	5820									

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.3	7.2	7.3	7.6	7.6	7.6	7.6	7.5	7.5	7.6	7.4	7.4
2	7.2	7.1	7.2	7.7	7.6	7.6	7.6	7.5	7.5	7.6	7.4	7.5
3	7.2	7.1	7.1	7.8	7.6	7.7	7.6	7.5	7.6	7.6	7.4	7.5
4	7.3	7.1	7.2	7.8	7.8	7.8	7.7	7.5	7.6	7.5	7.4	7.5
5	7.3	7.2	7.3	7.8	7.6	7.6	7.7	7.6	7.6	7.5	7.3	7.4
6	7.3	7.2	7.3	7.8	7.6	7.6	7.8	7.6	7.7	7.4	7.3	7.4
7	7.3	7.2	7.2	7.9	7.8	7.9	7.8	7.6	7.7	7.4	7.3	7.4
8	7.3	7.2	7.3	7.9	7.7	7.8	7.7	7.6	7.6	7.5	7.4	7.4
9	7.3	7.3	7.3	7.8	7.7	7.7	7.7	7.6	7.6	7.5	7.4	7.4
10	7.3	7.3	7.3	7.8	7.7	7.7	7.7	7.6	7.6	7.5	7.4	7.4
11	7.3	7.3	7.3	7.8	7.7	7.7	7.8	7.6	7.7	7.6	7.4	7.5
12	7.4	7.3	7.3	7.8	7.7	7.7	7.8	7.6	7.7	7.6	7.5	7.6
13	7.3	7.3	7.3	7.8	7.7	7.8	7.7	7.6	7.6	7.7	7.6	7.6
14	7.4	7.3	7.3	7.8	7.7	7.8	7.8	7.6	7.7	7.7	7.5	7.6
15	7.5	7.3	7.4	7.8	7.7	7.7	7.6	7.4	7.5	7.8	7.6	7.7
16	7.6	7.4	7.5	7.7	7.6	7.7	7.6	7.4	7.4	7.7	7.6	7.6
17	7.6	7.5	7.5	7.8	7.6	7.7	7.6	7.4	7.5	7.8	7.6	7.6
18	7.5	7.5	7.5	7.7	7.5	7.6	7.6	7.3	7.5	7.8	7.6	7.7
19	7.6	7.4	7.5	7.6	7.4	7.5	7.6	7.3	7.4	7.8	7.6	7.7
20	7.5	7.3	7.4	7.6	7.4	7.5	7.6	7.3	7.4	7.7	7.6	7.7
21	7.5	7.3	7.4	7.6	7.3	7.5	7.5	7.3	7.4	7.7	7.6	7.6
22	7.4	7.3	7.4	7.6	7.3	7.4	7.4	7.3	7.3	7.7	7.6	7.6
23	7.4	7.3	7.3	7.5	7.3	7.4	7.4	7.3	7.3	7.9	7.6	7.6
24	7.4	7.3	7.4	7.5	7.3	7.4	7.4	7.3	7.3	7.8	7.6	7.7
25	7.4	7.3	7.4	7.5	7.3	7.4	7.5	7.3	7.4	7.8	7.6	7.7
26	7.4	7.3	7.4	7.6	7.3	7.4	7.6	7.4	7.4	7.8	7.6	7.7
27	7.5	7.3	7.4	7.6	7.4	7.4	7.6	7.4	7.4	7.8	7.6	7.7
28	7.5	7.4	7.4	7.6	7.4	7.5	7.5	7.4	7.4	7.8	7.7	7.7
29	7.6	7.5	7.5	7.6	7.4	7.5	7.6	7.4	7.4	7.8	7.6	7.7
30	7.6	7.5	7.6	7.6	7.4	7.5	7.6	7.4	7.4	7.8	7.7	7.7
31	7.6	7.5	7.5	---	---	---	7.6	7.4	7.4	7.8	7.7	7.7
MAX	7.6	7.5	7.6	7.9	7.8	7.9	7.8	7.6	7.7	7.9	7.7	7.7
MIN	7.2	7.1	7.1	7.5	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.4

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.8	7.7	7.7	7.7	7.4	7.5	7.5	7.3	7.3	7.5	7.3	7.3
2	7.8	7.7	7.7	7.6	7.4	7.4	7.4	7.2	7.2	7.5	7.2	7.3
3	7.7	7.6	7.7	7.5	7.3	7.4	7.2	7.1	7.2	7.4	7.3	7.3
4	7.8	7.7	7.7	7.5	7.3	7.4	7.3	7.1	7.2	7.5	7.3	7.3
5	7.8	7.6	7.7	7.4	7.3	7.4	7.3	7.1	7.2	7.4	7.2	7.2
6	7.7	7.6	7.7	7.4	7.3	7.3	7.3	7.1	7.2	7.3	7.1	7.2
7	7.8	7.6	7.7	7.4	7.3	7.3	7.2	7.1	7.2	7.3	7.1	7.2
8	7.8	7.7	7.7	7.5	7.2	7.3	7.3	7.2	7.3	7.3	7.1	7.1
9	7.8	7.7	7.7	7.4	7.2	7.3	7.4	7.2	7.3	7.4	7.1	7.2
10	7.8	7.6	7.7	7.4	7.3	7.3	7.5	7.3	7.5	7.3	7.1	7.1
11	7.8	7.7	7.8	7.5	7.3	7.4	7.6	7.5	7.6	7.4	7.1	7.1
12	7.9	7.7	7.8	7.5	7.3	7.4	7.8	7.5	7.7	7.4	7.1	7.2
13	7.8	7.7	7.8	7.5	7.3	7.4	7.8	7.4	7.6	7.4	7.2	7.3
14	7.9	7.7	7.8	7.7	7.4	7.6	7.7	7.4	7.5	7.6	7.2	7.3
15	7.9	7.7	7.8	7.8	7.4	7.5	7.7	7.4	7.4	7.6	7.3	7.3
16	7.9	7.8	7.8	7.8	7.4	7.5	7.5	7.3	7.4	7.5	7.3	7.4
17	8.0	7.8	7.9	7.8	7.4	7.5	7.6	7.4	7.4	7.6	7.4	7.4
18	8.0	7.8	7.9	7.7	7.4	7.5	7.7	7.4	7.5	7.5	7.3	7.4
19	8.0	7.8	7.9	7.8	7.4	7.5	7.6	7.4	7.5	7.4	7.3	7.3
20	8.0	7.8	7.8	7.6	7.4	7.5	7.6	7.4	7.5	7.4	7.3	7.3
21	7.9	7.8	7.8	7.5	7.3	7.3	7.6	7.4	7.5	7.3	7.3	7.3
22	7.9	7.8	7.8	7.3	7.3	7.3	7.6	7.4	7.4	7.4	7.3	7.3
23	7.9	7.7	7.8	7.3	7.3	7.3	7.6	7.4	7.5	7.4	7.3	7.4
24	7.7	7.6	7.6	7.3	7.3	7.3	7.6	7.4	7.5	7.4	7.3	7.4
25	7.6	7.5	7.6	7.4	7.3	7.3	7.8	7.4	7.5	7.4	7.4	7.4
26	7.7	7.5	7.6	7.4	7.3	7.3	7.8	7.5	7.6	7.5	7.3	7.4
27	7.8	7.5	7.6	7.3	7.3	7.3	7.8	7.4	7.5	7.5	7.3	7.4
28	7.8	7.6	7.6	7.3	7.2	7.3	7.7	7.3	7.5	7.5	7.4	7.4
29	---	---	---	7.3	7.2	7.3	7.6	7.3	7.3	7.5	7.4	7.4
30	---	---	---	7.3	7.2	7.3	7.5	7.3	7.3	7.5	7.4	7.4
31	---	---	---	7.5	7.2	7.3	---	---	---	7.5	7.4	7.4
MAX	8.0	7.8	7.9	7.8	7.4	7.6	7.8	7.5	7.7	7.6	7.4	7.4
MIN	7.6	7.5	7.6	7.3	7.2	7.3	7.2	7.1	7.2	7.3	7.1	7.1

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE—Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.6	7.4	7.5	7.0	6.9	7.0	7.4	7.3	7.3	7.3	7.2	7.3
2	7.6	7.5	7.5	7.1	7.0	7.1	7.4	7.3	7.3	7.3	7.2	7.3
3	7.6	7.4	7.5	7.2	7.1	7.1	7.4	7.3	7.4	7.3	7.2	7.3
4	7.5	7.4	7.5	7.2	7.0	7.1	7.4	7.3	7.4	7.3	7.2	7.3
5	7.5	7.4	7.5	7.2	7.1	7.1	7.4	7.3	7.3	7.3	7.2	7.3
6	7.5	7.4	7.4	7.2	7.1	7.1	7.4	7.3	7.3	7.3	7.2	7.3
7	7.6	7.4	7.4	7.2	7.1	7.2	7.4	7.3	7.3	7.3	7.2	7.2
8	7.5	7.3	7.4	7.2	7.1	7.2	7.4	7.2	7.3	7.3	7.1	7.1
9	7.4	7.3	7.3	7.3	7.2	7.2	7.4	7.3	7.3	7.3	7.2	7.3
10	7.4	7.3	7.3	7.2	7.1	7.2	7.4	7.3	7.4	7.4	7.2	7.3
11	7.3	7.3	7.3	7.2	7.1	7.2	7.4	7.3	7.3	7.3	7.1	7.3
12	7.3	7.2	7.3	7.2	7.1	7.2	7.4	7.3	7.3	7.4	7.2	7.3
13	7.3	7.0	7.3	7.2	7.1	7.2	7.3	7.2	7.3	7.5	7.4	7.4
14	7.1	7.0	7.0	7.2	7.1	7.2	7.3	7.2	7.3	7.4	7.4	7.4
15	7.1	6.9	7.0	7.3	7.1	7.2	7.3	7.2	7.2	7.4	7.4	7.4
16	7.0	7.0	7.0	7.2	7.2	7.2	7.3	7.2	7.2	7.4	7.3	7.3
17	7.1	7.0	7.0	7.3	7.2	7.2	7.3	7.2	7.2	7.4	7.3	7.3
18	7.0	7.0	7.0	7.2	7.2	7.2	7.3	7.2	7.2	7.6	7.3	7.4
19	7.0	7.0	7.0	7.2	7.2	7.2	7.3	7.1	7.2	7.7	7.4	7.6
20	7.0	7.0	7.0	7.3	7.2	7.3	7.4	7.2	7.3	7.4	7.4	7.4
21	7.0	7.0	7.0	7.4	7.3	7.3	7.4	7.2	7.3	7.4	7.3	7.4
22	7.0	6.9	7.0	7.4	7.2	7.3	7.4	7.2	7.3	7.4	7.3	7.4
23	7.0	6.9	6.9	7.4	7.3	7.3	7.4	7.2	7.3	7.4	7.3	7.4
24	7.0	6.9	6.9	7.4	7.2	7.4	7.5	7.3	7.4	7.4	7.2	7.3
25	7.0	6.8	6.9	7.5	7.3	7.4	7.5	7.3	7.3	7.3	7.2	7.3
26	7.0	6.8	6.9	7.5	7.2	7.4	7.4	7.3	7.3	7.3	7.1	7.2
27	7.0	6.8	6.9	7.5	7.3	7.4	7.4	7.2	7.3	7.2	7.1	7.2
28	7.0	6.9	6.9	7.5	7.3	7.4	7.3	7.2	7.3	7.2	7.1	7.2
29	7.0	6.9	7.0	7.4	7.2	7.4	7.4	7.2	7.3	7.3	7.1	7.2
30	7.0	6.9	7.0	7.4	7.3	7.4	7.3	7.2	7.2	7.3	7.1	7.2
31	---	---	---	7.4	7.2	7.3	7.3	7.2	7.3	---	---	---
MAX	7.6	7.5	7.5	7.5	7.3	7.4	7.5	7.3	7.4	7.7	7.4	7.6
MIN	7.0	6.8	6.9	7.0	6.9	7.0	7.3	7.1	7.2	7.2	7.1	7.1

YEAR			
	MAX	MAXIMUM 8.0	MINIMUM 7.0
	MIN	MAXIMUM 7.8	MINIMUM 6.8
	MEDIAN	MAXIMUM 7.9	MINIMUM 6.9

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	23.0	22.5	22.5	12.5	12.0	12.5	7.5	6.0	7.0	4.0	3.5	4.0
2	23.5	22.5	23.0	12.0	11.5	12.0	7.0	6.0	6.5	4.5	4.0	4.0
3	23.5	23.0	23.0	11.5	11.0	11.5	6.5	5.0	5.5	4.5	4.0	4.0
4	23.5	23.0	23.5	11.5	11.0	11.0	6.0	5.0	5.0	4.5	4.0	4.0
5	24.0	23.5	23.5	11.0	11.0	11.0	5.5	4.5	5.0	4.0	3.5	3.5
6	23.5	22.5	23.0	11.0	10.5	11.0	5.0	4.0	4.5	4.0	3.5	3.5
7	23.0	22.5	23.0	11.0	10.5	10.5	4.5	4.0	4.0	3.5	2.5	3.5
8	22.5	21.0	22.0	10.5	10.0	10.5	4.5	4.0	4.0	3.5	3.0	3.5
9	22.0	21.0	21.5	10.5	10.0	10.5	4.0	3.0	3.5	3.5	3.0	3.5
10	21.5	21.0	21.0	11.5	10.5	11.0	4.0	3.5	3.5	3.5	3.5	3.5
11	21.0	20.5	21.0	11.5	11.0	11.5	4.0	3.5	3.5	3.5	2.5	3.0
12	21.0	20.5	20.5	11.5	11.5	11.5	4.0	3.5	4.0	3.5	2.5	3.0
13	20.5	20.0	20.5	11.5	11.0	11.5	4.0	3.5	4.0	3.0	2.0	2.5
14	20.5	19.0	20.0	11.5	11.0	11.0	4.5	4.0	4.0	3.0	2.0	2.5
15	19.5	18.5	19.0	11.5	11.0	11.5	4.5	4.0	4.0	3.0	2.0	2.5
16	19.0	18.0	18.5	11.5	11.0	11.0	4.5	3.5	4.0	2.5	1.5	2.0
17	18.5	17.5	18.0	11.0	10.5	11.0	4.0	3.5	4.0	2.5	1.5	2.0
18	18.0	17.5	17.5	11.0	10.0	10.5	4.0	3.5	3.5	2.0	0.5	1.5
19	17.5	17.0	17.0	10.0	9.5	10.0	4.0	3.5	3.5	1.5	1.0	1.0
20	17.0	16.5	17.0	10.5	9.5	10.0	4.5	4.0	4.0	1.0	0.5	1.0
21	17.0	16.5	16.5	10.5	9.5	10.0	4.5	4.0	4.0	1.0	0.0	0.5
22	16.5	16.0	16.0	10.5	10.0	10.0	4.0	3.5	4.0	0.5	0.0	0.0
23	16.5	15.5	16.0	10.5	9.0	9.5	4.5	3.5	4.0	0.0	0.0	0.0
24	16.0	15.0	15.5	9.5	8.5	9.0	4.0	3.5	4.0	0.0	0.0	0.0
25	15.5	14.5	15.0	9.5	8.5	9.0	4.5	3.5	4.0	0.0	0.0	0.0
26	15.0	14.5	15.0	9.5	8.5	9.0	3.5	3.0	3.5	0.0	0.0	0.0
27	15.0	14.5	15.0	9.5	8.0	9.0	3.5	3.0	3.5	0.0	0.0	0.0
28	15.0	14.5	14.5	8.5	8.0	8.5	3.5	3.0	3.5	0.0	0.0	0.0
29	14.5	13.5	14.0	8.5	7.5	8.0	4.0	3.0	3.5	0.0	0.0	0.0
30	13.5	12.5	13.0	8.0	7.5	7.5	3.5	3.0	3.5	0.0	0.0	0.0
31	13.0	12.5	12.5	---	---	---	4.0	3.5	3.5	0.0	0.0	0.0
MONTH	24.0	12.5	18.6	12.5	7.5	10.3	7.5	3.0	4.1	4.5	0.0	1.9

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.0	0.0	0.0	1.5	1.0	1.5	9.0	7.0	8.5	15.5	14.0	14.5
2	0.5	0.0	0.5	2.0	1.5	1.5	9.5	8.5	9.0	16.0	15.0	15.5
3	1.0	0.0	0.5	2.0	1.5	1.5	10.0	9.0	9.5	16.0	15.0	15.5
4	1.0	0.5	0.5	2.0	1.0	1.5	9.5	9.5	9.5	16.0	15.5	15.5
5	1.0	0.5	0.5	2.5	1.5	2.0	10.0	9.5	9.5	15.5	15.0	15.5
6	1.0	0.5	0.5	2.0	2.0	2.0	10.0	9.0	9.5	15.5	15.0	15.0
7	0.5	0.0	0.5	2.5	1.5	2.0	9.5	8.5	9.0	16.5	15.0	15.5
8	1.0	0.5	0.5	3.0	2.0	2.5	9.5	8.5	9.0	16.5	15.5	16.0
9	1.0	0.5	0.5	3.5	2.5	3.0	9.0	8.5	8.5	16.5	16.0	16.0
10	1.0	0.5	0.5	3.0	2.5	3.0	8.5	8.0	8.5	16.5	16.0	16.0
11	1.0	0.5	0.5	3.0	2.5	3.0	8.5	8.0	8.5	17.0	16.0	16.5
12	1.0	0.5	1.0	4.0	2.5	3.0	9.5	8.0	8.5	17.0	16.5	17.0
13	1.0	0.0	0.5	4.0	3.0	3.5	10.0	8.5	9.0	16.5	16.5	16.5
14	1.0	0.0	0.5	4.5	3.5	3.5	10.0	9.0	9.5	17.0	16.0	16.5
15	0.5	0.5	0.5	5.0	3.5	4.0	11.0	9.5	10.0	17.0	16.5	16.5
16	0.5	0.0	0.0	5.5	4.0	4.5	11.5	10.5	11.0	16.5	16.0	16.0
17	0.0	0.0	0.0	6.0	5.0	5.5	11.0	10.5	11.0	16.0	15.5	15.5
18	0.0	0.0	0.0	6.5	5.5	6.0	11.0	10.5	10.5	15.5	15.5	15.5
19	0.0	0.0	0.0	6.5	5.5	6.0	11.0	10.0	10.5	16.0	15.0	15.5
20	0.5	0.0	0.0	6.5	6.0	6.0	11.5	10.5	11.0	17.5	15.5	16.0
21	0.5	0.0	0.0	7.0	6.5	6.5	11.5	11.0	11.5	16.5	16.0	16.5
22	1.0	0.5	0.5	7.5	6.5	7.0	12.5	11.5	11.5	16.5	16.0	16.5
23	1.5	0.5	1.0	8.0	7.5	8.0	12.0	11.5	11.5	16.5	16.0	16.0
24	1.0	0.5	1.0	8.5	8.0	8.0	12.5	11.5	11.5	16.5	16.0	16.0
25	1.5	0.5	1.0	9.5	8.5	8.5	12.5	11.5	12.0	16.5	16.0	16.0
26	1.0	0.5	1.0	10.0	9.0	9.5	12.5	12.0	12.5	16.5	16.0	16.0
27	1.0	0.5	1.0	10.5	9.0	9.5	13.5	12.5	12.5	16.5	16.0	16.5
28	1.5	0.5	1.0	9.5	9.0	9.5	14.0	12.5	13.5	17.0	16.0	16.5
29	---	---	---	10.0	9.5	9.5	14.5	13.5	14.0	16.5	16.5	16.5
30	---	---	---	10.0	9.5	9.5	15.0	13.5	14.0	18.0	16.5	17.0
31	---	---	---	9.5	8.0	9.0	---	---	---	17.5	17.0	17.5
MONTH	1.5	0.0	0.5	10.5	1.0	5.2	15.0	7.0	10.5	18.0	14.0	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.5	17.0	17.5	25.0	23.5	24.0	27.0	26.5	26.5	27.0	26.5	26.5
2	18.0	16.5	17.0	25.0	24.0	24.5	27.0	26.5	27.0	27.0	26.0	26.5
3	17.5	17.0	17.0	24.5	24.0	24.5	27.5	26.5	27.0	26.5	26.0	26.0
4	17.0	17.0	17.0	25.0	24.0	24.5	28.0	27.0	27.0	26.5	26.0	26.0
5	17.5	17.0	17.0	25.5	24.5	25.0	27.0	27.0	27.0	26.0	25.5	25.5
6	18.0	17.0	17.5	26.0	25.0	25.5	27.5	27.0	27.0	26.0	25.0	25.5
7	17.5	17.5	17.5	26.5	25.5	26.0	27.0	26.5	27.0	26.0	25.0	25.5
8	18.0	17.5	17.5	27.5	26.0	26.5	27.5	26.5	27.0	26.0	25.0	25.5
9	19.0	17.5	18.0	27.5	26.5	26.5	27.0	27.0	27.0	25.0	25.0	25.0
10	19.5	18.0	18.5	26.5	26.0	26.5	27.5	26.5	27.0	25.0	24.0	24.5
11	20.0	18.5	19.0	27.0	26.0	26.5	27.0	27.0	27.0	24.5	24.0	24.5
12	21.0	19.5	20.0	26.5	26.0	26.5	27.5	27.0	27.0	24.5	23.5	24.0
13	21.0	20.0	20.5	27.0	26.0	26.5	28.0	27.0	27.5	24.0	23.0	23.5
14	22.0	20.5	21.0	26.5	26.0	26.5	28.5	27.5	28.0	24.0	23.5	24.0
15	22.0	21.0	21.5	27.0	26.0	26.5	28.5	27.5	28.0	24.0	24.0	24.0
16	21.5	21.0	21.5	27.0	26.0	26.5	28.0	27.5	28.0	24.5	23.5	24.0
17	21.5	21.0	21.0	27.0	26.0	26.5	28.0	27.5	28.0	24.0	23.0	23.5
18	21.5	20.5	21.0	26.5	26.0	26.5	28.0	27.5	27.5	23.5	23.0	23.0
19	21.5	21.0	21.0	27.0	26.0	26.5	28.5	27.5	28.0	23.0	22.5	23.0
20	21.5	21.0	21.0	27.5	26.5	26.5	29.0	27.5	28.0	23.5	22.5	23.0
21	21.5	21.0	21.0	27.0	26.5	26.5	28.5	27.5	28.0	23.0	22.5	23.0
22	21.0	20.5	21.0	27.5	26.5	27.0	29.0	27.5	28.0	23.0	22.5	23.0
23	21.5	20.5	21.0	27.5	26.5	27.0	28.5	27.0	28.0	23.0	22.5	23.0
24	22.5	21.0	21.5	27.5	26.5	27.0	27.5	26.5	27.0	23.0	22.0	22.5
25	23.0	21.5	22.0	28.0	26.5	27.0	27.5	26.0	26.5	23.0	22.0	22.5
26	23.5	22.0	22.5	28.0	27.0	27.5	27.5	26.0	26.5	23.0	22.0	22.5
27	24.0	22.5	23.0	27.5	27.0	27.0	27.0	26.0	26.5	23.0	22.5	22.5
28	24.0	23.0	23.5	27.5	27.0	27.0	27.5	26.0	26.5	22.5	22.5	22.5
29	24.5	23.0	23.5	28.0	27.0	27.0	27.5	26.5	27.0	22.5	21.5	22.0
30	24.5	23.5	24.0	27.0	27.0	27.0	27.5	26.5	27.0	22.0	21.0	21.5
31	---	---	---	27.0	26.5	27.0	27.0	26.0	26.5	---	---	---
MONTH	24.5	16.5	20.2	28.0	23.5	26.3	29.0	26.0	27.2	27.0	21.0	23.9
YEAR	29.0	0.0	13.8									

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE—Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.8	6.3	6.6	8.2	7.8	8.0	11.0	10.1	10.6	---	---	---
2	6.8	6.3	6.6	8.3	7.9	8.1	11.5	10.0	10.5	---	---	---
3	6.6	6.2	6.5	8.3	8.0	8.2	10.2	9.7	9.9	---	---	---
4	6.8	6.2	6.5	8.4	8.0	8.3	9.8	9.3	9.5	---	---	---
5	6.6	6.2	6.5	8.5	8.2	8.3	9.4	9.1	9.3	---	---	---
6	6.7	6.4	6.6	8.7	8.3	8.5	9.3	8.9	9.1	10.2	9.2	9.6
7	6.6	6.3	6.5	8.8	8.5	8.6	9.3	8.8	8.9	9.9	8.8	9.3
8	6.8	6.4	6.6	---	---	---	9.1	8.8	8.9	9.7	8.8	9.1
9	6.8	6.4	6.6	---	---	---	9.3	9.0	9.1	9.2	8.7	9.0
10	6.8	6.4	6.6	---	---	---	9.2	8.8	8.9	9.3	8.7	9.1
11	6.8	6.5	6.7	---	---	---	9.2	8.8	9.0	9.4	8.8	9.1
12	6.8	6.6	6.7	---	---	---	9.2	8.5	8.8	9.4	8.8	9.1
13	6.8	6.4	6.7	---	---	---	9.2	8.7	8.9	9.2	8.6	8.9
14	7.1	5.6	6.8	---	---	---	9.2	8.7	8.8	10.7	8.4	9.4
15	7.2	6.7	6.9	---	---	---	9.5	8.8	9.0	8.8	8.2	8.4
16	7.2	6.9	7.0	---	---	---	9.5	9.0	9.2	9.0	7.8	8.3
17	7.2	6.9	7.1	---	---	---	10.0	9.3	9.5	8.6	7.8	8.2
18	7.2	7.0	7.1	---	---	---	9.9	9.1	9.4	8.2	7.8	8.1
19	7.4	7.0	7.2	---	---	---	10.1	9.4	9.7	8.2	7.9	8.1
20	7.3	6.7	7.0	---	---	---	10.4	9.6	9.8	8.4	7.8	8.1
21	7.2	6.6	7.1	---	---	---	10.4	9.8	10.1	9.1	7.7	8.3
22	7.5	7.0	7.3	---	---	---	10.3	9.6	10.0	12.0	6.9	8.5
23	7.8	7.3	7.5	---	---	---	10.4	9.6	9.9	11.7	5.2	9.3
24	8.1	7.6	7.9	---	---	---	11.1	10.0	10.4	11.7	8.5	9.5
25	8.5	8.0	8.2	9.8	9.2	9.5	11.2	10.7	10.9	10.3	8.7	9.3
26	8.7	8.2	8.4	10.2	9.5	9.8	11.9	11.0	11.4	9.2	8.6	8.8
27	8.7	7.6	8.1	10.2	9.7	9.9	12.5	11.4	11.8	10.4	8.6	9.3
28	7.9	7.5	7.8	10.3	9.6	10	---	---	---	9.2	8.4	8.8
29	8.1	7.6	7.9	10.4	9.9	10.1	---	---	---	8.8	8.5	8.6
30	8.2	7.8	8.0	10.6	10.0	10.3	---	---	---	8.7	8.3	8.6
31	8.2	7.8	8.0	---	---	---	---	---	---	8.9	8.3	8.5
MONTH	8.7	5.6	7.1	10.6	7.8	9.0	12.5	8.5	9.7	12.0	5.2	8.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	9.2	8.3	8.5	---	---	---	10.6	8.6	10.1	8.8	8.4	8.6
2	8.5	8.2	8.3	12.8	12.3	12.5	10.4	9.2	9.9	8.6	8.2	8.4
3	---	---	---	12.7	12.3	12.5	9.3	9.1	9.2	8.5	8.1	8.3
4	---	---	---	12.7	12.3	12.5	9.2	9.0	9.1	8.3	8.0	8.1
5	---	---	---	12.6	12.3	12.4	9.2	9.0	9.1	8.2	7.8	8.0
6	---	---	---	12.7	12.3	12.4	9.3	9.0	9.1	8.0	7.6	7.9
7	---	---	---	12.6	12.2	12.4	9.4	9.0	9.3	7.8	7.4	7.6
8	---	---	---	12.7	12.2	12.4	9.7	9.3	9.5	7.5	6.9	7.3
9	---	---	---	12.9	12.3	12.6	10.0	9.5	9.8	7.7	7.0	7.3
10	---	---	---	12.9	12.6	12.7	10.1	9.8	10	7.4	7.0	7.2
11	---	---	---	12.9	12.7	12.8	10.2	10.0	10.1	7.4	6.9	7.1
12	---	---	---	12.9	12.7	12.8	10.2	10.0	10.1	7.6	7.0	7.3
13	---	---	---	12.8	12.5	12.6	10.2	9.6	9.9	8.0	7.3	7.7
14	---	---	---	12.8	12.3	12.5	9.7	9.3	9.5	8.1	7.7	7.9
15	---	---	---	12.5	11.9	12.3	9.4	9.0	9.2	8.3	7.7	8.0
16	---	---	---	12.0	9.8	11.4	9.1	8.7	8.9	8.4	8.0	8.2
17	---	---	---	10.4	8.8	9.7	9.1	8.7	8.9	8.4	8.0	8.2
18	---	---	---	10.5	8.5	9.6	9.0	8.5	8.8	8.3	7.8	8.1
19	---	---	---	10.2	8.4	9.4	8.8	8.4	8.6	8.3	7.7	8.1
20	---	---	---	10.1	8.5	9.4	8.7	8.4	8.6	8.1	7.6	7.9
21	---	---	---	10.9	9.2	10.0	8.8	8.4	8.6	7.9	7.5	7.8
22	---	---	---	11.7	10.7	11.3	8.8	8.4	8.6	8.0	7.6	7.9
23	---	---	---	11.7	11.5	11.6	8.8	8.4	8.6	8.0	7.6	7.8
24	---	---	---	11.7	11.4	11.6	8.9	8.4	8.7	8.0	7.6	7.8
25	---	---	---	11.4	10.9	11.2	9.1	8.5	8.8	8.1	7.6	7.8
26	---	---	---	10.9	10.6	10.7	9.1	8.6	8.8	8.8	7.8	8.1
27	---	---	---	10.7	10.3	10.5	9.1	8.6	8.9	8.8	8.3	8.6
28	---	---	---	10.7	10.0	10.5	9.0	8.6	8.9	8.6	8.1	8.5
29	---	---	---	10.8	10.5	10.6	9.0	8.6	8.8	8.5	8.1	8.3
30	---	---	---	10.8	10.4	10.6	8.9	8.6	8.7	8.4	7.9	8.2
31	---	---	---	10.5	8.6	10.1	---	---	---	8.2	7.8	8.1
MONTH	9.2	8.2	8.4	12.9	8.4	11.5	10.6	8.4	9.2	8.8	6.9	7.9

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE—Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.6	7.7	8.2	6.7	5.4	6.2	6.4	5.6	6.1	6.7	6.0	6.2
2	8.4	8.0	8.2	6.4	5.6	6.0	6.3	5.7	6.0	6.2	5.3	6.0
3	8.3	7.5	8.1	6.2	5.6	5.9	6.4	5.6	6.1	6.1	5.7	5.9
4	8.2	7.7	8.0	6.0	5.3	5.8	6.4	5.6	6.0	6.2	5.7	5.9
5	8.0	7.4	7.7	6.1	5.7	5.9	6.2	5.2	5.9	6.3	5.7	6.0
6	7.8	7.3	7.5	---	---	---	6.2	5.5	5.9	8.0	6.2	7.2
7	7.9	7.2	7.4	---	---	---	6.2	5.6	5.9	8.4	7.1	8.2
8	7.6	6.8	7.2	---	---	---	6.3	5.4	5.9	8.7	5.4	8.0
9	7.2	6.5	7.0	---	---	---	6.3	5.5	5.9	8.6	7.8	8.3
10	7.1	6.2	6.8	---	---	---	6.3	5.5	5.9	8.2	7.3	7.8
11	7.0	6.5	6.8	6.3	5.8	6.1	6.2	5.5	5.9	7.6	6.9	7.3
12	7.0	6.5	6.7	6.4	5.7	6.1	6.1	5.6	5.8	7.5	7.0	7.2
13	6.8	6.0	6.5	6.5	5.8	6.2	5.9	5.5	5.7	7.2	6.8	7.0
14	6.8	5.5	6.2	6.6	5.5	6.2	5.9	5.4	5.7	6.9	6.5	6.7
15	6.6	5.9	6.3	6.8	5.6	6.2	6.1	5.2	5.6	6.6	6.2	6.4
16	6.8	5.2	6.4	6.7	5.5	6.3	5.7	4.9	5.5	6.3	6.0	6.2
17	7.0	6.4	6.7	6.7	6.0	6.4	6.1	3.8	5.6	6.2	5.9	6.1
18	7.1	4.3	6.7	6.6	5.5	6.2	6.1	5.5	5.8	6.3	5.9	6.2
19	7.0	5.4	6.7	6.6	5.9	6.3	6.1	5.3	5.7	6.5	6.0	6.3
20	7.1	6.2	6.8	6.7	6.0	6.3	7.0	5.4	5.9	6.6	6.0	6.2
21	7.2	6.5	6.9	6.8	6.0	6.4	6.6	5.3	5.9	6.5	6.0	6.3
22	7.4	6.6	7.0	7.0	6.0	6.5	7.0	5.4	6.1	6.7	5.9	6.3
23	7.1	6.6	6.8	7.0	5.9	6.6	6.9	5.8	6.3	6.9	6.2	6.6
24	7.0	6.0	6.5	7.0	6.0	6.7	7.0	6.0	6.4	6.8	6.4	6.6
25	7.1	6.2	6.6	---	---	---	6.5	5.8	6.2	6.9	6.5	6.7
26	7.1	5.7	6.2	---	---	---	6.3	5.8	6.0	6.8	6.4	6.7
27	6.3	5.5	5.9	6.9	5.9	6.5	6.1	5.4	5.8	7.0	6.4	6.7
28	6.8	5.4	6.1	6.7	5.9	6.4	6.1	5.6	5.8	7.0	6.4	6.7
29	6.8	5.1	6.1	6.5	5.4	6.2	---	---	---	7.0	6.4	6.7
30	6.8	5.3	6.2	6.5	5.2	6.1	---	---	---	6.8	6.1	6.5
31	---	---	---	6.5	5.2	6.1	---	---	---	---	---	---
MONTH	8.6	4.3	6.9	7.0	5.2	6.2	7.0	3.8	5.9	8.7	5.3	6.7
YEAR	12.9	3.8	8.1									

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)
APR 2003									
02...	1132	1028	1028	330	1	10.5	7.5	2040	9.9
02...	1133	1028	1028	330	5	10.4	7.5	2280	10.1
02...	1134	1028	1028	330	10	10.4	7.5	2300	10.1
02...	1135	1028	1028	800	1	10.5	7.5	1960	9.6
02...	1136	1028	1028	800	5	10.5	7.5	2220	9.3
02...	1137	1028	1028	800	10	10.4	7.5	2320	9.3
02...	1138	1028	1028	800	15	10.3	7.5	2480	9.4
02...	1139	1028	1028	800	20	10.3	7.5	2600	9.9
02...	1140	1028	1028	800	25	10.3	7.5	2600	10.2
02...	1141	1028	1028	800	30	10.3	7.5	2620	10.3
02...	1153	1028	1028	1300	1	10.5	7.5	1750	10.4
02...	1154	1028	1028	1300	5	10.5	7.5	1850	9.0
02...	1155	1028	1028	1300	10	10.5	7.5	2040	8.9
02...	1156	1028	1028	1300	15	10.4	7.5	2270	9.0
02...	1157	1028	1028	1300	20	10.4	7.4	2450	9.0
02...	1158	1028	1028	1300	25	10.3	7.5	2560	9.6
02...	1159	1028	1028	1300	30	10.3	7.5	2610	9.7
02...	1202	1028	1028	1800	1	10.6	7.5	1770	9.2
02...	1203	1028	1028	1800	5	10.5	7.5	1770	9.0
02...	1204	1028	1028	1800	10	10.5	7.5	1910	8.9
02...	1205	1028	1028	1800	15	10.4	7.4	2690	9.2
02...	1206	1028	1028	1800	20	10.4	7.5	2410	9.1
02...	1207	1028	1028	1800	25	10.3	7.5	2830	9.4
02...	1208	1028	1028	1800	30	10.3	7.5	2850	9.5
02...	1209	1028	1028	2300	1	10.4	7.5	1860	9.0
02...	1210	1028	1028	2300	5	10.4	7.5	1880	8.9
02...	1211	1028	1028	2300	10	10.4	7.5	1980	8.9
02...	1212	1028	1028	2300	15	10.4	7.4	2370	8.9
02...	1213	1028	1028	2300	20	10.3	7.4	2840	9.1
02...	1214	1028	1028	2300	25	10.3	7.4	3070	9.5
02...	1215	1028	1028	2300	30	10.3	7.5	3080	9.6
02...	1216	1028	1028	2300	35	10.3	7.5	3100	9.6
02...	1217	1028	1028	2800	1	10.5	7.5	2010	9.1
02...	1218	1028	1028	2800	5	10.5	7.5	2130	9.0
02...	1219	1028	1028	2800	10	10.4	7.5	2190	9.0
02...	1220	1028	1028	2800	15	10.4	7.5	2210	9.0
02...	1221	1028	1028	2800	20	10.4	7.5	2310	9.0
02...	1222	1028	1028	2800	25	10.4	7.5	2600	9.1
02...	1223	1028	1028	2800	30	10.3	7.5	2840	9.3
02...	1224	1028	1028	2800	35	10.3	7.5	2880	9.4
02...	1225	1028	1028	3300	1	10.4	7.5	2150	9.1
02...	1226	1028	1028	3300	5	10.4	7.5	2140	9.0
02...	1227	1028	1028	3300	10	10.4	7.5	2150	8.9
02...	1228	1028	1028	3300	15	10.4	7.5	2400	8.9
02...	1229	1028	1028	3300	20	10.4	7.5	2450	8.9
02...	1230	1028	1028	3300	25	10.4	7.5	2670	9.0
02...	1231	1028	1028	3300	30	10.4	7.5	2830	9.0
02...	1232	1028	1028	3300	35	10.4	7.5	2820	9.0
02...	1233	1028	1028	3300	40	10.4	7.5	2800	9.0
02...	1234	1028	1028	3800	1	10.5	7.5	2470	9.2
02...	1235	1028	1028	3800	5	10.5	7.5	2560	9.2
02...	1236	1028	1028	3800	10	10.5	7.5	2610	9.0
02...	1237	1028	1028	3800	15	10.4	7.5	2750	8.9
02...	1238	1028	1028	3800	20	10.4	7.5	2740	8.9
02...	1239	1028	1028	3800	25	10.4	7.5	2730	8.9
02...	1240	1028	1028	3800	30	10.4	7.5	2740	8.8
02...	1241	1028	1028	3800	35	10.4	7.5	2780	8.8
02...	1242	1028	1028	3800	40	10.4	7.5	2810	8.8
02...	1243	1028	1028	3800	45	10.4	7.5	2870	8.8
02...	1244	1028	1028	4300	1	10.5	7.5	2740	9.0
02...	1245	1028	1028	4300	5	10.4	7.5	2820	8.8
02...	1246	1028	1028	4300	10	10.4	7.5	3000	8.8
02...	1247	1028	1028	4300	15	10.4	7.5	3030	8.8
02...	1248	1028	1028	4300	20	10.4	7.5	3100	8.8
02...	1249	1028	1028	4300	25	10.4	7.5	3180	8.8
02...	1250	1028	1028	4300	30	10.4	7.5	3200	8.8
02...	1251	1028	1028	4300	35	10.4	7.5	3130	8.8
02...	1252	1028	1028	4300	40	10.4	7.5	3150	8.8
02...	1253	1028	1028	4300	45	10.4	7.5	3120	8.8
02...	1254	1028	1028	4300	50	10.4	7.5	3080	8.8
02...	1255	1028	1028	4800	1	10.4	7.5	2800	9.3
02...	1256	1028	1028	4800	5	10.5	7.5	2890	9.1
02...	1257	1028	1028	4800	10	10.4	7.5	2900	8.9
02...	1258	1028	1028	4800	15	10.4	7.5	2920	8.8
02...	1259	1028	1028	4800	20	10.4	7.5	3000	8.8
02...	1300	1028	1028	4800	25	10.4	7.5	3140	8.8
02...	1301	1028	1028	4800	30	10.4	7.5	3160	8.8
02...	1302	1028	1028	4800	35	10.4	7.5	3190	8.8
02...	1303	1028	1028	4800	40	10.4	7.5	3180	8.8
02...	1304	1028	1028	4800	45	10.4	7.5	3190	8.8
02...	1305	1028	1028	5300	1	10.5	7.5	2900	9.8
02...	1306	1028	1028	5300	5	10.5	7.5	2880	9.7
02...	1307	1028	1028	5300	10	10.6	7.5	2820	9.3
02...	1308	1028	1028	5300	15	10.6	7.5	2920	9.2
02...	1309	1028	1028	5300	20	10.5	7.5	2980	9.2
02...	1310	1028	1028	5300	25	10.5	7.5	2960	9.3

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE—Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduct-ance, wat unf µS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)
APR 2003									
02...	1311	1028	1028	5300	30	10.5	7.5	3070	9.3
02...	1312	1028	1028	5300	35	10.5	7.5	3140	9.2
02...	1313	1028	1028	5800	1	10.5	7.5	1510	9.3
02...	1314	1028	1028	5800	5	10.5	7.4	2080	9.1
02...	1315	1028	1028	5800	10	10.5	7.4	2800	9.0
02...	1316	1028	1028	5800	15	10.5	7.4	2920	9.0
02...	1317	1028	1028	5800	20	10.5	7.5	2960	8.9
02...	1318	1028	1028	5800	25	10.5	7.5	2950	9.0
02...	1319	1028	1028	6300	1	10.5	7.5	830	9.4
02...	1320	1028	1028	6300	5	10.5	7.4	1090	9.1
02...	1321	1028	1028	6300	10	10.5	7.3	1770	9.0
02...	1322	1028	1028	6300	15	10.5	7.3	2790	8.9
02...	1323	1028	1028	6300	20	10.5	7.3	2850	8.8
02...	1324	1028	1028	6800	1	10.5	7.5	560	9.4
02...	1325	1028	1028	6800	5	10.6	7.4	1100	9.2
02...	1326	1028	1028	6800	10	10.6	7.3	1760	8.8
02...	1327	1028	1028	6800	15	10.5	7.3	2360	8.8
02...	1328	1028	1028	7300	1	10.4	7.3	520	9.2
02...	1329	1028	1028	7300	5	10.5	7.4	640	8.9
02...	1330	1028	1028	7300	10	10.5	7.3	1300	8.9
02...	1331	1028	1028	7500	0	--	--	--	--

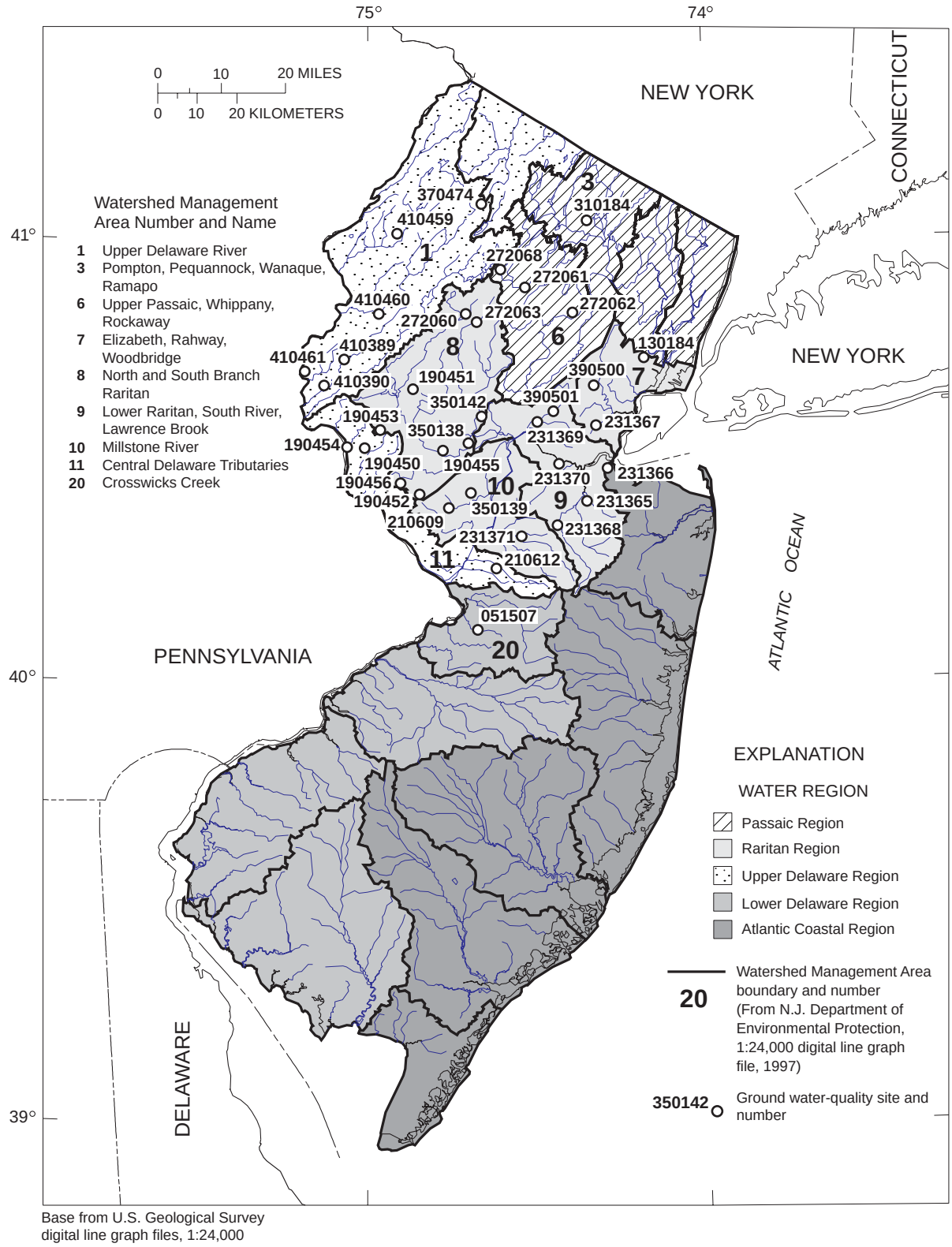


Figure 48. Location of sites in the Ambient Ground-Water-Quality Network, water year 2003.

WATERSHED MANAGEMENT AREA 1

NJ-WRD Well Number	Station Number	Local Identifier	Latitude (NAD83)	Longitude (NAD83)	Altitude of Land Surface (NGVD29) (feet)	Depth of Well (feet)	Screen Interval (feet)	Aquifer Unit
410390	403951075075301	NJDEP MW93	403951	750752	280	76	56 - 76	364JKBG
410461	404146075112101	NJDEP MW119	404146	751120	316	160	140 - 160	360KTTN
410389	404324075041801	NJDEP MW94	404324	750417	405	158	138 - 158	371ALNN
410460	404937074580501	NJDEP MW105	404937	745804	440	52	42 - 52	112SFDF
410459	410033074544701	NJDEP MW96	410033	745446	495	100	75 - 100	371ALNN
370474	*410433074394001	NJDEP MW111	410433	743939	615	22	17 - 22	112SFDF

* Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection.

AQUIFER UNITS.-- 364JKBG, Jacksonburg Limestone; 360KTTN, Kittatinny Limestone; 371ALNN, Allentown Dolomite; 112SFDF, Stratified Drift.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
WARREN COUNTY										
NJDEP MW93	403951075075301	12-16-02	1230	0.52	90	10	748	8.8	82	7.0
NJDEP MW119	404146075112101	06-26-03	1310	0.60	180	5.3	752	6.8	69	8.4
NJDEP MW94	404324075041801	12-04-02	1150	0.60	85	0.5	764	9.0	83	8.1
NJDEP MW105	404937074580501	06-25-03	1130	1.0	75	1.5	751	11.0	100	--
NJDEP MW96	410033074544701	06-24-03	1130	2.5	60	5.2	760	4.3	42	6.9
SUSSEX COUNTY										
NJDEP MW111	410433074394001	11-18-02	1015	0.25	35	0.9	744	8.6	84	7.4

MULTIPLE STATION ANALYSES

Local identifier	Date	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
WARREN COUNTY											
NJDEP MW93	12-16-02	1,710	11.0	390	113	24.8	6.42	192	239	291	362
NJDEP MW119	06-26-03	408	15.4	190	36.8	23.5	3.31	15.5	141	170	31.5
NJDEP MW94	12-04-02	520	12.0	230	48.6	26.8	2.01	21.2	157	190	38.5
NJDEP MW105	06-25-03	408	10.3	230	49.0	25.1	1.13	1.91	196	239	3.85
NJDEP MW96	06-24-03	590	14.5	340	69.4	39.9	1.19	4.55	291	355	8.60
SUSSEX COUNTY											
NJDEP MW111	11-18-02	1,090	13.0	320	82.1	28.1	2.35	102	246	299	110

WATERSHED MANAGEMENT AREA 1—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
WARREN COUNTY											
NJDEP MW93	12-16-02	<0.17	7.0	33.0		938	<0.10	<0.04	4.81	<0.008	<0.02
NJDEP MW119	06-26-03	<0.17	13.1	22.5	249	245	<0.10	<0.04	4.28	0.049	<0.02
NJDEP MW94	12-04-02	<0.17	16.1	13.2	309	301	<0.10	E.04	11.2	0.025	<0.02
NJDEP MW105	06-25-03	<0.17	8.5	11.9	237	225	<0.10	<0.04	4.20	<0.008	<0.02
NJDEP MW96	06-24-03	<0.17	5.8	22.8	330	331	E.06	<0.04	0.66	<0.008	<0.02
SUSSEX COUNTY											
NJDEP MW111	11-18-02	<0.17	7.7	25.3		645	0.12	<0.04	24.2	<0.008	<0.02

MULTIPLE STATION ANALYSES

Local identifier	Date	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)
WARREN COUNTY											
NJDEP MW93	12-16-02	0.6	<2	<0.30	<0.3	139	<0.06	25	0.04	1.0	0.5
NJDEP MW119	06-26-03	E.2	4	<0.30	0.4	31	<0.06	7	<0.04	4.0	0.3
NJDEP MW94	12-04-02	0.4	5	<0.30	<0.3	44	<0.06	12	<0.04	E.8	0.3
NJDEP MW105	06-25-03	0.4	<2	<0.30	<0.3	12	<0.06	11	<0.04	E.5	0.3
NJDEP MW96	06-24-03	0.5	3	<0.30	<0.3	14	<0.06	E5	0.04	1.2	0.4
SUSSEX COUNTY											
NJDEP MW111	11-18-02	0.7	E1	<0.30	<0.3	22	<0.06	23	<0.04	E.5	0.4

MULTIPLE STATION ANALYSES

Local identifier	Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thallium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)
WARREN COUNTY											
NJDEP MW93	12-16-02	<10	0.10	4.3	<0.02	9.31	2.0	0.3	E.03	7	<0.1
NJDEP MW119	06-26-03	E4	<0.08	0.2	<0.02	2.21	0.9	<0.2	<0.04	1	0.4
NJDEP MW94	12-04-02	<10	E.07	14.2	<0.02	3.09	1.1	<0.2	0.09	2	<0.1
NJDEP MW105	06-25-03	<8	<0.08	<0.2	<0.02	1.79	<0.5	<0.2	<0.04	M	<0.1
NJDEP MW96	06-24-03	E4	0.26	0.9	<0.02	2.97	<0.5	<0.2	<0.04	2	<0.1
SUSSEX COUNTY											
NJDEP MW111	11-18-02	<10	<0.08	1.0	<0.02	2.99	E.4	<0.2	<0.04	1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)
WARREN COUNTY											
NJDEP MW93	12-16-02	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
NJDEP MW119	06-26-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	0.2
NJDEP MW94	12-04-02	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
NJDEP MW105	06-25-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
NJDEP MW96	06-24-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
SUSSEX COUNTY											
NJDEP MW111	11-18-02	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1

WATERSHED MANAGEMENT AREA 1—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Chloro-benzene water unfltrd ug/L (34301)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl-benzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)
WARREN COUNTY											
NJDEP MW93	12-16-02	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2
NJDEP MW119	06-26-03	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2
NJDEP MW94	12-04-02	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2
NJDEP MW105	06-25-03	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2
NJDEP MW96	06-24-03	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2
SUSSEX COUNTY											
NJDEP MW111	11-18-02	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2

MULTIPLE STATION ANALYSES

Local identifier	Date	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)
WARREN COUNTY											
NJDEP MW93	12-16-02	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1
NJDEP MW119	06-26-03	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1
NJDEP MW94	12-04-02	<0.1	<0.1	<0.1	0.2	<0.1	<0.2	<0.1	<0.1	<0.2	1.9
NJDEP MW105	06-25-03	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1
NJDEP MW96	06-24-03	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1
SUSSEX COUNTY											
NJDEP MW111	11-18-02	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Alpha radio-activty 2-sigma wat flt Th-230, pCi/L (75987)	Alpha radio-activty water, fltrd, Th-230, pCi/L (04126)	Beta radio-activty 2-sigma wat flt CS-137, pCi/L (75989)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)
WARREN COUNTY								
NJDEP MW93	12-16-02	<0.2	<0.1	<0.2	8.3	8	6.0	13
NJDEP MW119	06-26-03	<0.2	0.7	<0.2	1.1	M	1.7	5
NJDEP MW94	12-04-02	<0.2	<0.1	<0.2	2.6	M	1.9	4
NJDEP MW105	06-25-03	<0.2	<0.1	<0.2	1.6	2	2.6	2
NJDEP MW96	06-24-03	<0.2	<0.1	<0.2	1.7	M	2.6	4
SUSSEX COUNTY								
NJDEP MW111	11-18-02	<0.2	<0.1	<0.2	2.8	M	4.3	8

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

WATERSHED MANAGEMENT AREA 1—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more ground-water samples are listed in the following table.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	Atra-zine, water, fltrd, ug/L (39632)	Cyana-zine, water, fltrd, ug/L (04041)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)
WARREN COUNTY										
NJDEP MW93	403951075075301	12-16-02	1230	E.134	<0.006	<0.004	0.216	<0.018	<0.005	<0.005
NJDEP MW119	404146075112101	06-26-03	1310	E.085	<0.006	<0.004	0.086	<0.018	<0.005	<0.005
NJDEP MW94	404324075041801	12-04-02	1150	E.355	E.005	0.270	0.341	<0.018	<0.005	<0.005
NJDEP MW105	404937074580501	06-25-03	1130	E.276	<0.006	<0.004	0.228	<0.018	<0.005	<0.005
NJDEP MW96	410033074544701	06-24-03	1130	E.055	<0.006	<0.004	0.024	<0.018	<0.005	<0.005
SUSSEX COUNTY										
NJDEP MW111	410433074394001	11-18-02	1015	E.946	<0.006	<0.004	2.50	<0.018	<0.005	<0.005

MULTIPLE STATION ANALYSES

Local identifier	Date	Desulf-inyl-fipro-nil, water, fltrd, ug/L (62170)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Metola-chlor, water, fltrd, ug/L (39415)	Prome-ton, water, fltrd, ug/L (04037)	Sima-zine, water, fltrd, ug/L (04035)
WARREN COUNTY								
NJDEP MW93	12-16-02	<0.004	<0.009	<0.005	<0.005	E.002	0.06	0.023
NJDEP MW119	06-26-03	<0.004	<0.009	<0.005	<0.005	<0.013	0.02	<0.005
NJDEP MW94	12-04-02	<0.004	<0.009	<0.005	<0.005	4.52	<0.01	0.006
NJDEP MW105	06-25-03	<0.004	<0.009	<0.005	<0.005	E.008	<0.01	0.010
NJDEP MW96	06-24-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
SUSSEX COUNTY								
NJDEP MW111	11-18-02	<0.004	<0.009	<0.005	<0.005	1.33	<0.01	0.051

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

WATERSHED MANAGEMENT AREA 3

NJ-WRD Well Number	Station Number	Local Identifier	Latitude (NAD83)	Longitude (NAD83)	Altitude of Land Surface (NGVD29) (feet)	Depth of Well (feet)	Screen Interval (feet)	Aquifer Unit
310184	*410214074204501	NJDEP MW81	410214	742044	560	29	19 - 29	112SFDF

* Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection.

AQUIFER UNITS.--112SFDF, Stratified Drift.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
PASSAIC COUNTY										
NJDEP MW81	410214074204501	11-20-02	1015	0.25	60	1.6	750	3.4	32	7.0

MULTIPLE STATION ANALYSES

Local identifier	Date	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
PASSAIC COUNTY											
NJDEP MW81	11-20-02	206	12.5	79	18.8	7.77	3.48	6.84	65	11.6	<0.17

MULTIPLE STATION ANALYSES

Local identifier	Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, ug/L (01106)
PASSAIC COUNTY											
NJDEP MW81	11-20-02	18.6	12.3	126	E.09	<0.04	0.14	<0.008	<0.02	0.6	2

MULTIPLE STATION ANALYSES

Local identifier	Date	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)
PASSAIC COUNTY											
NJDEP MW81	11-20-02	<0.30	<0.3	39	<0.06	15	0.05	<0.8	0.6	<10	<0.08

WATERSHED MANAGEMENT AREA 3—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thallium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)
PASSAIC COUNTY											
NJDEP MW81	11-20-02	120	<0.02	2.12	E.3	<0.2	0.05	51	<0.1	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)
PASSAIC COUNTY											
NJDEP MW81	11-20-02	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)
PASSAIC COUNTY											
NJDEP MW81	11-20-02	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	E.1	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)
PASSAIC COUNTY											
NJDEP MW81	11-20-02	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Vinyl chloride, water, unfltrd ug/L (39175)	Alpha radioactivty 2-sigma wat flt Th-230, pCi/L (75987)	Alpha radioactivty water, fltrd, Th-230, pCi/L (04126)	Beta radioactivty 2-sigma wat flt CS-137, pCi/L (75989)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)
PASSAIC COUNTY						
NJDEP MW81	11-20-02	<0.2	0.70	M	1.6	5

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

WATERSHED MANAGEMENT AREA 3—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more ground-water samples are listed in the following table.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	Atra-zine, water, fltrd, ug/L (39632)	Cyana-zine, water, fltrd, ug/L (04041)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)
PASSAIC COUNTY										
NJDEP MW81	410214074204501	11-20-02	1015	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005

MULTIPLE STATION ANALYSES

Local identifier	Date	Desulf-inyl-fipro-nil, water, fltrd, ug/L (62170)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Metola-chlor, water, fltrd, ug/L (39415)	Prome-ton, water, fltrd, ug/L (04037)	Sima-zine, water, fltrd, ug/L (04035)
PASSAIC COUNTY								
NJDEP MW81	11-20-02	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005

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

WATERSHED MANAGEMENT AREA 6

NJ-WRD Well Number	Station Number	Local Identifier	Latitude (NAD83)	Longitude (NAD83)	Altitude of Land Surface (NGVD29) (feet)	Depth of Well (feet)	Screen Interval (feet)	Aquifer Unit
272062	*404944074232401	NJDEP MW79	404944	742323	200	20	15 - 20	112SFDF
272061	*405309074315301	NJDEP MW131	405309	743152	610	26	16 - 26	112SFDF
272068	405537074361401	NJDEP MW83	405537	743614	700	55	45 - 55	112SFDF

* Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection.

AQUIFER UNITS.--112SFDF, Stratified Drift.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Sample type	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)
MORRIS COUNTY									
NJDEP MW79	404944074232401	10-29-02	1030	Environmental	0.25	35	1.8	762	0.6
NJDEP MW131	405309074315301	*11-13-02*	*0945*	*Ambient Blank*	--	--	--	--	--
		11-13-02	1000	Environmental	0.25	35	1.1	745	0.6
NJDEP MW83	405537074361401	09-11-03	1250	Environmental	--	135	65	755	6.7

MULTIPLE STATION ANALYSES

Local identifier	Date	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
MORRIS COUNTY											
NJDEP MW79	10-29-02	6	7.8	624	13.0	330	80.8	31.0	1.27	12.2	--
NJDEP MW131	11-13-02	--	--	--	--	--	--	--	--	--	--
	11-13-02	6	6.3	1,540	15.0	320	79.1	29.1	3.12	165	124
NJDEP MW83	09-11-03	65	8.1	146	13.5	73	18.7	6.27	0.43	2.49	61

MULTIPLE STATION ANALYSES

Local identifier	Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
MORRIS COUNTY											
NJDEP MW79	10-29-02	328	2.87	0.25	18.7	36.7		368	E.05	<0.04	E.03
NJDEP MW131	11-13-02	--	--	--	--	--	--	--	--	--	--
	11-13-02	151	390	<0.17	13.0	9.7	782	820	0.12	0.07	0.14
NJDEP MW83	09-11-03	75	4.07	<0.17	18.0	8.4	95	100	<0.10	<0.04	E.04

WATERSHED MANAGEMENT AREA 6—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
MORRIS COUNTY											
NJDEP MW79	10-29-02	<0.008	0.04	1.1	3	<0.30	1.6	49	<0.06	48	<0.04
NJDEP MW131	11-13-02	--	--	--	--	--	--	--	--	--	--
	11-13-02	0.010	<0.02	3.3	E1	<0.30	<0.3	313	E.04	13	<0.04
NJDEP MW83	09-11-03	0.009	<0.02	0.7	8	<0.30	2.0	3	<0.06	<7	<0.04

MULTIPLE STATION ANALYSES

Local identifier	Date	Chrom-ium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thall-ium, water, fltrd, ug/L (01057)
MORRIS COUNTY											
NJDEP MW79	10-29-02	<0.8	0.6	<10	<0.08	364	<0.02	1.79	0.5	<0.2	<0.04
NJDEP MW131	11-13-02	--	--	--	--	--	--	--	--	--	--
	11-13-02	<0.8	0.6	16,000	0.54	2,450	<0.02	2.07	E.3	<0.2	<0.04
NJDEP MW83	09-11-03	1.6	0.8	<8	<0.08	12.3	<0.02	0.69	<0.5	<0.2	<0.04

MULTIPLE STATION ANALYSES

Local identifier	Date	Zinc, water, fltrd, ug/L (01090)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000)	1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)	1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)
MORRIS COUNTY											
NJDEP MW79	10-29-02	M	<0.1	<0.1	<0.1	<0.1	--	--	--	<0.1	<0.2
NJDEP MW131	11-13-02	--	*<0.1*	*<0.1*	*<0.1*	*<0.1*	--	--	--	*<0.1*	*<0.2*
	11-13-02	2	<1.00	<1.00	<1.00	<1.00	35.2	3.8	32.3	<1.00	<2.0
NJDEP MW83	09-11-03	<1	<0.1	<0.1	<0.1	<0.1	--	--	--	<0.1	<0.2

MULTIPLE STATION ANALYSES

Local identifier	Date	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	2-Ethyl-toluene water unfltrd ug/L (77220)	4-Iso-propyl-toluene water unfltrd ug/L (77356)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Chloro-benzene water unfltrd ug/L (34301)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	Di-bromo-chloro-methane water unfltrd ug/L (32105)
MORRIS COUNTY											
NJDEP MW79	10-29-02	<0.1	<0.1	<0.1	--	--	<0.1	<0.1	<0.1	<0.1	<0.2
NJDEP MW131	11-13-02	*<0.1*	*<0.1*	*<0.1*	--	--	*<0.1*	*<0.1*	*<0.1*	*<0.1*	*<0.2*
	11-13-02	<1.00	<1.00	<1.00	14.1	2.44	1.40	<1.00	<1.00	<1.00	<2.0
NJDEP MW83	09-11-03	<0.1	<0.1	<0.1	--	--	<0.1	<0.1	<0.1	<0.1	<0.2

MULTIPLE STATION ANALYSES

Local identifier	Date	Di-chloro-di-fluoro-methane wat unf ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl-benzene water unfltrd ug/L (34371)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)
MORRIS COUNTY											
NJDEP MW79	10-29-02	<0.2	<0.2	<0.2	<0.2	<0.1	--	<0.2	<0.2	--	--
NJDEP MW131	11-13-02	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.1*	--	*<0.2*	*<0.2*	--	--
	11-13-02	<2.00	<2.0	<2.0	<2.00	38.3	5.75	<2.00	22.2	8.0	6.3
NJDEP MW83	09-11-03	<0.2	<0.2	<0.2	<0.2	<0.1	--	<0.2	<0.2	--	--

WATERSHED MANAGEMENT AREA 6—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	n-propylbenzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butylbenzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)
MORRIS COUNTY											
NJDEP MW79	10-29-02	--	<0.1	--	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW131	11-13-02	--	*<0.1*	--	*<0.1*	*<0.1*	*<0.2*	*<0.1*	*<0.2*	*<0.1*	*<0.1*
	11-13-02	16.9	1.06	6.07	<1.00	<1.00	<2.0	<1.00	<2.00	<1.67	<1.00
NJDEP MW83	09-11-03	--	<0.1	--	<0.1	<0.1	E.1	<0.1	<0.2	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)	Alpha radioactivty 2-sigma wat flt Th-230, pCi/L (75987)	Alpha radioactivty water, fltrd, Th-230, pCi/L (04126)	Beta radioactivty 2-sigma wat flt CS-137, pCi/L (75989)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)
MORRIS COUNTY										
NJDEP MW79	10-29-02	<0.2	<0.1	<0.2	<0.1	<0.2	3.0	1	2.2	3
NJDEP MW131	11-13-02	*<0.2*	*<0.1*	*<0.2*	*<0.1*	*<0.2*	--	--	--	--
	11-13-02	<2.00	<1.00	<2.00	<1.00	<2.0	7.6	14	4.6	15
NJDEP MW83	09-11-03	<0.2	<0.1	<0.2	0.2	<0.2	0.74	M	1.0	M

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more ground-water samples are listed in the following table.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	Atrazine, water, fltrd, ug/L (39632)	Cyanazine, water, fltrd, ug/L (04041)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)
MORRIS COUNTY										
NJDEP MW79	404944074232401	10-29-02	1030	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
NJDEP MW131	405309074315301	11-13-02	1000	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
NJDEP MW83	405537074361401	09-11-03	1250	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005

MULTIPLE STATION ANALYSES

Local identifier	Date	Desulfinylfipronil, water, fltrd, ug/L (62170)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Metolachlor, water, fltrd, ug/L (39415)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)
MORRIS COUNTY								
NJDEP MW79	10-29-02	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW131	11-13-02	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	0.010
NJDEP MW83	09-11-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005

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

WATERSHED MANAGEMENT AREA 7

NJ-WRD Well Number	Station Number	Local Identifier	Latitude (NAD83)	Longitude (NAD83)	Altitude of Land Surface (NGVD29) (feet)	Depth of Well (feet)	Screen Interval (feet)	Aquifer Unit
231367	403422074192001	NJDEP MW135	403422	741920	60	27	22 - 27	227PSSC
390500	*403946074193901	NJDEP MW136	403946	741938	95	17	12 - 17	227PSSC
130184	*404332074104201	NJDEP MW140	404332	741042	20	36	26 - 36	227PSSC

* Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection.

AQUIFER UNITS.--227PSSC, Passaic Formation.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Sample type	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)
				MIDDLESEX COUNTY					
NJDEP MW135	403422074192001	10-22-02	1010	Environmental	--	55	8.3	768	1.8
				UNION COUNTY					
NJDEP MW136	403946074193901	11-12-02	0915	Environmental	0.25	30	0.3	764	0.3
				ESSEX COUNTY					
NJDEP MW140	404332074104201	*09-09-03*	*1000*	*Ambient Blank*	--	--	--	--	--
		09-09-03	1030	Environmental	0.50	40	0.9	770	1.6

MULTIPLE STATION ANALYSES

Local identifier	Date	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
					MIDDLESEX COUNTY						
NJDEP MW135	10-22-02	17	6.9	416	14.0	150	35.7	13.9	7.78	20.6	109
					UNION COUNTY						
NJDEP MW136	11-12-02	3	6.2	320	15.0	140	35.5	11.3	0.77	14.4	98
					ESSEX COUNTY						
NJDEP MW140	09-09-03	--	--	--	--	--	--	--	--	--	--
	09-09-03	17	7.1	1,900	15.3	520	185	14.6	6.86	147	203

WATERSHED MANAGEMENT AREA 7—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
MIDDLESEX COUNTY											
NJDEP MW135	10-22-02	132	50.3	<0.17	25.1	13.7	233	237	E.09	0.06	<0.06
UNION COUNTY											
NJDEP MW136	11-12-02	119	13.9	<0.17	30.8	32.2	201	225	0.20	<0.04	0.55
ESSEX COUNTY											
NJDEP MW140	09-09-03	--	--	--	--	--	--	--	--	--	--
	09-09-03	247	395	<0.17	16.4	71.7	992	1,170	0.11	<0.04	7.44

MULTIPLE STATION ANALYSES

Local identifier	Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
MIDDLESEX COUNTY											
NJDEP MW135	10-22-02	<0.008	<0.02	0.9	2	<0.30	0.6	245	<0.06	268	0.16
UNION COUNTY											
NJDEP MW136	11-12-02	0.010	<0.02	3.8	3	<0.30	2.5	101	E.04	15	0.12
ESSEX COUNTY											
NJDEP MW140	09-09-03	--	--	--	--	--	--	--	--	--	--
	09-09-03	<0.008	<0.18	1.3	E1	<0.30	E.2	87	<0.06	65	E.04

MULTIPLE STATION ANALYSES

Local identifier	Date	Chromium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thallium, water, fltrd, ug/L (01057)
MIDDLESEX COUNTY											
NJDEP MW135	10-22-02	2.0	0.6	233	1.31	352	<0.02	2.83	<0.5	<0.2	<0.04
UNION COUNTY											
NJDEP MW136	11-12-02	<0.8	1.5	690	0.79	374	<0.02	12.8	E.4	<0.2	<0.04
ESSEX COUNTY											
NJDEP MW140	09-09-03	--	--	--	--	--	--	--	--	--	--
	09-09-03	<0.8	2.6	E4	<0.08	73.1	<0.02	3.12	3.1	<0.2	<0.04

WATERSHED MANAGEMENT AREA 7—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Zinc, water, fltrd, ug/L (01090)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)
MIDDLESEX COUNTY											
NJDEP MW135	10-22-02	24	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
UNION COUNTY											
NJDEP MW136	11-12-02	5	<0.1	<0.1	0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
ESSEX COUNTY											
NJDEP MW140	09-09-03	--	*<0.1*	*<0.1*	*<0.1*	*<0.1*	*<0.1*	*<0.2*	*<0.1*	*<0.1*	*<0.1*
	09-09-03	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)
MIDDLESEX COUNTY											
NJDEP MW135	10-22-02	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
UNION COUNTY											
NJDEP MW136	11-12-02	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
ESSEX COUNTY											
NJDEP MW140	09-09-03	*<0.1*	*<0.1*	*<0.1*	*<0.1*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.1*
	09-09-03	<0.1	<0.1	<0.1	1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)
MIDDLESEX COUNTY											
NJDEP MW135	10-22-02	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
UNION COUNTY											
NJDEP MW136	11-12-02	<0.2	<0.2	<0.1	<0.1	<0.1	E.1	<0.1	<0.2	<0.1	<0.1
ESSEX COUNTY											
NJDEP MW140	09-09-03	*<0.2*	*<0.2*	*<0.1*	*<0.1*	*<0.1*	*<0.2*	*<0.1*	*<0.2*	*<0.1*	*<0.1*
	09-09-03	<0.2	<0.2	<0.1	<0.1	<0.1	0.2	14.1	<0.2	<0.1	<0.1

WATERSHED MANAGEMENT AREA 7—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Alpha radio-activty 2-sigma wat flt Th-230, pCi/L (75987)	Alpha radio-activty water, fltrd, Th-230, pCi/L (04126)	Beta radio-activty 2-sigma wat flt CS-137, pCi/L (75989)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)
MIDDLESEX COUNTY										
NJDEP MW135	10-22-02	<0.2	<0.1	<0.2	<0.1	<0.2	1.3	3	3.0	7
UNION COUNTY										
NJDEP MW136	11-12-02	<0.2	<0.1	<0.2	<0.1	<0.2	1.5	3	1.7	5
ESSEX COUNTY										
NJDEP MW140	09-09-03	*<0.2*	*<0.1*	*<0.2*	*<0.1*	*<0.2*	--	--	--	--
	09-09-03	<0.2	3.2	<0.2	2.4	<0.2	8.4	2	7.9	13

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more ground-water samples are listed in the following table.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	Atra-zine, water, fltrd, ug/L (39632)	Cyana-zine, water, fltrd, ug/L (04041)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)
MIDDLESEX COUNTY										
NJDEP MW135	403422074192001	10-22-02	1010	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
UNION COUNTY										
NJDEP MW136	403946074193901	11-12-02	0915	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
ESSEX COUNTY										
NJDEP MW140	404332074104201	09-09-03	1030	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005

MULTIPLE STATION ANALYSES

Local identifier	Date	Desulf-inyl-fipro-nil, water, fltrd, ug/L (62170)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Metola-chlor, water, fltrd, ug/L (39415)	Prome-ton, water, fltrd, ug/L (04037)	Sima-zine, water, fltrd, ug/L (04035)
MIDDLESEX COUNTY								
NJDEP MW135	10-22-02	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
UNION COUNTY								
NJDEP MW136	11-12-02	0.007	E.005	E.004	E.006	<0.013	<0.01	<0.005
ESSEX COUNTY								
NJDEP MW140	09-09-03	<0.004	<0.009	<0.005	<0.005	<0.013	E.01	<0.005

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

WATERSHED MANAGEMENT AREA 8

NJ-WRD Well Number	Station Number	Local Identifier	Latitude (NAD83)	Longitude (NAD83)	Altitude of Land Surface (NGVD29) (feet)	Depth of Well (feet)	Screen Interval (feet)	Aquifer Unit
190452	402501074505001	NJDEP MW106	402500	745050	310	119	94 - 119	227PSSC
190456	*402633074541301	NJDEP MW91	402633	745413	200	37	12 - 37	227PSSC
190455	403100074464101	NJDEP MW107	403100	744641	150	41	21 - 41	227PSSC
190453	403347074575101	NJDEP MW98	403348	745751	540	60	40 - 60	231LCKG
190451	*403921074515901	NJDEP MW101	403921	745159	370	37	17 - 37	400PCMB
350138	403200074420601	NJDEP MW110	403200	744206	60	36	31 - 36	227PSSC
350142	403537074394401	NJDEP MW123	403537	743943	110	76	52 - 76	227PSSC
272063	*404828074403501	NJDEP MW87	404828	744034	695	30	21 - 30	112SFDF
272060	*404936074423101	NJDEP MW124	404936	744230	620	25	15 - 25	112SFDF

* Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection.

AQUIFER UNITS.--227PSSC, Passaic Formation; 231LCKG, Lockatong Formation; 400PCMB, Precambrian Erathem; 112SFDF, Stratified Drift.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Sample type	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)
				HUNTERDON COUNTY					
NJDEP MW106	402501074505001	*07-01-03*	*0930*	*Field Blank*	--	--	--	--	--
		07-01-03	1240	Environmental	0.70	90	2.8	756	6.9
NJDEP MW91	402633074541301	09-10-03	1115	Environmental	0.50	90	2.3	766	2.4
NJDEP MW107	403100074464101	06-26-03	1130	Environmental	1.0	55	5.9	755	2.0
NJDEP MW98	403347074575101	07-09-03	1100	Environmental	0.70	60	2.2	753	2.0
NJDEP MW101	403921074515901	06-24-03	1000	Environmental	0.50	60	0.3	753	4.0
				SOMERSET COUNTY					
NJDEP MW110	403200074420601	11-04-02	1040	Environmental	0.42	40	8.8	762	0.9
NJDEP MW123	403537074394401	06-30-03	1030	Environmental	0.30	105	2.4	761	4.2
				MORRIS COUNTY					
NJDEP MW87	404828074403501	07-08-03	1030	Environmental	0.50	35	2.2	740	4.0
NJDEP MW124	404936074423101	*10-22-02*	*1000*	*Ambient Blank*	--	--	--	--	--
		10-22-02	1015	Environmental	0.50	30	1.1	752	2.8

WATERSHED MANAGEMENT AREA 8—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
HUNTERDON COUNTY											
NJDEP MW106	07-01-03	--	--	--	--	--	*E.01*	*<0.008*	--	*E.08*	--
	07-01-03	71	7.8	429	16.4	190	51.3	14.5	3.20	13.3	92
NJDEP MW91	09-10-03	21	7.1	290	12.3	130	34.3	11.8	0.71	7.61	102
NJDEP MW107	06-26-03	20	7.5	261	14.3	210	66.6	11.0	1.77	9.75	134
NJDEP MW98	07-09-03	19	7.2	275	11.4	130	30.6	13.4	0.87	7.25	112
NJDEP MW101	06-24-03	39	6.5	407	12.5	170	31.9	22.2	1.40	12.3	72
SOMERSET COUNTY											
NJDEP MW110	11-04-02	8	7.8	331	12.0	150	40.4	10.7	2.65	9.68	130
NJDEP MW123	06-30-03	43	7.0	1,400	16.5	600	176	39.2	1.53	25.6	154
MORRIS COUNTY											
NJDEP MW87	07-08-03	38	6.6	57	11.7	23	4.30	3.07	0.58	3.12	26
NJDEP MW124	10-22-02	--	--	--	--	--	--	--	--	--	--
	10-22-02	28	5.2	800	15.0	200	50.9	16.5	4.04	56.1	2

MULTIPLE STATION ANALYSES

Local identifier	Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
HUNTERDON COUNTY											
NJDEP MW106	07-01-03	--	--	--	*<0.02*	--	--	--	--	--	--
	07-01-03	112	31.1	<0.17	27.6	53.8	276	285	0.12	<0.04	5.79
NJDEP MW91	09-10-03	124	5.93	<0.17	16.7	16.1	173	172	0.13	E.02	4.25
NJDEP MW107	06-26-03	164	30.9	<0.17	16.2	27.1	283	290	<0.10	<0.04	8.84
NJDEP MW98	07-09-03	137	7.65	<0.17	18.7	23.6	178	167	<0.10	<0.04	1.77
NJDEP MW101	06-24-03	87	29.8	<0.17	34.3	39.7	255	269	0.12	<0.04	9.18
SOMERSET COUNTY											
NJDEP MW110	11-04-02	158	13.8	<0.17	20.8	10.1	197	200	<0.10	E.03	2.43
NJDEP MW123	06-30-03	187	336	<0.17	21.1	25.5	743	800	E.09	<0.04	5.69
MORRIS COUNTY											
NJDEP MW87	07-08-03	32	2.25	<0.17	15.1	0.5	45	41	0.11	0.05	E.05
NJDEP MW124	10-22-02	--	--	--	--	--	--	--	--	--	--
	10-22-02	3	225	<0.17	21.2	0.6		426	<0.10	<0.04	0.65

WATERSHED MANAGEMENT AREA 8—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
HUNTERDON COUNTY											
NJDEP MW106	07-01-03	--	--	--	*<2*	*<0.30*	*<0.3*	*<0.050*	*<0.06*	*<7*	*<0.04*
	07-01-03	0.010	0.03	0.8	<3	<0.30	2.1	5	<0.06	24	<0.04
NJDEP MW91	09-10-03	E.004	0.06	1.1	M	<0.30	2.9	185	<0.06	20	<0.04
NJDEP MW107	06-26-03	0.104	0.03	0.8	4	<0.30	1.4	198	<0.06	15	0.09
NJDEP MW98	07-09-03	<0.008	<0.02	1.1	2	<0.30	4.1	185	<0.06	14	<0.04
NJDEP MW101	06-24-03	<0.008	0.03	0.5	<2	<0.30	<0.3	59	<0.06	13	<0.04
SOMERSET COUNTY											
NJDEP MW110	11-04-02	0.017	0.05	0.4	4	<0.30	5.6	373	<0.06	44	E.02
NJDEP MW123	06-30-03	<0.008	E.01	<0.3	<2	<0.30	0.6	777	<0.06	42	<0.04
MORRIS COUNTY											
NJDEP MW87	07-08-03	<0.008	<0.02	2.9	E1	<0.30	<0.3	8	<0.06	<7	0.08
NJDEP MW124	10-22-02	--	--	--	--	--	--	--	--	--	--
	10-22-02	<0.008	E.01	0.4	22	<0.30	<0.3	516	0.23	E5	0.54

MULTIPLE STATION ANALYSES

Local identifier	Date	Chrom-ium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thall-ium, water, fltrd, ug/L (01057)
HUNTERDON COUNTY											
NJDEP MW106	07-01-03	*<0.8*	*<0.2*	*<8*	*<0.08*	*<0.2*	*<0.02*	*<0.06*	*<0.5*	*<0.2*	*<0.04*
	07-01-03	E.5	0.5	<8	<0.16	0.6	<0.02	2.62	<0.5	<0.2	<0.04
NJDEP MW91	09-10-03	<0.8	0.9	16	<0.08	59.3	<0.02	0.56	<0.5	<0.2	<0.04
NJDEP MW107	06-26-03	<0.8	1.1	E4	E.08	10.6	<0.02	2.75	E.3	<0.2	<0.04
NJDEP MW98	07-09-03	<0.8	0.5	151	0.10	52.5	<0.02	1.87	E.3	<0.2	<0.04
NJDEP MW101	06-24-03	2.3	0.6	<8	<0.08	2.5	<0.02	3.73	E.3	<0.2	<0.04
SOMERSET COUNTY											
NJDEP MW110	11-04-02	E.7	0.8	E9	E.05	60.9	<0.02	2.63	E.3	<0.2	E.02
NJDEP MW123	06-30-03	0.9	0.6	13	<0.08	2.0	<0.02	7.00	1.6	<0.2	<0.04
MORRIS COUNTY											
NJDEP MW87	07-08-03	<0.8	114	237	0.58	105	<0.02	3.15	0.6	<0.2	<0.04
NJDEP MW124	10-22-02	--	--	--	--	--	--	--	--	--	--
	10-22-02	E.5	0.8	<10	<0.08	339	0.08	8.56	<0.5	<0.2	E.03

WATERSHED MANAGEMENT AREA 8—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Zinc, water, fltrd, ug/L (01090)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)
HUNTERDON COUNTY											
NJDEP MW106	07-01-03	*<1*	--	--	--	--	--	--	--	--	--
	07-01-03	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW91	09-10-03	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW107	06-26-03	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW98	07-09-03	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW101	06-24-03	3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
SOMERSET COUNTY											
NJDEP MW110	11-04-02	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW123	06-30-03	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
MORRIS COUNTY											
NJDEP MW87	07-08-03	60	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW124	10-22-02	--	*<0.1*	*<0.1*	*<0.1*	*<0.1*	*<0.1*	*<0.2*	*<0.1*	*<0.1*	*<0.1*
	10-22-02	48	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)
HUNTERDON COUNTY											
NJDEP MW106	07-01-03	--	--	--	--	--	--	--	--	--	--
	07-01-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW91	09-10-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW107	06-26-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW98	07-09-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW101	06-24-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
SOMERSET COUNTY											
NJDEP MW110	11-04-02	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW123	06-30-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
MORRIS COUNTY											
NJDEP MW87	07-08-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW124	10-22-02	*<0.1*	*<0.1*	*<0.1*	*<0.1*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.2*	*<0.1*
	10-22-02	<0.1	<0.1	<0.1	4.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1

WATERSHED MANAGEMENT AREA 8—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)
HUNTERDON COUNTY											
NJDEP MW106	07-01-03	--	--	--	--	--	--	--	--	--	--
	07-01-03	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW91	09-10-03	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW107	06-26-03	<0.2	<0.2	<0.1	<0.1	<0.1	0.3	<0.1	<0.2	<0.1	<0.1
NJDEP MW98	07-09-03	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW101	06-24-03	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
SOMERSET COUNTY											
NJDEP MW110	11-04-02	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW123	06-30-03	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
MORRIS COUNTY											
NJDEP MW87	07-08-03	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW124	10-22-02	*<0.2*	*<0.2*	*<0.1*	*<0.1*	*<0.1*	*<0.2*	*<0.1*	*<0.2*	*<0.1*	*<0.1*
	10-22-02	<0.2	<0.2	<0.1	<0.1	<0.1	1.2	11.1	<0.2	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Alpha radio-activty 2-sigma wat flt Th-230, pCi/L (75987)	Alpha radio-activty water, fltrd, Th-230, pCi/L (04126)	Beta radio-activty 2-sigma wat flt CS-137, pCi/L (75989)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)
HUNTERDON COUNTY										
NJDEP MW106	07-01-03	--	--	--	--	--	--	--	--	--
	07-01-03	<0.2	<0.1	<0.2	<0.1	<0.2	2.3	4	2.9	3
NJDEP MW91	09-10-03	<0.2	<0.1	<0.2	<0.1	<0.2	1.2	M	1.2	1
NJDEP MW107	06-26-03	<0.2	<0.1	<0.2	<0.1	<0.2	2.0	1	1.9	5
NJDEP MW98	07-09-03	<0.2	<0.1	<0.2	<0.1	<0.2	1.6	1	1.9	2
NJDEP MW101	06-24-03	<0.2	<0.1	<0.2	<0.1	<0.2	1.1	M	2.8	6
SOMERSET COUNTY										
NJDEP MW110	11-04-02	<0.2	<0.1	<0.2	<0.1	<0.2	1.2	3	2.1	6
NJDEP MW123	06-30-03	<0.2	<0.1	<0.2	<0.1	<0.2	6.6	6	4.9	8
MORRIS COUNTY										
NJDEP MW87	07-08-03	<0.2	<0.1	<0.2	<0.1	<0.2	0.85	1	0.87	1
NJDEP MW124	10-22-02	*<0.2*	*<0.1*	*<0.2*	*<0.1*	*<0.2*	--	--	--	--
	10-22-02	<0.2	2.6	<0.2	<0.1	<0.2	3.9	2	3.0	6

WATERSHED MANAGEMENT AREA 8—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more ground-water samples are listed in the following table.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	Atra-zine, water, fltrd, ug/L (39632)	Cyana-zine, water, fltrd, ug/L (04041)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)
HUNTERDON COUNTY										
NJDEP MW106	402501074505001	07-01-03	1240	E.414	0.008	<0.004	0.142	0.045	<0.005	<0.005
NJDEP MW91	402633074541301	09-10-03	1115	E.093	<0.006	<0.004	0.073	<0.018	<0.005	<0.005
NJDEP MW107	403100074464101	06-26-03	1130	E.023	<0.006	<0.004	0.009	<0.018	<0.005	<0.005
NJDEP MW98	403347074575101	07-09-03	1100	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
NJDEP MW101	403921074515901	06-24-03	1000	E.113	<0.006	<0.004	0.089	<0.018	<0.005	<0.005
SOMERSET COUNTY										
NJDEP MW110	403200074420601	11-04-02	1040	E.013	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
NJDEP MW123	403537074394401	06-30-03	1030	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
MORRIS COUNTY										
NJDEP MW87	404828074403501	07-08-03	1030	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
NJDEP MW124	404936074423101	10-22-02	1015	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005

MULTIPLE STATION ANALYSES

Local identifier	Date	Desulf-inyl-fipro-nil, water, fltrd, ug/L (62170)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Metola-chlor, water, fltrd, ug/L (39415)	Prome-ton, water, fltrd, ug/L (04037)	Sima-zine, water, fltrd, ug/L (04035)
HUNTERDON COUNTY								
NJDEP MW106	07-01-03	<0.004	<0.009	<0.005	<0.005	0.064	<0.01	<0.005
NJDEP MW91	09-10-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW107	06-26-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW98	07-09-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW101	06-24-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
SOMERSET COUNTY								
NJDEP MW110	11-04-02	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW123	06-30-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
MORRIS COUNTY								
NJDEP MW87	07-08-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW124	10-22-02	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005

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

WATERSHED MANAGEMENT AREA 9

NJ-WRD Well Number	Station Number	Local Identifier	Latitude (NAD83)	Longitude (NAD83)	Altitude of Land Surface (NGVD29) (feet)	Depth of Well (feet)	Screen Interval (feet)	Aquifer Unit
231368	402046074261901	NJDEP MW126	402046	742618	65	38	33 - 38	211ODBG
231365	*402403074210201	NJDEP MW133	402403	742102	40	37	32 - 37	211ODBG
231366	402831074171901	NJDEP MW134	402831	741718	135	55	50 - 55	211ODBG
231370	*402907074255801	NJDEP MW127	402907	742557	85	51	26 - 51	227PSSC
231369	*403451074294801	NJDEP MW128	403451	742947	40	28	18 - 28	227PSSC
390501	*403617074265601	NJDEP MW129	403617	742655	58	23	13 - 23	112SFDF

* Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection.

AQUIFER UNITS.--211ODBG, Old Bridge Sand Member of Magothy Formation; 227PSSC, Passaic Formation; 112SFDF, Stratified Drift.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Water-Quality Control Data" in the Explanation of Water-Quality Records section of this report.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Sample type	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)
MIDDLESEX COUNTY									
NJDEP MW126	402046074261901	06-24-03	1100	Environmental	1.0	40	4.0	756	8.7
NJDEP MW133	402403074210201	*10-25-02*	*1300*	*Equipment Blank*	--	--	--	--	--
		10-28-02	1015	Environmental	0.25	45	1.8	765	0.5
NJDEP MW134	402831074171901	10-22-02	1440	Environmental	--	85	3.8	764	--
NJDEP MW127	402907074255801	06-16-03	1030	Environmental	0.50	115	0.2	767	5.4
NJDEP MW128	403451074294801	03-20-03	1000	Environmental	0.50	40	0.4	768	3.0
UNION COUNTY									
NJDEP MW129	403617074265601	01-14-03	1015	Environmental	0.50	--	1.9	764	4.0

MULTIPLE STATION ANALYSES

Local identifier	Date	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
MIDDLESEX COUNTY											
NJDEP MW126	06-24-03	85	4.5	102	13.8	29	7.52	2.52	1.91	3.03	4
NJDEP MW133	*10-25-02*	--	--	--	--	--	*<0.01*	*<0.008*	--	*<0.09*	--
	10-28-02	5	4.1	689	14.4	32	7.57	3.10	3.21	83.9	--
NJDEP MW134	10-22-02		4.7	265	15.0	54	7.59	8.42	3.62	16.8	1
NJDEP MW127	06-16-03	53	7.2	720	15.0	280	61.0	31.1	3.48	16.7	113
NJDEP MW128	03-20-03	28	8.2	371	12.5	150	39.6	12.4	1.21	14.5	71
UNION COUNTY											
NJDEP MW129	01-14-03	39	7.1	774	14.5	300	79.1	25.7	1.44	40.1	141

WATERSHED MANAGEMENT AREA 9—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
MIDDLESEX COUNTY											
NJDEP MW126	06-24-03	5	4.71	<0.17	4.0	18.1	59	56	E.09	<0.04	3.24
NJDEP MW133	*10-25-02*	--	--	--	*<0.13*	--	--	--	--	--	--
	10-28-02	--	164	<0.17	5.1	51.3	--	322	0.28	0.21	<0.06
NJDEP MW134	10-22-02	3	61.0	<0.17	11.7	20.3	134	132	0.17	E.03	<0.06
NJDEP MW127	06-16-03	138	135	0.3	27.2	9.3	354	415	<0.10	<0.04	<0.06
NJDEP MW128	03-20-03	85	24.2	0.06	19.3	62.5	227	238	<0.10	<0.04	2.47
UNION COUNTY											
NJDEP MW129	01-14-03	171	87.6	<0.17	18.6	83.2	439	455	<0.10	<0.04	4.12

MULTIPLE STATION ANALYSES

Local identifier	Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
MIDDLESEX COUNTY											
NJDEP MW126	06-24-03	<0.008	<0.02	0.6	123	<0.30	<0.3	36	0.13	20	10.0
NJDEP MW133	*10-25-02*	--	--	--	*<2*	*<0.30*	*<0.3*	*M*	*<0.06*	*<7*	*<0.04*
	10-28-02	<0.008	<0.02	1.0	5,370	<0.30	0.3	23	1.28	31	<0.04
NJDEP MW134	10-22-02	<0.008	<0.02	0.7	526	<0.30	E.2	140	0.98	14	3.02
NJDEP MW127	06-16-03	<0.008	<0.02	E.2	2	0.68	0.4	569	<0.06	19	0.04
NJDEP MW128	03-20-03	<0.008	0.04	E.3	3	<0.30	0.7	99	<0.06	63	<0.04
UNION COUNTY											
NJDEP MW129	01-14-03	<0.008	0.32	0.6	<2	<0.30	0.8	57	<0.06	108	<0.04

MULTIPLE STATION ANALYSES

Local identifier	Date	Chromium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thallium, water, fltrd, ug/L (01057)
MIDDLESEX COUNTY											
NJDEP MW126	06-24-03	1.5	18.4	18	1.08	17.7	<0.02	3.56	0.5	<0.2	0.06
NJDEP MW133	*10-25-02*	*<0.8*	*E.1*	*<10*	*<0.08*	*0.2*	*<0.02*	*<0.06*	*<0.5*	*<0.2*	*E.04*
	10-28-02	<0.8	0.8	8,380	0.42	127	<0.02	18.6	0.7	0.3	<0.04
NJDEP MW134	10-22-02	1.4	1.4	2,310	1.62	86.2	<0.02	11.4	<0.5	E.2	E.04
NJDEP MW127	06-16-03	<0.8	36.3	<8	3.85	982	<0.02	10.0	<0.5	<0.2	<0.04
NJDEP MW128	03-20-03	<0.8	0.4	<10	<0.08	0.9	<0.02	0.93	0.6	<0.2	<0.04
UNION COUNTY											
NJDEP MW129	01-14-03	2.2	0.7	63	<0.08	58.5	<0.02	3.95	0.7	<0.2	<0.04

WATERSHED MANAGEMENT AREA 9—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Zinc, water, fltrd, ug/L (01090)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)
MIDDLESEX COUNTY											
NJDEP MW126	06-24-03	44	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW133	*10-25-02*	*<1*	--	--	--	--	--	--	--	--	--
	10-28-02	125	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW134	10-22-02	210	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW127	06-16-03	71	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
NJDEP MW128	03-20-03	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
UNION COUNTY											
NJDEP MW129	01-14-03	M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Benzene water unfltrd ug/L (34030)	Bromodichloromethane water unfltrd ug/L (32101)	Chlorobenzene water unfltrd ug/L (34301)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Dibromochloromethane water unfltrd ug/L (32105)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)
MIDDLESEX COUNTY											
NJDEP MW126	06-24-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW133	*10-25-02*	--	--	--	--	--	--	--	--	--	--
	10-28-02	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW134	10-22-02	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW127	06-16-03	<0.1	0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
NJDEP MW128	03-20-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1
UNION COUNTY											
NJDEP MW129	01-14-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)
MIDDLESEX COUNTY											
NJDEP MW126	06-24-03	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW133	*10-25-02*	--	--	--	--	--	--	--	--	--	--
	10-28-02	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW134	10-22-02	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
NJDEP MW127	06-16-03	<0.2	<0.2	<0.1	<0.1	<0.1	E.1	<0.1	<0.2	<0.1	<0.1
NJDEP MW128	03-20-03	<0.2	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1
UNION COUNTY											
NJDEP MW129	01-14-03	<0.2	<0.2	<0.1	<0.1	<0.1	E.2	<0.1	<0.2	<0.1	<0.1

WATERSHED MANAGEMENT AREA 9—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Alpha radio-activty 2-sigma wat flt Th-230, pCi/L (75987)	Alpha radio-activty water, fltrd, Th-230, pCi/L (04126)	Beta radio-activty 2-sigma wat flt CS-137, pCi/L (75989)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)
MIDDLESEX COUNTY										
NJDEP MW126	06-24-03	<0.2	<0.1	<0.2	<0.1	<0.2	0.88	2	1.1	7
NJDEP MW133	*10-25-02*	--	--	--	--	--	--	--	--	--
	10-28-02	<0.2	<0.1	<0.2	<0.1	<0.2	4.1	28	2.7	20
NJDEP MW134	10-22-02	<0.2	<0.1	<0.2	<0.1	<0.2	1.8	8	2.1	10
NJDEP MW127	06-16-03	<0.2	<0.1	<0.2	1.7	<0.2	3.0	2	2.4	7
NJDEP MW128	03-20-03	<0.2	<0.1	<0.2	<0.1	<0.2	2.0	2	1.5	3
UNION COUNTY										
NJDEP MW129	01-14-03	<0.2	<0.1	<0.2	0.3	<0.2	2.5	6	2.6	3

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more ground-water samples are listed in the following table.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	Atra-zine, water, fltrd, ug/L (39632)	Cyana-zine, water, fltrd, ug/L (04041)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)
MIDDLESEX COUNTY										
NJDEP MW126	402046074261901	06-24-03	1100	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
NJDEP MW133	402403074210201	10-28-02	1015	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
NJDEP MW134	402831074171901	10-22-02	1440	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
NJDEP MW127	402907074255801	06-16-03	1030	<0.006	<0.006	<0.004	0.007	<0.018	<0.005	<0.005
NJDEP MW128	403451074294801	03-20-03	1000	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005
UNION COUNTY										
NJDEP MW129	403617074265601	01-14-03	1015	<0.006	<0.006	<0.004	<0.007	<0.018	<0.005	<0.005

MULTIPLE STATION ANALYSES

Local identifier	Date	Desulf-inyl-fipro-nil, water, fltrd, ug/L (62170)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Metola-chlor, water, fltrd, ug/L (39415)	Prome-ton, water, fltrd, ug/L (04037)	Sima-zine, water, fltrd, ug/L (04035)
MIDDLESEX COUNTY								
NJDEP MW126	06-24-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW133	10-28-02	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW134	10-22-02	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
NJDEP MW127	06-16-03	<0.004	<0.009	<0.005	<0.005	E.005	<0.01	<0.005
NJDEP MW128	03-20-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005
UNION COUNTY								
NJDEP MW129	01-14-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005

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

WATERSHED MANAGEMENT AREA 10

NJ-WRD Well Number	Station Number	Local Identifier	Latitude (NAD83)	Longitude (NAD83)	Altitude of Land Surface (NGVD29) (feet)	Depth of Well (feet)	Screen Interval (feet)	Aquifer Unit
231371	401916074324201	NJDEP MW113	401916	743242	90	23	13 - 23	111HPPM
210609	*402310074453801	NJDEP MW120	402310	744537	160	35	10 - 35	227PSSC
350139	*402512074414301	NJDEP MW109	402512	744142	110	40	20 - 40	227PSSC

* Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection.

AQUIFER UNITS.--111HPPM, Undifferentiated Holocene, Pleistocene, Pliocene, and Miocene; 227PSSC, Passaic Formation.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
MIDDLESEX COUNTY										
NJDEP MW113	401916074324201	09-11-03	1120	0.12	95	7.6	761	1.4	15	4.8
MERCER COUNTY										
NJDEP MW120	402310074453801	01-16-03	1100	3.0	150	4.8	765	3.8	36	7.6
SOMERSET COUNTY										
NJDEP MW109	402512074414301	01-15-03	0930	0.50	35	1.5	762	4.6	43	7.8

MULTIPLE STATION ANALYSES

Local identifier	Date	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
MIDDLESEX COUNTY											
NJDEP MW113	09-11-03	350	19.3	100	22.9	11.4	5.66	22.1	4	4	68.5
MERCER COUNTY											
NJDEP MW120	01-16-03	500	12.5	240	62.1	21.0	0.97	11.4	217	263	10.5
SOMERSET COUNTY											
NJDEP MW109	01-15-03	348	12.0	150	42.3	10.6	0.71	10.1	--	92	9.61

MULTIPLE STATION ANALYSES

Local identifier	Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
MIDDLESEX COUNTY											
NJDEP MW113	09-11-03	<0.17	15.7	15.8	243	310	0.14	E.02	16.5	E.004	<0.02
MERCER COUNTY											
NJDEP MW120	01-16-03	<0.17	18.2	31.2	286	302	E.07	<0.04	0.13	<0.008	<0.02
SOMERSET COUNTY											
NJDEP MW109	01-15-03	<0.17	22.8	36.4		222	<0.10	<0.04	7.67	<0.008	0.06

WATERSHED MANAGEMENT AREA 10—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)
MIDDLESEX COUNTY											
NJDEP MW113	09-11-03	2.2	146	<0.30	1.2	643	1.08	16	1.01	1.1	1.7
MERCER COUNTY											
NJDEP MW120	01-16-03	1.0	<2	E.15	3.4	395	<0.06	35	0.18	<0.8	11.0
SOMERSET COUNTY											
NJDEP MW109	01-15-03	E.2	3	<0.30	1.4	126	<0.06	25	<0.04	<0.8	0.4

MULTIPLE STATION ANALYSES

Local identifier	Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thall-ium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)
MIDDLESEX COUNTY											
NJDEP MW113	09-11-03	4,350	0.53	860	<0.02	8.60	E.3	<0.2	0.06	36	<0.1
MERCER COUNTY											
NJDEP MW120	01-16-03	<10	<0.08	219	<0.02	2.88	0.6	<0.2	E.03	1	<0.1
SOMERSET COUNTY											
NJDEP MW109	01-15-03	<10	<0.08	0.4	<0.02	1.27	E.3	<0.2	<0.04	<1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo-di-chloro-methane water unfltrd ug/L (32101)
MIDDLESEX COUNTY											
NJDEP MW113	09-11-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
MERCER COUNTY											
NJDEP MW120	01-16-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
SOMERSET COUNTY											
NJDEP MW109	01-15-03	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Chloro-benzene water unfltrd ug/L (34301)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl-benzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)
MIDDLESEX COUNTY											
NJDEP MW113	09-11-03	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2
MERCER COUNTY											
NJDEP MW120	01-16-03	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2
SOMERSET COUNTY											
NJDEP MW109	01-15-03	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2

WATERSHED MANAGEMENT AREA 10—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)
MIDDLESEX COUNTY											
NJDEP MW113	09-11-03	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1
MERCER COUNTY											
NJDEP MW120	01-16-03	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1
SOMERSET COUNTY											
NJDEP MW109	01-15-03	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1

MULTIPLE STATION ANALYSES

Local identifier	Date	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Alpha radio-activty 2-sigma wat flt Th-230, pCi/L (75987)	Alpha radio-activty water, fltrd, Th-230, pCi/L (04126)	Beta radio-activty 2-sigma wat flt CS-137, pCi/L (75989)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)
MIDDLESEX COUNTY								
NJDEP MW113	09-11-03	<0.2	<0.1	<0.2	1.6	M	1.4	6
MERCER COUNTY								
NJDEP MW120	01-16-03	<0.2	<0.1	<0.2	2.5	7	1.8	4
SOMERSET COUNTY								
NJDEP MW109	01-15-03	<0.2	<0.1	<0.2	1.3	1	2.0	2

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

WATERSHED MANAGEMENT AREA 10—Continued

WATER-COLUMN PESTICIDE ANALYSES

The following were determined using laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Laboratory Measurements" in the Explanation of Water-Quality Records section of this report). Only pesticides detected in one or more ground-water samples are listed in the following table.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	Atra-zine, water, fltrd, ug/L (39632)	Cyana-zine, water, fltrd, ug/L (04041)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)
MIDDLESEX COUNTY										
NJDEP MW113	401916074324201	09-11-03	1120	E.064	<0.006	<0.004	0.136	<0.018	<0.005	<0.005
MERCER COUNTY										
NJDEP MW120	402310074453801	01-16-03	1100	<0.006	<0.006	<0.004	<0.007	<0.018	0.014	<0.005
SOMERSET COUNTY										
NJDEP MW109	402512074414301	01-15-03	0930	E.008	<0.006	<0.004	E.006	<0.018	<0.005	<0.005

MULTIPLE STATION ANALYSES

Local identifier	Date	Desulf-inyl-fipro-nil, water, fltrd, ug/L (62170)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Metola-chlor, water, fltrd, ug/L (39415)	Prome-ton, water, fltrd, ug/L (04037)	Sima-zine, water, fltrd, ug/L (04035)
MIDDLESEX COUNTY								
NJDEP MW113	09-11-03	<0.004	<0.009	<0.005	<0.005	0.078	<0.01	<0.005
MERCER COUNTY								
NJDEP MW120	01-16-03	<0.004	<0.009	<0.005	<0.005	<0.013	E.01	<0.005
SOMERSET COUNTY								
NJDEP MW109	01-15-03	<0.004	<0.009	<0.005	<0.005	<0.013	<0.01	<0.005

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

WATERSHED MANAGEMENT AREA 11

NJ-WRD Well Number	Station Number	Local Identifier	Latitude (NAD83)	Longitude (NAD83)	Altitude of Land Surface (NGVD29) (feet)	Depth of Well (feet)	Screen Interval (feet)	Aquifer Unit
210612	*401454074371401	NJDEP MW112	401454	743714	105	28	18 - 28	111HPPM
190450	403121075003901	NJDEP MW89	403121	750038	505	208	188 - 208	227PSSC
190454	*403129075034701	NJDEP MW118	403129	750347	110	22	12 - 22	227PSSC

* Field data and samples for laboratory analysis were provided by the New Jersey Department of Environmental Protection.

AQUIFER UNITS.--111HPPM, Undifferentiated Holocene, Pleistocene, Pliocene, and Miocene; 227PSSC, Passaic Formation.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
MERCER COUNTY										
NJDEP MW112	401454074371401	09-04-03	0945	0.50	45	0.9	757	0.8	8	3.9
HUNTERDON COUNTY										
NJDEP MW89	403121075003901	06-25-03	1300	0.30	165	2.5	758	0.2	2	8.0
NJDEP MW118	403129075034701	06-25-03	1000	0.50	50	1.1	761	6.8	64	6.5

MULTIPLE STATION ANALYSES

Local identifier	Date	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
MERCER COUNTY											
NJDEP MW112	09-04-03	1,360	14.2	92	23.0	8.47	1.03	180	--	--	341
HUNTERDON COUNTY											
NJDEP MW89	06-25-03	406	15.6	130	30.6	12.2	2.05	35.8	138	146	28.2
NJDEP MW118	06-25-03	478	12.5	120	30.5	10.0	7.20	43.1	80	98	66.9

MULTIPLE STATION ANALYSES

Local identifier	Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
MERCER COUNTY											
NJDEP MW112	09-04-03	<0.17	6.9	98.0	--	651	E.08	<0.04	0.59	<0.008	<0.02
HUNTERDON COUNTY											
NJDEP MW89	06-25-03	0.3	16.2								