01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ

LOCATION.--Lat 40°45'54", long 74°31'47", Morris County, Hydrologic Unit 02030103, at bridge on Camp Trail Road in Morristown National Historical Park, 20 ft downstream of unnamed tributary, 500 ft west of Mount Kemble, and 2.4 mi northeast of Bernardsville.

DRAINAGE AREA.--1.07 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 Surface-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). Additional data for this site are presented in "Morristown National Historical Park" in the Water-Quality at Special-Study Sites section of this report.

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 6.

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													
16...	1110	1.4	0.8	0.063	0.049	741	12.1	97	7.5	98	2.0	5.0	33
MAR													
04...	1310	1.3	0.7	0.042	0.033	737	12.9	97	7.5	97	4.0	2.3	34
MAY													
20...	1310	1.3	2.5	0.043	0.035	756	10.0	95	7.2	118	--	13.0	41
AUG													
26...	1030	0.98	5.0	0.055	0.044	749	9.2	96	6.8	136	21.0	16.6	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)
DEC													
16...	8.26	3.11	0.64	4.01	E26	3.44	<0.17	21.6	13.7	--	81	<1	E.10
MAR													
04...	8.26	3.23	0.54	4.25	32	4.54	<0.17	20.5	14.1	76	77	<1	E.09
MAY													
20...	10.2	3.72	0.71	5.54	30	5.89	<0.17	24.1	14.6	85	91	3	0.12
AUG													
26...	11.0	4.32	0.72	6.04	37	7.86	<0.17	26.2	13.7	94	105	15	0.10

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													
16...	<0.030	<0.030	0.15	<0.003	<0.020	<0.02	E.002	0.007	--	--	<0.1	<0.1	<0.1
MAR													
04...	<0.030	<0.030	0.30	<0.003	<0.020	<0.02	E.003	0.005	--	--	<0.1	<0.1	<0.1
MAY													
20...	<0.030	<0.030	0.36	<0.030	<0.020	0.05	0.009	0.016	0.49	0.54	0.6	<0.1	0.6
AUG													
26...	<0.020	<0.020	0.37	<0.003	<0.020	0.05	0.013	0.025	0.47	0.52	1.0	<0.1	1.0

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, 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				
16...	1.9	E1.7	--	E8.7
MAR				
04...	1.4	<1.0	--	<13
MAY				
20...	1.2	2.1	2.70	E8.0
AUG				
26...	1.6	E1.3	0.300	8.1

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	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											
26...	*1028*	*Sampler Blank*	--	--	--	--	--	--	--	--	--
26...	*1029*	*Field Blank*	--	--	--	--	--	--	*<0.2*	--	--
26...	1030	Environmental	<2	13.1	<0.06	E7	<0.04	<0.8	--	0.9	370

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)
AUG											
26...	--	--	--	--	--	--	--	--	--	*<1*	--
26...	*<0.08*	--	--	*<0.02*	--	*<0.06*	--	--	--	*M*	--
26...	--	0.55	25.0	--	<0.02	--	1.05	0.7	<0.16	--	3

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-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...	1310	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, 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	<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 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 Surface-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 20...	1310	<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 20...	<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 20...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

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

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, 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...	1205	20	100	20
14...	1155	<10	<100	40
21...	1152	200	<100	40
28...	1150	40	<100	40
JUN				
04...	1147	130	1,500	300

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

01379200 DEAD RIVER NEAR MILLINGTON, NJ

LOCATION.--Lat 40°38'56", long 74°31'25", Morris County, Hydrologic Unit 02030103, at bridge on King George Road (Spur County Route 527), 100 ft upstream from mouth, 2.0 mi south of Millington, and 4.2 mi south of Basking Ridge.

DRAINAGE AREA.--20.8 mi^2.

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

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

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 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													
14...	0920	37	12	0.345	0.275	757	8.3	71	8.4	318	11.5	8.5	88
MAR													
10...	1040	81	7.1	0.143	0.113	751	11.9	85	7.1	618	-0.5	0.8	110
MAY													
12...	1030	13	17	0.108	0.083	745	6.2	63	7.0	610	18.0	14.7	150
SEP													
03...	1150	59	50	0.169	0.128	761	7.8	82	7.0	343	22.5	17.6	85

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													
14...	21.8	8.11	2.61	26.7	57	43.3	<0.17	15.7	24.4	184	205	11	0.44
MAR													
10...	28.5	10.3	1.85	78.3	30	166	<0.17	10.1	14.2	333	343	8	0.30
MAY													
12...	38.8	13.7	3.93	54.3	--	108	<0.17	14.8	32.2	--	344	30	0.62
SEP													
03...	22.4	7.14	2.26	27.1	62	51.5	<0.17	13.1	20.1	188	210	54	0.35

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													
14...	<0.030	<0.030	1.46	<0.003	0.239	0.12	0.25	0.29	1.9	2.0	0.6	<0.1	0.6
MAR													
10...	0.048	0.052	1.10	0.005	0.105	0.06	0.11	0.13	1.4	1.5	0.4	<0.1	0.4
MAY													
12...	0.160	0.188	2.40	0.026	0.624	0.07	0.63	0.81	3.0	3.1	0.7	<0.1	0.7
SEP													
03...	0.068	0.081	1.34	0.007	0.208	0.20	0.22	0.32	1.7	1.9	1.8	<0.1	1.8

01379200 DEAD RIVER NEAR MILLINGTON, 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				
14...	8.4	2.1	--	142
MAR				
10...	3.7	<1.1	--	71
MAY				
12...	3.6	<1.0	9.40	183
SEP				
03...	4.5	E1.8	5.10	136

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...	1009	140	400	500
14...	1026	50	500	800
21...	1039	110	800	230
28...	0750	800	720	1,300
JUN				
04...	1030	6,100	23,000	>16000

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

01379870 MILL BROOK AT RANDOLPH, NJ

LOCATION.--Lat 40°52'43", long 74°31'31", Morris County, Hydrologic Unit 02030103, at bridge on Palmer Road, 0.1 mi upstream of mouth, 0.4 mi east of Randolph, and 1.9 mi east of Dover.

DRAINAGE AREA.--4.84 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, 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 6.

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													
20...	1030	1.2	0.130	0.102	753	10.7	86	7.0	295	11.0	5.5	76	17.7
FEB													
13...	1100	0.8	0.040	0.032	747	14.1	99	7.2	604	-1.5	0.3	110	24.6
MAY													
13...	1130	1.5	0.075	0.059	741	10.8	102	7.3	394	16.5	11.3	94	21.9
AUG													
06...	1045	45	0.244	0.190	746	7.6	85	7.1	190	24.5	19.9	42	10.3

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													
20...	7.65	1.48	21.6	E33	55.0	<0.17	14.8	11.6	--	173	5	0.20	0.030
FEB													
13...	10.8	1.42	64.7	E39	150	<0.17	17.1	12.0	--	330	4	E.06	<0.030
MAY													
13...	9.50	1.54	33.2	34	87.4	<0.17	14.8	9.9	206	245	4	0.12	<0.030
AUG													
06...	3.87	1.45	16.7	24	36.0	<0.17	10.0	6.7	102	136	42	0.34	0.034

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													
20...	<0.030	1.23	<0.003	<0.020	0.03	0.005	0.012	1.4	1.4	<0.1	<0.1	<0.1	3.5
FEB													
13...	<0.030	2.09	<0.003	0.034	<0.02	E.003	0.005	--	--	<0.1	<0.1	<0.1	1.1
MAY													
13...	<0.030	1.58	<0.003	<0.020	<0.02	E.004	0.010	1.7	--	0.2	<0.1	0.2	2.0
AUG													
06...	0.065	0.60	0.006	0.025	0.23	0.016	0.101	0.94	1.2	2.9	<0.1	2.9	6.0

01379870 MILL BROOK AT RANDOLPH, 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			
20...	2.1	--	17
FEB			
13...	<1.0	--	E7.4
MAY			
13...	E1.9	1.30	16
AUG			
06...	E1.8	1.70	14

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													
06...	1045	--	--	--	--	--	<2	28.8	0.09	15	0.05	1.0	4.2
06...	1200	6.70	230	5,000	13	0.3	--	--	--	--	--	--	--

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													
06...	1,530	4.69	92.3	E.02	2.43	0.6	<0.16	15	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	<1	0.202	41	4.6	27

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													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	36,000	24	470	<0.01	16	<1	170	<50	<50	<50	<50	<50	<50

01379870 MILL BROOK AT RANDOLPH, 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-Fluorene, 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													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<50	<50	<50	<50	<50	<50	51	76	140	130	120	E130	95

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													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	160	<50	290	120	<50	<50	E12	<50	140	<50	260	8.4	1.3

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				
06...	--	--	--	--
06...	1.6	1.9	2.8	4.5

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													
13...	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													
13...	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	0.5

01379870 MILL BROOK AT RANDOLPH, 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									
13...	0.3	<0.2	<0.1	<0.1	<0.2	0.2	<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													
13...	1130	<0.006	E.006	<0.006	<0.004	<0.005	E.006	<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)	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													
13...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	E.006	<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						
13...	<0.022	M	E.003	<0.02	<0.034	<0.009

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

01379870 MILL BROOK AT RANDOLPH, 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...	1115	20	400	202
14...	1110	60	200	230
21...	1105	610	500	600
28...	1110	490	800	2,400
JUN				
04...	1100	2,600	11,000	9,000

01380100 BEAVER BROOK AT ROCKAWAY, NJ

LOCATION.--Lat 40°54'08", long 74°30'05", Morris County, Hydrologic Unit 02030103, at bridge on Gill Road in Rockaway, and 0.2 mi above mouth.

DRAINAGE AREA.--22.7 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, biochemical oxygen demand, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 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	28	3.7	0.147	0.113	738	10.7	90	8.0	229	9.0	6.5	64
FEB													
06...	1120	30	2.6	0.104	0.080	758	13.9	96	6.9	287	-2.0	0.0	70
MAY													
20...	1030	12	4.4	0.142	0.112	756	8.5	86	6.9	188	24.0	15.8	47
AUG													
13...	1200	85	4.3	0.227	0.174	755	6.7	79	6.7	153	29.5	23.4	41

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...	16.2	5.75	1.40	18.2	E37	34.0	<0.17	6.9	16.2	--	140	3	0.26
FEB													
06...	18.1	5.99	1.43	26.6	38	46.5	<0.17	8.2	18.7	150	162	4	0.22
MAY													
20...	11.6	4.29	0.79	15.1	27	30.8	<0.17	7.5	9.0	96	122	4	0.36
AUG													
13...	10.7	3.40	0.88	14.3	26	22.7	<0.17	8.7	8.0	85	106	6	0.33

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	0.15	<0.003	0.021	0.04	0.011	0.028	0.41	0.45	0.5	<0.1	0.5
FEB													
06...	0.033	<0.030	0.31	<0.003	<0.020	0.05	0.006	0.015	0.54	0.58	0.3	<0.1	0.3
MAY													
20...	0.035	0.050	0.18	0.007	<0.020	0.05	0.014	0.048	0.48	0.53	0.4	<0.1	0.4
AUG													
13...	0.035	0.030	0.09	<0.003	0.032	0.06	0.020	0.042	0.42	0.47	0.7	<0.1	0.7

01380100 BEAVER BROOK AT ROCKAWAY, 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...	5.2	<1.0	--	16
FEB				
06...	2.9	<1.0	--	13
MAY				
20...	3.2	E2.1	1.90	E11
AUG				
13...	5.7	<1.0	3.80	18

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...	1050	70	<100	140
14...	1050	80	<100	500
21...	1050	520	500	270
28...	1055	560	300	500
JUN				
04...	1050	5,800	2,600	230

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

01381498 WHIPPANY RIVER AT RIDGEDALE AVENUE, AT MORRISTOWN, NJ

LOCATION.--Lat 40°48'04", long 74°27'57", Morris County, Hydrologic Unit 02030103, at bridge on Ridgedale Avenue, 0.8 mi northeast of Morristown, 1.3 mi downstream of Lake Pocahontas, and 1.8 mi southeast of Morris Plains.

DRAINAGE AREA.--27.7 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 6.

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...	1030	2.2	0.101	0.080	758	9.3	88	7.5	479	12.0	12.5	140	35.5
FEB													
03...	1045	1.8	0.045	0.037	754	15.8	117	7.9	532	10.0	2.4	130	31.7
MAY													
07...	1115	2.5	0.073	0.057	752	12.5	122	8.2	456	27.0	13.6	120	30.5
AUG													
21...	1145	3.1	0.080	0.062	756	9.0	106	7.8	473	30.5	23.1	160	39.5

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													
12...	12.3	3.20	32.2	E74	83.7	<0.17	17.7	20.9	--	268	5	0.31	0.042
FEB													
03...	11.3	2.53	46.8	56	111	<0.17	16.0	17.8	279	284	8	0.32	0.127
MAY													
07...	10.9	2.37	37.8	57	94.9	<0.17	13.9	16.5	247	281	3	0.26	<0.030
AUG													
21...	14.1	3.07	36.8	66	94.6	<0.17	17.3	16.7	269	299	10	0.27	0.045

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...	0.053	1.33	0.024	0.098	0.11	0.120	0.168	1.6	1.8	0.6	<0.1	0.6	3.5
FEB													
03...	0.145	1.83	0.181	0.078	0.06	0.077	0.105	2.1	2.2	0.3	<0.1	0.3	1.9
MAY													
07...	<0.030	1.34	0.019	0.029	0.08	0.030	0.056	1.6	1.7	0.4	<0.1	0.4	2.3
AUG													
21...	0.040	1.48	0.022	0.104	0.06	0.122	0.177	1.7	1.8	0.5	<0.1	0.5	2.6

01381498 WHIPPANY RIVER AT RIDGEDALE AVENUE, AT MORRISTOWN, 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			
12...	<1.0	--	68
FEB			
03...	<1.4	--	40
MAY			
07...	E1.5	15.8	44
AUG			
21...	<1.0	6.00	55

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													
21...	1145	<2	38.9	<0.06	54	E.02	1.0	2.0	430	0.77	68.6	<0.02	1.98

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			
21...	0.7	<0.16	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...	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

01381498 WHIPPANY RIVER AT RIDGEDALE AVENUE, AT MORRISTOWN, 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													
03...	0.7	<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									
03...	0.1	<0.2	<0.1	<0.1	<0.2	1.1	<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													
07...	1115	<0.006	<0.006	<0.006	<0.004	<0.005	E.005	<0.050	<0.010	<0.002	E.007	<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													
07...	<0.003	0.009	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	E.026	<0.027	E.001	<0.006	<0.007

01381498 WHIPPANY RIVER AT RIDGEDALE AVENUE, AT MORRISTOWN, 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						
07...	<0.022	E.01	0.006	<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)
MAY				
07...	1145	40	<100	130
14...	1135	40	100	130
21...	1135	630	400	500
28...	1134	340	800	1,700
JUN				
04...	1130	4,200	16,000	16,000

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

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ

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

DRAINAGE AREA.--68.5 mi^2.

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

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

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 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...	1100	E170	4.8	0.447	0.347	758	7.3	58	6.9	285	11.0	5.5	79
FEB													
04...	1030	35	6.6	0.063	0.048	742	11.2	88	7.7	698	5.5	4.0	160
MAY													
07...	1030	88	5.6	0.202	0.154	756	8.3	81	7.4	596	23.5	13.5	150
AUG													
14...	1000	E265	8.1	0.631	0.495	766	1.8	21	6.9	283	30.0	24.0	85

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...	20.7	6.70	2.36	21.9	E44	39.0	<0.17	9.6	23.7	--	181	8	0.62
FEB													
04...	42.1	14.2	3.67	66.0	77	139	<0.17	12.9	26.1	363	373	3	0.34
MAY													
07...	37.9	12.8	3.03	57.9	79	122	<0.17	11.0	20.2	321	368	6	0.50
AUG													
14...	23.7	6.19	2.71	25.8	56	45.1	<0.17	11.0	8.8	159	189	10	0.89

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...	<0.030	0.043	0.86	0.008	0.070	0.15	0.07	0.10	1.5	1.6	0.6	<0.1	0.6
FEB													
04...	0.064	0.064	2.95	0.101	0.144	0.10	0.13	0.21	3.3	3.4	0.7	<0.1	0.7
MAY													
07...	0.091	0.081	1.80	0.060	0.087	0.12	0.09	0.17	2.3	2.4	0.8	<0.1	0.8
AUG													
14...	0.102	0.112	0.38	0.009	0.106	0.15	0.13	0.28	1.3	1.4	1.4	<0.1	1.4

01381800 WHIPPANY RIVER NEAR PINE BROOK, 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...	9.8	<1.0	--	51
FEB				
04...	2.5	E1.2	--	70
MAY				
07...	4.9	E1.1	14.2	67
AUG				
14...	11.7	<1.0	3.30	54

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...	1030	20	<100	80
14...	1035	10	200	300
21...	1028	140	500	>2400
28...	1034	650	800	2,200
JUN				
04...	1028	6,600	21,000	>16000

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

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'50", long 74°16'22", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, and 50 ft upstream from Pompton River.

DRAINAGE AREA.--361 mi^2.

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

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

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

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 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...	0940	353	5.9	0.179	0.137	755	8.6	74	7.3	586	8.0	8.5	150
FEB													
13...	1000	199	4.0	0.096	0.072	760	15.3	107	7.6	985	-2.0	0.6	170
MAY													
06...	1210	324	7.1	0.209	0.157	756	7.5	73	7.2	588	12.5	13.7	130
AUG													
06...	1010	1020	23	0.237	0.181	755	5.9	71	7.0	313	23.5	24.2	84

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...	38.8	13.5	5.13	51.7	E83	95.1	<0.17	14.6	40.3	--	344	4	0.59
FEB													
13...	45.2	15.0	4.92	120	E88	234	<0.17	12.5	36.0	--	560	2	0.56
MAY													
06...	33.9	11.9	3.36	60.0	75	111	<0.17	8.8	23.1	307	316	12	0.57
AUG													
06...	21.5	7.43	1.92	27.5	48	54.4	<0.17	10.6	15.8	174	180	32	0.51

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...	0.079	0.080	4.10	0.031	0.791	0.10	0.82	0.90	4.7	4.8	0.7	<0.1	0.7
FEB													
13...	0.117	0.107	4.04	0.048	0.574	0.09	0.59	0.71	4.6	4.7	0.6	<0.1	0.5
MAY													
06...	0.115	0.109	1.96	0.042	0.273	0.13	0.27	0.39	2.5	2.7	0.9	<0.1	0.9
AUG													
06...	0.088	0.123	1.07	0.023	0.253	0.22	0.24	0.36	1.6	1.8	2.1	<0.1	2.1

01382000 PASSAIC RIVER AT TWO BRIDGES, 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...	6.3	<1.3	--	145
FEB				
13...	3.8	E1.7	--	117
MAY				
06...	5.5	E1.4	15.2	103
AUG				
06...	6.1	<1.0	7.00	58

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...	0922	20	200	230
14...	0941	<10	200	170
21...	0947	<10	<100	<20
28...	0701	650	2,500	3,000
JUN				
04...	0930	240	5,000	3,000

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

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ

LOCATION.--Lat 41°01'05", long 74°24'06", Passaic County, Hydrologic Unit 02030103, at culvert on crossover between northbound and southbound lanes on State Route 23, 1,000 ft downstream from Macopin Intake Dam, 0.6 mi downstream from Macopin River, and 2.8 mi northwest of Butler.

DRAINAGE AREA.--63.7 mi^2.

PERIOD OF RECORD.--Water years 1924, 1962-69, 1973-79, 1991 to current year.

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

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 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...	1000	4.0	0.4	0.044	0.033	754	14.1	99	7.6	247	-7.0	0.5	50
FEB													
06...	1000	9.1	1.5	0.132	0.100	756	14.3	100	7.6	283	-1.1	0.5	58
MAY													
20...	1000	8.2	1.3	0.126	0.095	755	8.2	83	7.3	207	23.5	15.4	47
AUG													
27...	1000	4.8	1.2	0.160	0.123	745	7.8	91	7.4	227	26.0	21.7	54

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...	12.7	4.44	0.42	23.5	30	39.0	<0.17	10.6	13.8	124	134	2	0.13
FEB													
06...	14.5	5.36	0.93	26.4	--	52.1	<0.17	8.7	13.0	--	158	3	0.25
MAY													
20...	11.7	4.23	0.81	19.0	27	36.0	<0.17	5.6	10.1	104	121	2	0.24
AUG													
27...	13.4	4.93	0.80	18.4	39	36.1	<0.17	6.8	8.8	114	134	3	0.76

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	0.40	<0.003	0.031	<0.02	E.003	0.005	0.53	--	<0.1	<0.1	<0.1
FEB													
06...	0.046	<0.030	0.67	0.003	<0.020	0.07	0.010	0.018	0.92	0.99	0.3	<0.1	0.3
MAY													
20...	<0.030	<0.030	0.17	<0.003	<0.020	0.08	0.006	0.018	0.40	0.48	0.5	<0.1	0.5
AUG													
27...	0.029	0.026	0.22	<0.003	<0.020	0.03	0.017	0.019	0.98	1.0	0.3	<0.1	0.2

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, 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...	1.7	<1.0	--	16
FEB				
06...	3.5	E1.5	--	E13
MAY				
20...	3.5	<1.0	7.60	E12
AUG				
27...	4.1	<1.0	1.50	14

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...	1000	50	<100	80
AUG				
04...	1000	310	500	700
AUG				
11...	1020	20	<100	70
18...	1020	20	<100	40
25...	1015	20	<100	60

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

01382960 GREEN BROOK NEAR WEST MILFORD, NJ

LOCATION.--Lat 41°09'09", long 74°21'33", Passaic County, Hydrologic Unit 02030103, at bridge on Union Valley Road (County Route 513), 847 ft upstream of confluence with Cooley Brook, 1.7 mi northeast of West Milford, and 1.7 mi east of Moe.

DRAINAGE AREA.--2.03 mi^2.

PERIOD OF RECORD.--December 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). Diversions from Upper Greenwood Lake (Hudson River Basin) included in flow.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 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													
12...	1000	0.9	0.074	0.055	746	13.2	99	7.9	252	11.0	2.5	27	6.61
MAR													
13...	1000	0.6	0.051	0.037	744	14.6	111	8.3	156	6.2	3.1	19	4.75
MAY													
15...	0900	0.4	0.058	0.042	750	10.9	99	7.3	112	22.0	10.2	19	4.76
SEP													
03...	1000	2.8	0.153	0.114	748	8.2	85	7.5	143	21.4	16.2	26	6.55

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													
12...	2.46	0.47	35.8	E37	62.3	<0.17	3.7	8.5	--	128	2	0.11	<0.030
MAR													
13...	1.78	0.30	20.1	6	35.9	<0.17	4.0	8.6	80	86	1	E.08	<0.030
MAY													
15...	1.79	0.42	13.5	9	23.7	<0.17	3.3	8.1	61	68	3	0.10	<0.030
SEP													
03...	2.26	0.59	13.6	19	23.3	<0.17	3.6	5.4	67	76	6	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)
DEC													
12...	0.046	0.20	<0.003	<0.020	<0.02	<0.004	E.003	0.31	--	0.2	<0.1	0.2	2.7
MAR													
13...	<0.030	0.12	<0.003	<0.020	<0.02	E.002	E.003	--	--	<0.1	<0.1	<0.1	1.8
MAY													
15...	<0.030	E.04	<0.003	<0.020	0.02	E.002	E.003	--	E.17	<0.1	<0.1	<0.1	1.9
SEP													
03...	<0.020	0.08	<0.003	<0.020	0.03	0.005	0.016	0.30	0.33	0.4	<0.1	0.4	4.7

01382960 GREEN BROOK NEAR WEST MILFORD, 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			
12...	2.4	--	<13
MAR			
13...	E1.9	--	E6.2
MAY			
15...	<1.0	0.200	<13
SEP			
03...	E1.1	0.200	12

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)
SEP													
03...	1000	<2	11.2	E.06	14	0.05	1.3	2.1	230	1.00	99.7	<0.02	1.37

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)
SEP			
03...	E.3	<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)
MAR													
13...	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

01382960 GREEN BROOK NEAR WEST MILFORD, 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													
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)
MAR									
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)	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													
15...	0900	<0.006	E.003	<0.006	<0.004	<0.005	E.003	<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													
15...	<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						
15...	<0.022	M	<0.005	E.01	<0.034	<0.009

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

01382960 GREEN BROOK NEAR WEST MILFORD, 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...	1029	60	<100	20
AUG				
04...	1025	330	<100	230
11...	1045	40	200	20
18...	1040	20	<100	<20
25...	1040	20	<100	<20

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

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'53", long 74°09'46", Bergen County, Hydrologic Unit 02030103, 350 ft downstream from bridge on State Highway 17, 0.6 mi downstream from Mahwah River, and 1.0 mi west of Mahwah. Water-quality samples collected at bridge, 350 ft upstream from gage, at high flows.

DRAINAGE AREA.--120 mi^2.

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

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: February 1964 to June 1965.

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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													
18...	0715	1,840	17	0.211	0.166	737	10.3	87	7.3	173	4.0	6.5	37
FEB													
26...	1100	349	2.0	0.095	0.072	768	15.2	104	7.5	417	-1.0	0.3	65
MAY													
06...	0715	181	1.7	0.088	0.066	744	9.2	86	7.4	411	7.0	11.1	90
AUG													
20...	1015	70	2.2	0.109	0.083	760	7.4	86	7.7	479	27.0	22.3	120

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													
18...	10.1	2.90	1.27	15.9	E23	25.1	<0.17	6.0	11.6	--	105	31	0.32
FEB													
26...	18.2	4.72	1.01	47.0	37	90.1	<0.17	7.2	12.7	206	213	1	0.33
MAY													
06...	24.6	6.87	1.28	41.3	56	75.6	<0.17	3.9	13.1	203	213	2	0.24
AUG													
20...	32.1	8.81	1.66	41.9	79	85.8	<0.17	8.4	13.8	245	261	10	0.35

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													
18...	0.041	0.037	0.37	0.008	0.038	0.31	0.06	0.12	0.69	1.0	3.2	<0.1	3.2
FEB													
26...	0.144	0.126	0.62	0.012	0.052	0.07	<0.05	0.07	0.95	1.0	0.5	<0.1	0.5
MAY													
06...	<0.030	<0.030	0.74	0.008	0.051	0.10	0.06	0.07	0.99	1.1	0.5	<0.1	0.4
AUG													
20...	0.028	0.027	1.03	0.007	0.107	0.08	0.11	0.15	1.4	1.5	0.5	<0.1	0.5

01387500 RAMAPO RIVER NEAR MAHWAH, 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				
18...	5.8	2.3	--	14
FEB				
26...	3.4	<1.0	--	16
MAY				
06...	3.2	E1.3	10.6	30
AUG				
20...	3.4	<1.0	10.1	43

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				
30...	0948	150	300	220
JUL				
07...	0940	450	1,100	1,700
JUL				
14...	0943	270	600	1,700
21...	0953	4,400	100	16,000
28...	0947	540	1,000	16,000

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ

LOCATION.--Lat 40°59'33", long 74°16'43", Passaic County, Hydrologic Unit 02030103, in Pompton Lakes, at bridge on Paterson-Hamburg Turnpike, 2.0 mi upstream from mouth, and 450 ft downstream from dam.

DRAINAGE AREA.--160 mi^2.

PERIOD OF RECORD.--Water years 1923, 1962-67, 1982, 1987 to current year.
NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1923, 1962-67, 1982, 1987-96.

PERIOD OF DAILY RECORD.--
DISSOLVED OXYGEN: April 1989 to current year.
DISSOLVED OXYGEN PERCENT SATURATION: October 2001 to current year.
SPECIFIC CONDUCTANCE: April 1989 to current year.
WATER TEMPERATURE: April 1989 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1989, pumping system, data recorded hourly.

REMARKS.--Stage is measured on right end of dam at pumping station, 450 ft upstream from bridge. Nutrient and inorganic chemical data from 1987-96 was collected at the same location (above dam); data from earlier years was probably collected at bridge, 450 ft below dam. Interruptions in the daily record were due to instrument or pumping system malfunction. The calibration of water-quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in “Accuracy of Records" in the Explanation of Water-Quality Records section of this report. Data from the following periods were adjusted:
DISSOLVED OXYGEN: Oct. 16 to Dec. 30, Jan. 30 to Feb. 13, Mar. 20 to June 9, Aug. 28 to Sept. 17.

EXTREMES FOR PERIOD OF DAILY RECORD.--
DISSOLVED OXYGEN: Maximum, 15.6 mg/L, Jan. 22, 23, 30, 2003; minimum, 4.5 mg/L, Aug. 4, 1999.
DISSOLVED OXYGEN PERCENT OF SATURATION: Maximum, 126, Feb. 24, 25, 2002; minimum, 66, Oct. 1, 2001.
SPECIFIC CONDUCTANCE: Maximum, 842 µS/cm, Jan. 18, 1999; minimum, 88 µS/cm, Sept. 7, 1999.
WATER TEMPERATURE: Maximum, 31.5 °C, July 5, 1999; minimum, 0.0 °C, on several days during winters.

EXTREMES FOR CURRENT YEAR.--
DISSOLVED OXYGEN: Maximum, 15.6 mg/L, Jan. 22, 23, 30; minimum, 6.8 mg/L, Oct. 5.
DISSOLVED OXYGEN PERCENT OF SATURATION: Maximum, 111, Jan. 22, 23, 30; minimum, 77, Oct. 5, 6.
SPECIFIC CONDUCTANCE: Maximum, 828 µS/cm, Feb. 23; minimum, 189 µS/cm, Nov. 19.
WATER TEMPERATURE: Maximum, 28.3°C, July 7, 8; minimum, 0.1°C, Feb. 24, 25.

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	---	---	---	11.6	11.2	11.4	13.5	12.8	13.2	13.4	13.2	13.3
2	9.3	8.0	8.9	11.8	11.3	11.5	13.6	13.2	13.4	13.9	13.2	13.5
3	8.0	7.1	7.6	12.0	11.4	11.7	14.3	13.6	14.0	14.2	13.9	14.1
4	7.7	7.1	7.5	11.9	11.6	11.7	14.6	14.2	14.4	14.3	14.2	14.2
5	7.7	6.8	7.4	12.0	11.4	11.7	14.3	14.0	14.2	14.3	14.1	14.2
6	7.9	6.9	7.3	11.4	11.1	11.2	14.4	13.8	14.1	14.1	13.9	14.0
7	7.9	7.1	7.5	11.5	11.1	11.3	14.5	14.2	14.4	14.0	13.8	13.9
8	8.3	7.4	7.8	11.6	11.0	11.3	14.6	14.2	14.5	13.8	13.7	13.8
9	8.6	7.5	8.0	11.4	10.9	11.1	14.9	14.5	14.7	13.7	13.6	13.7
10	8.4	7.9	8.2	11.1	10.4	10.8	14.7	14.2	14.5	13.6	13.5	13.6
11	9.5	8.2	9.0	10.5	10.3	10.4	14.7	14.5	14.6	14.0	13.6	13.9
12	9.8	9.5	9.7	10.6	10.3	10.4	15.3	14.7	15.0	14.5	14.0	14.3
13	10.0	9.8	9.9	10.6	10.4	10.5	15.2	14.8	15.1	14.4	14.3	14.4
14	10.1	9.9	10	10.6	10.4	10.5	14.8	14.3	14.5	14.8	14.3	14.5
15	10.3	9.9	10.2	10.7	10.3	10.4	14.3	14.3	14.3	14.6	14.5	14.5
16	10.3	9.6	10	10.5	10.3	10.4	14.4	14.1	14.2	14.6	14.5	14.6
17	10.2	9.9	10.1	11.2	10.4	10.8	14.8	14.4	14.6	14.7	14.4	14.5
18	10.4	10.1	10.3	11.5	10.7	11.1	14.9	14.7	14.8	14.8	14.7	14.7
19	10.3	10.1	10.2	11.4	10.8	11.2	14.8	14.4	14.7	14.8	14.7	14.7
20	10.3	10.1	10.2	11.6	11.2	11.4	14.4	14.1	14.2	14.9	14.6	14.7
21	10.4	10.1	10.3	11.5	10.9	11.2	14.1	13.7	13.9	15.0	14.8	14.9
22	10.7	10.3	10.5	11.0	9.9	10.6	14.0	13.6	13.8	15.6	14.8	15.2
23	10.7	10.3	10.5	10.3	9.8	10.1	13.8	13.6	13.7	15.6	14.7	15.0
24	10.8	10.5	10.6	10.6	10.2	10.4	13.9	13.7	13.8	15.1	14.8	15.0
25	10.8	10.5	10.7	10.7	10.4	10.7	13.8	13.5	13.6	15.2	14.8	15.0
26	10.6	10.5	10.5	11.1	10.7	11.0	14.3	13.8	14.1	15.0	14.9	14.9
27	10.8	10.5	10.6	11.5	11.0	11.2	14.5	14.2	14.3	15.3	14.9	15.1
28	10.7	10.4	10.6	12.0	11.4	11.7	14.3	14.0	14.1	15.4	15.0	15.1
29	11.0	10.6	10.9	12.5	12.0	12.3	14.0	13.9	13.9	15.2	15.0	15.1
30	11.2	10.9	11.1	12.8	12.3	12.6	14.0	13.6	13.8	15.6	15.2	15.4
31	11.7	11.0	11.2	---	---	---	13.6	13.4	13.5	15.4	15.2	15.3
MONTH	11.7	6.8	9.6	12.8	9.8	11.1	15.3	12.8	14.2	15.6	13.2	14.5

01388000 RAMAPO RIVER AT POMPTON LAKES, 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	15.2	14.9	15.1	15.1	14.8	15.0	12.7	12.4	12.6	10.5	10.1	10.3
2	15.1	14.8	14.9	14.8	14.5	14.6	12.9	12.6	12.7	10.2	9.8	10.0
3	15.1	14.7	14.9	14.9	14.5	14.7	12.7	12.3	12.5	10.2	9.9	10.0
4	14.7	14.5	14.6	14.9	14.8	14.9	12.4	12.3	12.4	10.4	10.0	10.2
5	14.8	14.5	14.6	14.8	14.6	14.7	12.4	12.4	12.4	10.4	10.1	10.3
6	14.8	14.4	14.6	14.6	14.5	14.6	12.9	12.4	12.8	10.6	10.3	10.4
7	14.5	14.3	14.4	14.9	14.6	14.8	13.0	12.7	12.9	10.7	10.1	10.4
8	14.7	14.4	14.5	14.9	14.6	14.8	13.3	13.0	13.2	10.3	10.0	10.2
9	14.8	14.5	14.6	14.6	14.3	14.4	13.3	13.1	13.2	10.4	10.1	10.3
10	14.7	14.3	14.5	14.4	14.3	14.4	13.3	12.8	13.1	10.3	9.9	10.1
11	14.8	14.4	14.6	14.5	14.3	14.4	12.9	12.5	12.8	9.9	9.7	9.8
12	14.8	14.4	14.6	14.4	14.4	14.4	12.5	12.2	12.4	10.0	9.7	9.9
13	14.7	14.5	14.6	14.4	14.2	14.3	12.3	11.8	12.1	10.1	9.8	10
14	14.8	14.5	14.6	14.5	14.2	14.3	12.1	11.7	11.9	10.4	10.0	10.2
15	15.0	14.6	14.8	14.2	14.0	14.1	11.7	11.1	11.5	10.4	10.0	10.2
16	15.1	14.7	14.9	14.0	13.7	13.8	11.2	10.5	10.9	10.4	10.1	10.3
17	14.8	14.5	14.6	13.7	13.2	13.5	11.1	10.7	11.0	10.5	10.2	10.3
18	14.7	14.5	14.6	13.5	13.3	13.4	11.5	11.1	11.3	10.5	10.0	10.3
19	14.8	14.5	14.6	13.7	13.5	13.6	11.5	11.3	11.4	10.2	9.9	10.0
20	14.8	14.5	14.6	13.8	13.6	13.7	11.4	11.1	11.3	10.1	9.4	9.8
21	14.9	14.6	14.7	13.7	13.1	13.5	11.3	10.9	11.1	9.6	9.4	9.5
22	14.6	14.2	14.5	13.1	12.7	12.9	11.0	10.7	10.9	9.7	9.4	9.6
23	14.8	14.4	14.5	12.9	12.6	12.8	11.1	10.8	10.9	9.9	9.7	9.8
24	15.0	14.8	15.0	12.8	12.6	12.7	11.5	11.1	11.3	9.9	9.8	9.9
25	15.1	15.0	15.1	12.7	12.3	12.5	11.4	11.0	11.2	10.0	9.8	9.9
26	15.4	15.1	15.2	12.4	12.1	12.2	11.0	10.8	10.9	10.1	9.8	10
27	15.3	15.1	15.2	12.3	12.0	12.2	11.0	10.5	10.8	10.5	10.1	10.3
28	15.2	15.0	15.1	12.3	12.0	12.2	10.9	10.4	10.7	10.4	10.1	10.3
29	---	---	---	12.0	11.6	11.8	10.5	10.2	10.4	10.2	9.7	10.0
30	---	---	---	11.8	11.6	11.7	10.6	10.3	10.4	9.9	9.6	9.8
31	---	---	---	12.4	11.8	12.1	---	---	---	9.7	9.6	9.7
MONTH	15.4	14.2	14.7	15.1	11.6	13.6	13.3	10.2	11.8	10.7	9.4	10.1
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.3	9.5	9.9	8.7	8.2	8.5	8.2	7.7	7.9	8.5	7.7	8.2
2	10.5	10.2	10.3	8.7	8.4	8.5	8.5	7.8	8.1	8.9	8.5	8.8
3	10.4	10.3	10.3	8.6	8.3	8.4	8.6	7.7	8.1	9.0	8.9	9.0
4	10.5	10.2	10.4	8.7	8.0	8.4	8.4	8.0	8.2	9.0	8.8	8.9
5	10.6	10.3	10.5	8.6	7.8	8.2	8.4	8.3	8.3	9.0	8.7	8.8
6	10.5	10.0	10.2	8.0	7.3	7.7	8.6	8.4	8.5	9.1	8.5	8.8
7	10.1	10.0	10.1	7.8	7.4	7.6	8.6	8.5	8.5	8.9	8.4	8.7
8	10.1	10.1	10.1	7.8	7.3	7.6	8.6	8.5	8.6	9.0	8.4	8.7
9	10.1	9.7	9.9	7.7	7.4	7.6	8.6	8.5	8.6	9.0	8.4	8.6
10	9.9	9.5	9.7	7.9	7.7	7.8	8.7	8.6	8.6	8.7	7.9	8.4
11	9.5	9.3	9.5	8.2	7.9	8.0	8.6	8.5	8.6	8.6	7.9	8.2
12	9.4	9.3	9.4	8.3	7.9	8.1	8.7	8.6	8.7	8.4	7.9	8.2
13	9.5	9.3	9.4	8.5	7.7	8.1	8.6	8.5	8.6	8.2	7.9	8.1
14	9.6	9.4	9.5	8.6	7.6	8.1	8.6	8.2	8.4	8.3	8.0	8.1
15	9.5	9.3	9.4	8.9	7.9	8.3	8.5	8.0	8.3	8.2	7.8	8.0
16	9.5	9.3	9.4	8.6	7.9	8.1	8.4	8.1	8.2	8.4	8.1	8.2
17	9.5	9.3	9.4	8.6	7.4	8.1	8.4	8.1	8.2	8.7	8.0	8.4
18	9.4	9.3	9.4	8.0	7.4	7.7	8.5	8.1	8.3	8.7	8.4	8.6
19	9.5	9.4	9.4	8.4	7.6	8.0	8.6	8.2	8.4	8.8	8.5	8.6
20	9.5	9.4	9.4	8.4	7.6	8.0	8.6	7.9	8.3	8.8	8.6	8.7
21	9.7	9.5	9.5	8.3	7.7	8.0	8.6	7.9	8.2	8.8	8.5	8.7
22	9.8	9.7	9.8	8.6	8.1	8.4	8.5	7.8	8.1	8.9	8.6	8.7
23	9.9	9.5	9.7	8.7	8.6	8.6	8.1	7.6	7.9	9.0	8.6	8.8
24	9.5	9.2	9.4	8.7	8.4	8.6	8.5	7.7	8.1	9.2	9.0	9.1
25	9.2	8.8	8.9	8.6	8.0	8.4	8.6	7.9	8.1	9.2	9.1	9.2
26	8.9	8.5	8.7	8.6	8.0	8.3	8.4	7.9	8.1	9.2	9.1	9.2
27	8.6	8.3	8.5	8.4	7.8	8.1	8.4	7.7	8.0	9.2	9.1	9.2
28	8.8	8.4	8.6	8.2	7.5	7.9	8.3	7.6	7.9	9.3	9.1	9.2
29	8.7	8.4	8.6	8.1	7.5	7.8	8.3	7.6	7.9	9.6	9.3	9.4
30	8.6	8.4	8.5	8.3	7.6	8.0	8.3	7.6	7.9	9.7	9.6	9.7
31	---	---	---	8.5	7.7	8.0	8.5	7.7	8.0	---	---	---
MONTH	10.6	8.3	9.5	8.9	7.3	8.1	8.7	7.6	8.2	9.7	7.7	8.7
YEAR	15.6	6.8	11.2									

01388000 RAMAPO RIVER AT POMPTON LAKES, 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	---	---	---	98	94	96	100	97	99	100	99	100
2	102	89	97	99	95	97	100	97	99	102	100	101
3	90	81	85	100	95	97	102	99	101	102	100	101
4	86	80	83	98	95	96	104	100	102	101	100	100
5	85	77	82	98	94	96	102	100	101	101	101	101
6	89	77	82	94	92	93	103	99	101	101	100	101
7	86	78	81	95	92	93	104	101	103	101	100	100
8	91	79	84	96	91	93	105	102	104	100	99	99
9	92	80	85	94	91	92	107	104	106	100	98	99
10	88	83	86	94	89	91	105	102	104	101	100	100
11	98	86	93	91	89	89	106	104	105	102	101	102
12	99	97	98	93	89	91	108	106	107	103	102	102
13	101	99	99	93	91	92	108	106	107	103	102	102
14	101	97	99	92	90	91	107	105	106	105	102	103
15	102	97	100	93	89	91	107	106	107	104	103	103
16	100	93	97	91	89	90	108	106	107	105	104	104
17	97	95	96	93	88	90	108	106	107	104	103	104
18	98	95	97	94	88	91	108	106	107	105	104	104
19	96	94	95	92	88	91	107	105	106	105	104	104
20	96	93	94	94	91	93	105	104	104	105	103	104
21	97	94	95	94	89	92	105	103	104	106	104	105
22	98	94	96	90	82	87	105	103	104	111	104	107
23	97	94	96	85	81	84	104	103	104	111	104	107
24	99	95	97	86	83	85	104	103	104	108	105	107
25	97	94	96	87	85	86	103	99	101	109	107	108
26	95	94	94	90	87	89	103	100	102	108	107	107
27	96	94	95	92	89	90	103	102	103	109	106	108
28	96	93	95	94	90	92	102	101	102	110	107	108
29	97	94	96	96	93	94	102	101	101	109	107	108
30	97	95	96	97	93	95	102	100	101	111	108	109
31	100	94	96	---	---	---	100	99	100	109	107	108
MONTH	102	77	93	100	81	92	108	97	104	111	98	104
		FEBRUARY			MARCH			APRIL			MAY	
1	107	105	107	106	105	105	105	102	103	105	102	103
2	107	105	106	105	103	104	104	103	104	104	102	103
3	108	106	106	105	103	104	105	103	104	105	102	103
4	106	105	105	105	104	105	105	103	104	105	101	103
5	108	105	106	104	104	104	104	102	102	104	101	103
6	109	106	107	104	103	104	105	102	104	104	101	102
7	107	104	105	105	104	104	105	103	105	106	101	103
8	107	105	106	105	104	104	104	103	103	104	101	102
9	107	104	105	105	103	104	104	102	103	103	100	101
10	105	102	103	105	104	105	104	102	103	103	100	101
11	105	102	104	106	104	105	104	101	103	101	98	100
12	105	102	103	105	105	105	104	101	102	100	98	99
13	104	102	103	106	104	105	104	103	104	100	98	99
14	104	102	103	106	104	105	106	104	105	102	98	100
15	106	103	104	106	105	105	105	102	104	105	99	102
16	106	102	104	106	105	106	105	102	103	104	101	102
17	103	101	102	106	104	105	104	103	104	105	100	102
18	104	101	102	106	104	105	105	103	104	106	100	103
19	104	102	103	106	104	105	105	103	104	105	100	102
20	104	102	103	105	103	104	106	103	104	105	98	102
21	104	102	102	105	103	104	105	102	104	101	98	99
22	102	100	101	105	103	104	103	102	102	100	98	99
23	102	100	101	105	103	104	103	101	102	100	98	99
24	103	102	103	106	103	105	104	101	103	98	97	98
25	104	103	104	105	104	105	105	102	103	99	96	98
26	106	104	105	105	104	105	103	102	102	99	96	98
27	106	105	105	106	104	105	105	102	103	103	98	101
28	106	105	105	107	105	106	105	102	103	102	100	101
29	---	---	---	106	104	105	104	102	103	102	101	101
30	---	---	---	105	103	104	106	102	104	101	100	101
31	---	---	---	105	102	103	---	---	---	102	100	101
MONTH	109	100	104	107	102	105	106	101	103	106	96	101

01388000 RAMAPO RIVER AT POMPTON LAKES, 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	103	99	101	104	99	101	100	94	97	99	92	96
2	103	102	103	103	99	100	104	95	99	103	99	101
3	103	102	103	103	98	100	105	95	99	101	100	101
4	103	102	102	102	97	100	105	99	102	100	97	98
5	103	101	102	102	96	98	103	100	101	101	97	99
6	103	102	102	101	92	96	103	101	102	102	96	99
7	103	100	102	99	93	95	103	101	102	102	95	98
8	102	101	101	98	93	96	102	101	102	102	95	98
9	103	100	101	96	93	95	102	101	102	103	95	98
10	102	101	101	95	93	94	103	101	102	101	92	96
11	101	100	101	97	93	94	103	101	102	99	91	94
12	102	101	101	97	93	95	104	102	103	97	90	93
13	102	101	101	104	93	98	104	103	103	93	90	92
14	101	100	101	104	92	97	106	102	104	96	91	93
15	102	101	101	107	93	99	105	100	103	94	90	92
16	102	101	102	102	93	96	103	99	101	97	94	95
17	103	101	102	105	92	98	104	99	101	100	91	96
18	102	101	101	97	91	94	105	99	101	99	95	97
19	101	99	100	102	93	97	105	99	101	100	95	98
20	101	100	100	103	92	97	106	98	102	100	97	99
21	101	100	100	101	92	96	105	97	100	101	98	99
22	101	100	101	103	96	101	102	96	99	101	96	98
23	102	101	101	102	100	101	102	95	98	100	96	98
24	102	101	102	101	99	100	104	94	98	100	99	99
25	103	101	102	104	99	101	103	94	98	100	98	99
26	103	100	101	103	98	100	102	94	97	100	99	99
27	103	100	101	101	95	98	102	94	97	99	98	99
28	105	100	102	103	94	98	102	93	97	101	99	100
29	103	100	102	102	93	97	100	92	96	102	100	100
30	104	100	101	103	94	98	102	91	95	102	101	101
31	---	---	---	106	94	99	104	92	97	---	---	---
MONTH	105	99	101	107	91	98	106	91	100	103	90	98
YEAR	111	77	100									

01388000 RAMAPO RIVER AT POMPTON LAKES, 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	480	467	474	396	391	394	357	343	352	485	472	479
2	475	455	470	398	395	397	361	355	359	475	329	412
3	459	454	456	398	396	397	377	361	372	348	303	316
4	454	447	450	402	398	400	377	374	376	478	348	411
5	487	453	474	402	400	401	383	377	381	543	478	523
6	478	470	474	409	398	402	398	383	390	535	519	522
7	488	478	486	417	409	415	400	397	398	548	524	538
8	489	487	488	420	416	419	414	400	407	551	547	549
9	495	489	492	427	419	423	437	414	425	559	549	554
10	496	495	496	435	426	429	442	436	439	590	555	571
11	496	481	489	442	434	437	446	437	443	606	590	601
12	498	459	486	441	437	440	557	446	482	604	601	602
13	459	377	406	445	437	441	589	517	559	601	590	596
14	394	382	389	446	439	443	523	479	513	590	580	585
15	401	392	396	440	434	437	479	375	421	580	554	568
16	404	401	403	434	421	429	375	318	348	554	545	550
17	402	362	386	421	265	367	323	303	311	545	536	539
18	362	329	342	265	191	216	318	306	312	539	534	536
19	329	316	323	201	189	194	322	318	321	542	537	538
20	320	303	310	214	201	208	328	322	325	552	542	545
21	318	307	312	229	214	222	326	319	322	559	552	555
22	309	306	307	248	229	238	319	307	313	562	558	559
23	315	309	312	253	247	251	308	300	304	566	561	562
24	321	315	318	252	248	249	302	300	301	571	565	568
25	326	321	324	259	252	254	325	302	309	576	571	574
26	339	325	330	270	259	263	348	325	335	581	576	578
27	367	339	355	289	269	277	388	348	369	586	581	583
28	377	367	373	306	289	294	431	388	408	591	586	588
29	382	377	380	327	306	317	462	431	447	590	588	589
30	384	380	382	343	326	333	482	461	473	593	590	591
31	391	384	389	---	---	---	486	482	484	593	592	593
MONTH	498	303	402	446	189	346	589	300	387	606	303	544
		FEBRUARY			MARCH			APRIL			MAY	
1	594	592	593	429	426	427	305	293	298	446	441	444
2	592	588	590	432	420	426	317	304	311	447	440	443
3	588	583	586	446	417	436	329	317	325	444	439	442
4	584	581	582	448	432	443	342	329	336	440	434	438
5	581	577	578	448	425	436	351	342	347	435	423	431
6	579	577	578	446	418	431	363	351	356	423	417	421
7	597	577	585	462	437	446	373	363	366	417	411	414
8	609	597	600	497	462	476	406	373	391	413	407	409
9	629	609	616	512	497	500	500	406	443	414	409	411
10	660	629	641	551	512	533	557	500	538	417	410	412
11	702	660	688	557	550	554	572	557	569	413	407	410
12	711	702	709	555	536	547	565	489	527	415	406	409
13	723	711	719	536	504	519	489	421	455	408	403	405
14	733	723	729	504	499	502	421	394	406	406	401	403
15	754	730	747	508	500	505	395	381	385	402	398	401
16	758	735	756	507	497	502	386	379	382	401	399	400
17	760	757	758	504	445	484	384	381	383	403	399	401
18	760	752	756	445	307	373	391	384	388	401	398	399
19	753	746	751	307	250	273	402	390	396	407	399	402
20	746	734	739	255	247	249	416	401	408	416	405	409
21	735	715	726	281	255	267	426	415	421	416	412	414
22	716	696	705	256	220	236	432	425	427	425	414	420
23	828	695	753	235	220	225	439	430	435	428	425	426
24	795	637	703	255	235	244	448	438	445	435	428	432
25	637	549	594	277	255	265	448	445	446	445	434	440
26	549	492	514	292	276	285	452	445	447	448	441	443
27	492	456	471	314	290	303	455	452	454	448	421	434
28	456	429	441	326	314	319	458	455	457	421	393	403
29	---	---	---	333	326	330	457	448	453	393	361	379
30	---	---	---	333	304	318	450	445	448	361	336	346
31	---	---	---	304	293	298	---	---	---	336	327	332
MONTH	828	429	650	557	220	392	572	293	415	448	327	412

01388000 RAMAPO RIVER AT POMPTON LAKES, 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	331	252	305	399	376	387	444	437	439	483	470	478
2	252	202	217	423	399	411	465	444	454	512	482	496
3	223	202	210	423	413	418	476	450	460	536	512	528
4	237	220	229	433	422	427	484	449	466	537	524	532
5	235	222	228	446	431	439	497	470	489	524	507	514
6	232	223	227	448	442	445	477	386	434	507	501	504
7	247	231	239	464	448	456	386	325	351	502	498	500
8	254	246	251	477	463	470	328	307	316	498	494	496
9	271	253	263	488	477	484	311	305	307	496	494	495
10	284	266	273	492	487	489	311	305	309	496	493	495
11	303	282	291	501	492	494	317	308	311	494	493	493
12	319	302	308	513	500	505	311	288	301	497	494	496
13	320	265	298	515	513	514	295	289	291	498	497	498
14	266	255	259	524	513	516	297	289	293	503	498	499
15	263	254	258	535	521	527	308	294	301	506	498	503
16	282	263	272	555	535	544	322	307	315	509	496	503
17	301	281	290	552	540	545	328	321	324	515	507	512
18	319	300	311	544	540	542	340	328	335	515	514	514
19	342	318	329	552	542	549	362	340	346	514	507	509
20	345	337	341	558	549	552	366	358	363	508	467	487
21	352	345	348	569	552	558	394	366	382	473	443	454
22	350	258	301	567	554	562	416	390	399	443	430	436
23	258	240	245	566	479	520	402	394	398	431	386	415
24	264	244	253	479	440	455	410	402	407	386	316	338
25	290	263	278	464	455	461	425	410	416	318	301	309
26	311	289	298	455	431	441	433	418	423	304	282	293
27	328	311	319	441	429	434	437	431	434	283	276	279
28	348	328	338	437	432	435	444	430	435	293	277	286
29	368	345	359	438	436	437	459	442	446	277	224	246
30	381	366	372	440	435	437	467	459	465	225	220	223
31	---	---	---	440	437	439	470	466	468	---	---	---
MONTH	381	202	284	569	376	480	497	288	383	537	220	444
YEAR	828	189	427									

01388000 RAMAPO RIVER AT POMPTON LAKES, 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	19.3	18.4	18.8	8.3	7.8	8.0	3.6	2.8	3.2	3.5	3.0	3.3
2	20.4	19.2	19.7	7.8	7.4	7.6	2.9	2.5	2.6	3.6	2.4	3.2
3	21.9	20.1	20.9	7.4	7.0	7.2	2.5	1.2	1.8	2.4	0.9	1.7
4	21.6	20.2	20.8	7.0	6.7	6.9	1.3	1.0	1.1	1.2	0.8	1.0
5	21.4	19.8	20.4	7.2	6.5	6.8	1.7	1.2	1.5	1.6	1.1	1.3
6	21.1	20.1	20.6	7.2	6.9	7.1	1.7	1.5	1.6	2.1	1.6	1.8
7	20.1	19.0	19.4	7.1	6.8	6.9	1.6	1.4	1.5	2.0	1.8	1.9
8	19.6	18.5	18.9	7.0	6.6	6.8	1.7	1.5	1.6	1.9	1.7	1.8
9	18.6	17.8	18.1	7.4	6.9	7.1	1.7	1.5	1.6	2.5	1.9	2.1
10	17.8	17.4	17.6	8.6	7.4	7.8	1.8	1.6	1.7	2.9	2.4	2.6
11	17.4	16.5	17.0	9.2	8.5	8.8	1.9	1.7	1.8	2.8	2.1	2.4
12	16.5	15.7	16.2	9.5	9.1	9.3	1.9	1.1	1.3	2.1	1.3	1.5
13	15.7	15.4	15.5	9.5	9.0	9.3	1.6	1.2	1.4	1.5	1.3	1.4
14	15.4	14.5	15.0	9.2	8.8	9.0	2.9	1.6	2.2	1.4	1.1	1.3
15	14.9	13.9	14.3	9.2	9.0	9.1	3.3	2.9	3.1	1.5	1.3	1.4
16	14.1	13.4	13.9	9.2	8.5	8.9	3.4	2.9	3.3	1.7	1.4	1.5
17	13.4	12.6	12.8	8.5	7.0	7.7	2.9	2.1	2.4	1.5	1.2	1.4
18	12.7	12.1	12.4	7.0	6.5	6.8	2.1	1.7	1.9	1.2	1.0	1.1
19	12.3	11.9	12.1	6.5	6.2	6.3	2.1	1.7	1.9	1.2	1.1	1.1
20	12.3	11.6	11.9	6.6	6.1	6.4	2.9	2.1	2.4	1.1	1.0	1.1
21	12.2	11.7	11.9	6.6	6.4	6.5	3.7	2.9	3.3	1.2	0.9	1.0
22	11.7	11.1	11.4	7.1	6.6	6.9	3.6	3.3	3.5	1.3	1.0	1.1
23	11.5	11.0	11.2	7.1	6.7	6.9	3.6	3.4	3.5	1.5	1.0	1.2
24	11.2	10.8	11.0	6.7	6.3	6.5	3.6	3.2	3.3	1.6	1.2	1.4
25	10.9	10.5	10.7	6.5	6.1	6.3	3.2	2.1	2.8	1.8	1.5	1.6
26	10.6	10.5	10.5	6.5	6.1	6.3	2.1	1.6	1.8	1.7	1.5	1.6
27	10.6	10.2	10.4	6.5	5.5	6.1	1.8	1.4	1.6	1.5	1.2	1.4
28	10.5	10.1	10.3	5.5	4.8	5.0	2.0	1.5	1.7	1.6	1.3	1.5
29	10.1	9.4	9.7	4.8	3.8	4.2	2.3	2.0	2.1	1.6	1.3	1.5
30	9.4	8.6	9.0	3.8	3.6	3.7	2.5	2.2	2.3	1.3	1.1	1.2
31	8.6	8.2	8.4	---	---	---	3.0	2.5	2.7	1.2	1.1	1.1
MONTH	21.9	8.2	14.5	9.5	3.6	7.1	3.7	1.0	2.2	3.6	0.8	1.6
		FEBRUARY			MARCH			APRIL			MAY	
1	1.1	1.0	1.1	1.2	0.7	0.9	7.9	6.2	6.8	16.1	15.0	15.3
2	1.3	1.0	1.2	1.5	1.2	1.3	7.1	5.9	6.4	17.5	15.9	16.5
3	1.8	1.2	1.5	1.4	1.1	1.3	7.8	6.8	7.3	17.1	16.2	16.6
4	1.9	1.7	1.8	1.1	0.9	1.0	7.9	7.5	7.8	16.5	15.5	16.0
5	2.2	1.8	2.0	1.2	0.8	1.0	7.5	6.8	7.1	15.5	14.8	15.2
6	2.6	2.2	2.4	1.5	1.2	1.4	6.9	6.2	6.6	14.8	13.9	14.4
7	2.6	2.2	2.4	1.3	0.9	1.0	6.9	5.5	6.4	16.3	13.7	14.6
8	2.2	1.8	2.0	1.4	0.8	1.0	5.5	4.9	5.0	16.0	14.6	15.6
9	1.8	1.5	1.7	2.3	1.4	1.8	5.0	4.7	4.8	15.3	14.2	14.7
10	1.5	1.4	1.5	2.4	2.1	2.3	5.9	4.5	5.1	15.6	15.0	15.2
11	1.4	1.0	1.2	2.4	2.1	2.2	6.1	5.8	5.9	16.1	15.6	15.8
12	1.2	1.0	1.1	2.2	2.1	2.1	8.1	6.0	7.0	15.8	15.1	15.5
13	1.1	0.9	1.0	2.6	2.2	2.5	9.5	7.9	8.7	15.4	14.7	15.0
14	1.1	0.8	0.9	2.9	2.4	2.6	10.3	9.1	9.6	15.1	14.4	14.7
15	1.1	0.8	0.9	3.4	2.9	3.2	11.8	10.0	10.7	16.3	14.4	14.9
16	0.8	0.6	0.7	4.3	3.3	3.8	14.5	11.7	12.7	15.5	14.8	15.1
17	0.7	0.6	0.6	5.3	4.3	4.8	13.5	12.1	12.7	16.2	14.4	15.0
18	1.0	0.7	0.8	5.2	4.6	4.9	12.1	10.9	11.3	16.7	14.3	15.3
19	1.0	0.8	0.9	4.7	3.9	4.3	11.7	10.7	11.1	17.7	15.3	16.3
20	0.9	0.6	0.8	4.2	3.7	3.8	12.2	11.4	11.7	17.5	16.3	16.9
21	0.7	0.5	0.6	5.2	3.7	4.3	12.4	11.8	12.1	18.0	17.2	17.6
22	1.0	0.6	0.7	6.7	5.1	5.9	13.0	12.2	12.5	17.6	16.1	16.8
23	0.8	0.2	0.4	7.3	6.0	6.6	12.9	11.4	12.2	16.1	15.3	15.6
24	0.2	0.1	0.1	7.6	6.4	7.0	11.6	10.5	11.0	15.3	14.8	15.0
25	0.3	0.1	0.2	8.2	7.0	7.6	12.4	11.0	11.6	14.8	14.5	14.6
26	0.4	0.2	0.3	8.9	7.9	8.4	12.7	12.4	12.6	14.5	14.2	14.4
27	0.4	0.2	0.3	9.4	8.2	8.8	14.0	12.1	13.1	15.0	13.8	14.4
28	0.7	0.4	0.5	9.8	8.8	9.3	14.7	13.3	13.7	15.6	14.4	14.8
29	---	---	---	10.7	9.7	10.1	15.6	14.3	14.9	17.1	15.0	15.8
30	---	---	---	10.5	9.2	10.0	15.6	14.6	14.9	17.6	16.1	16.7
31	---	---	---	9.2	7.9	8.3	---	---	---	17.6	17.0	17.2
MONTH	2.6	0.1	1.1	10.7	0.7	4.3	15.6	4.5	9.8	18.0	13.7	15.5

01388000 RAMAPO RIVER AT POMPTON LAKES, 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	17.0	15.1	16.2	26.0	22.9	24.2	25.4	25.1	25.3	24.5	22.9	23.5
2	15.9	14.4	15.1	23.9	22.6	23.1	26.2	25.0	25.3	22.9	21.5	22.3
3	15.3	14.9	15.1	25.1	22.8	23.9	26.2	24.6	25.6	21.5	20.3	20.8
4	15.1	14.2	14.7	24.9	23.1	23.8	26.6	25.6	26.0	20.3	20.0	20.1
5	14.6	13.9	14.2	25.8	23.4	24.5	25.6	24.5	25.0	21.7	19.8	20.7
6	16.1	14.1	15.1	27.8	25.8	26.7	24.8	24.0	24.4	22.3	20.5	21.3
7	16.0	15.4	15.7	28.3	26.1	26.9	24.4	23.7	24.0	22.7	20.4	21.5
8	15.6	15.2	15.4	28.3	26.4	27.2	24.0	23.6	23.8	22.3	20.7	21.5
9	17.0	15.2	16.1	26.9	25.4	26.3	23.8	23.3	23.6	22.6	21.1	21.6
10	18.3	16.6	17.4	25.4	24.0	24.6	24.1	23.4	23.7	23.3	20.7	22.0
11	18.9	18.1	18.3	24.0	23.1	23.6	24.1	23.7	23.9	23.3	21.6	22.4
12	19.8	18.5	19.0	23.5	22.9	23.1	24.5	23.7	24.0	22.2	21.4	21.8
13	19.2	18.0	18.7	25.7	23.3	24.4	25.2	24.4	24.6	21.7	21.3	21.4
14	18.9	17.6	18.2	25.1	23.8	24.5	27.4	24.7	25.8	22.6	21.2	21.7
15	19.7	18.2	18.9	24.7	23.4	23.9	27.6	24.9	26.1	22.2	21.4	21.9
16	19.6	18.7	19.1	23.8	23.2	23.5	25.9	25.2	25.4	22.9	21.9	22.3
17	19.5	19.1	19.3	26.6	23.8	25.1	26.4	25.3	25.7	22.7	21.6	22.1
18	19.3	18.6	19.0	26.1	24.8	25.1	26.6	24.7	25.4	21.9	20.9	21.3
19	18.6	17.8	18.2	26.1	24.1	25.1	25.5	24.3	24.8	21.5	20.8	21.2
20	18.5	17.9	18.3	25.4	24.5	24.9	27.0	24.4	25.5	21.6	21.2	21.4
21	17.9	17.1	17.6	25.4	23.6	24.5	25.7	25.0	25.3	22.7	21.1	21.8
22	17.1	16.5	16.7	25.1	23.7	24.4	26.5	24.3	25.3	21.7	20.8	21.1
23	18.6	16.3	17.4	23.9	22.5	23.1	26.9	25.8	26.3	20.9	20.2	20.7
24	20.4	18.2	19.2	24.0	22.7	23.1	25.8	24.7	25.2	20.2	19.3	19.6
25	22.8	20.1	21.9	26.5	23.5	24.9	24.7	24.2	24.4	19.5	18.9	19.1
26	24.2	21.5	22.7	25.2	23.8	24.3	24.8	24.1	24.4	19.4	18.9	19.1
27	26.0	23.0	24.2	25.2	24.0	24.8	26.0	24.1	25.0	19.1	18.8	18.9
28	24.9	23.2	24.0	27.3	24.9	26.1	26.2	24.6	25.4	19.4	18.9	19.2
29	24.1	23.5	23.8	27.8	26.0	26.7	25.5	24.6	24.8	18.9	18.0	18.5
30	25.2	23.5	24.2	26.5	25.0	25.7	25.5	24.3	24.9	18.0	17.2	17.5
31	---	---	---	26.7	24.7	25.6	25.7	24.1	24.8	---	---	---
MONTH	26.0	13.9	18.5	28.3	22.5	24.8	27.6	23.3	25.0	24.5	17.2	20.9
YEAR	28.3	0.1	12.2									

Figure 30. Physical characteristics and concentrations of constituents measured at 01388000 Ramapo River at Pompton Lakes, water year 2003.

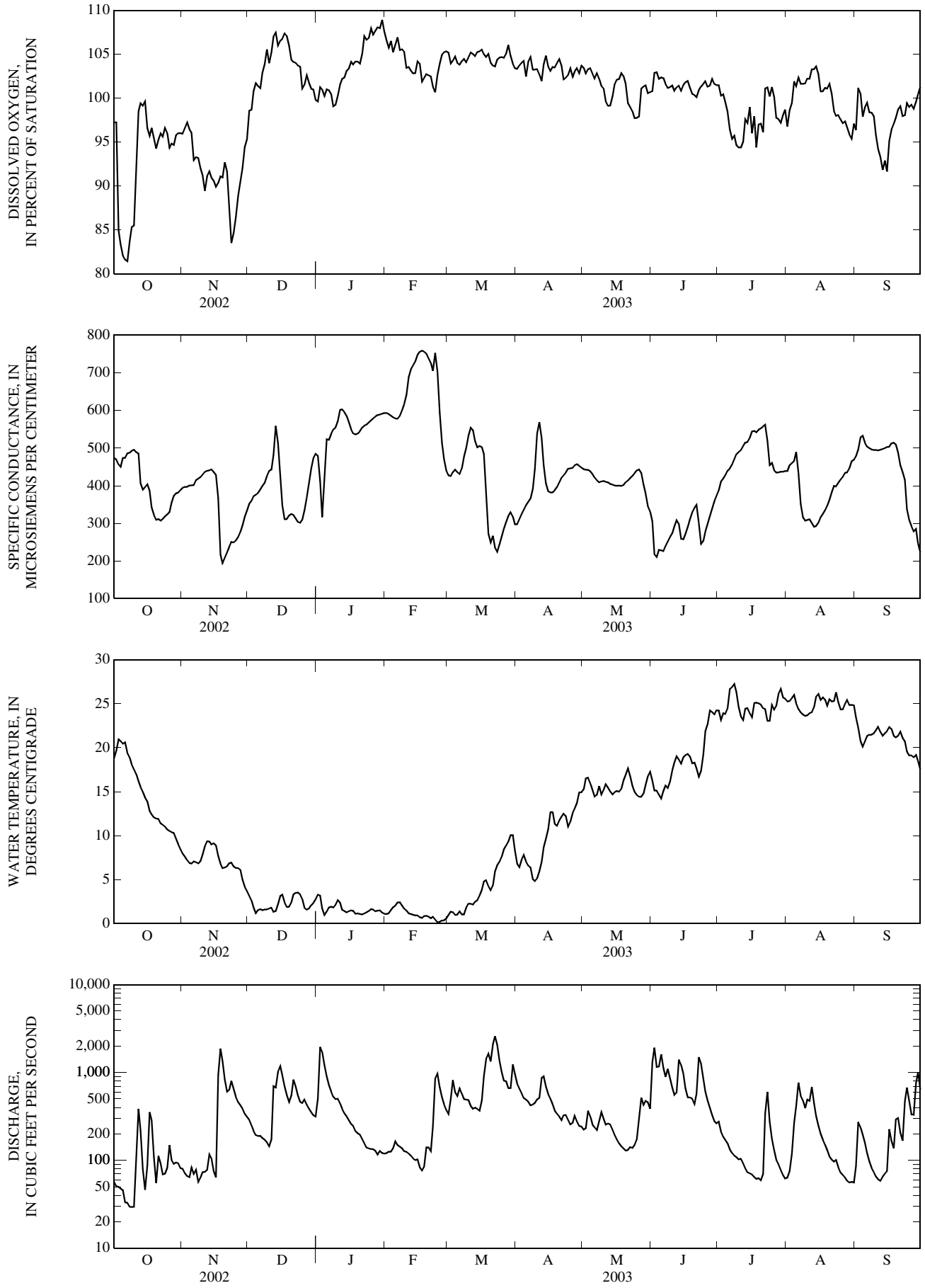
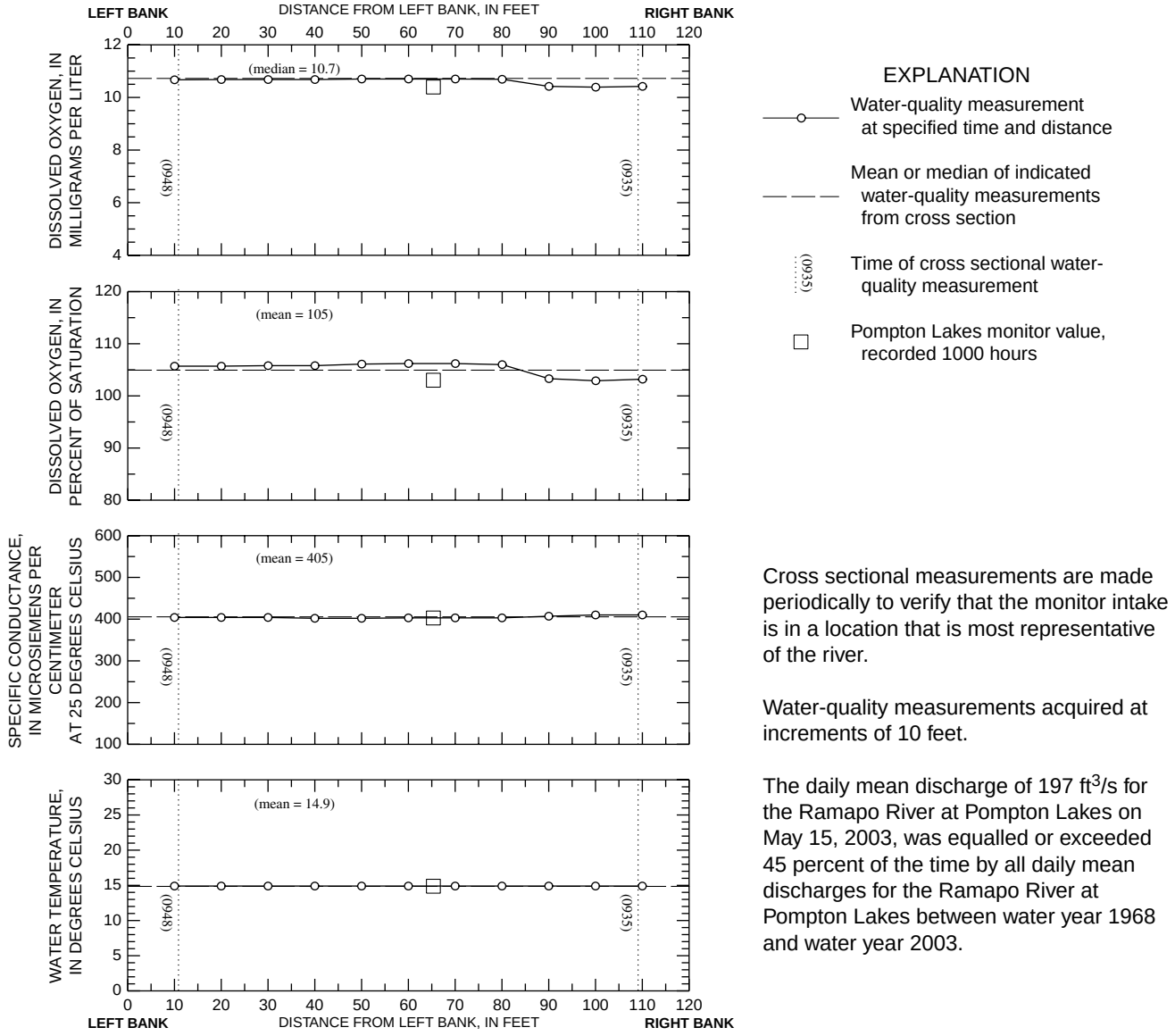


Figure 30. Physical characteristics and concentrations of constituents measured at 01388000 Ramapo River at Pompton Lakes, water year 2003--continued.

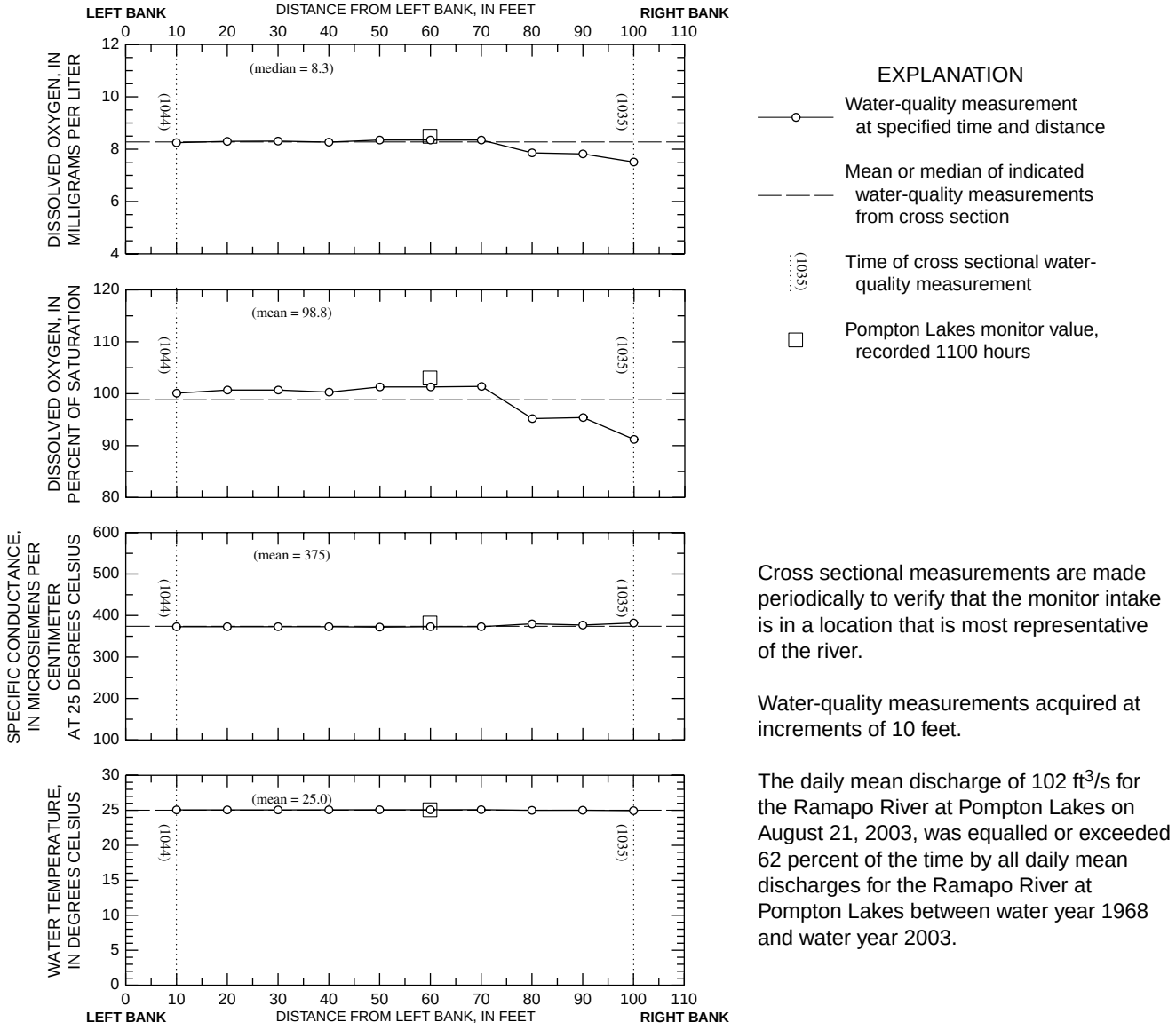


Cross sectional measurements are made periodically to verify that the monitor intake is in a location that is most representative of the river.

Water-quality measurements acquired at increments of 10 feet.

The daily mean discharge of 197 ft^3/s for the Ramapo River at Pompton Lakes on May 15, 2003, was equalled or exceeded 45 percent of the time by all daily mean discharges for the Ramapo River at Pompton Lakes between water year 1968 and water year 2003.

Figure 31. Cross sectional water-quality measurements with recorded monitor values, at Ramapo River at Pompton Lakes, May 15, 2003.



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

Water-quality measurements acquired at increments of 10 feet.

The daily mean discharge of 102 ft^3/s for the Ramapo River at Pompton Lakes on August 21, 2003, was equalled or exceeded 62 percent of the time by all daily mean discharges for the Ramapo River at Pompton Lakes between water year 1968 and water year 2003.

Figure 32. Cross sectional water-quality measurements with recorded monitor values, at Ramapo River at Pompton Lakes, August 21, 2003.

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ

LOCATION.--Lat 40°58'09", long 74°16'55", Passaic County, Hydrologic Unit 02030103, at Passaic Valley Water Commission pumping station, 100 ft upstream from bridge on Jackson Avenue (Pompton Plains Cross Road), 800 ft below confluence of Pequannock and Ramapo Rivers, and 0.7 mi east of Pompton Plains.

DRAINAGE AREA.--355 mi^2.

PERIOD OF RECORD.--Water years 1962-69, 1971-75, 1979-80, 1992, 1994, 1998 to current year.

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

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 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...	1015	153	3.1	0.089	0.068	744	9.2	81	7.5	402	10.5	8.5	97
FEB													
26...	1000	762	3.0	0.095	0.072	770	14.7	101	7.3	488	-2.0	0.6	72
MAY													
08...	1000	437	4.5	0.086	0.064	752	8.7	89	7.3	391	16.5	15.8	91
AUG													
28...	0930	117	2.4	0.092	0.070	761	6.5	75	7.4	418	26.0	22.7	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													
06...	26.9	7.33	2.05	32.2	60	64.3	<0.17	8.0	22.5	--	218	5	0.26
FEB													
26...	20.1	5.20	1.84	59.2	39	110	<0.17	7.0	13.7	244	253	1	0.37
MAY													
08...	24.9	7.01	1.69	38.0	54	71.8	<0.17	3.7	15.5	198	236	5	0.32
AUG													
28...	29.8	8.30	1.85	35.5	67	72.5	<0.17	6.5	18.5	218	246	1	0.50

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...	0.032	<0.030	1.35	0.018	--	0.15	0.023	0.064	1.6	1.8	0.8	<0.1	0.8
FEB													
26...	0.183	0.204	0.75	0.013	0.040	0.06	0.031	0.049	1.1	1.2	0.4	<0.1	0.4
MAY													
08...	<0.030	<0.030	0.74	0.018	<0.020	0.22	0.009	0.056	1.1	1.3	1.3	<0.1	1.3
AUG													
28...	0.041	0.046	0.96	0.009	<0.020	0.11	0.025	0.037	1.5	1.6	0.9	<0.1	0.9

01388500 POMPTON RIVER AT POMPTON PLAINS, 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...	3.7	E1.0	--	46
FEB				
26...	3.2	E1.6	--	20
MAY				
08...	3.3	2.3	35.9	40
AUG				
28...	3.2	<1.0	7.60	49

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...	1104	1,420	1,100	700
AUG				
04...	1100	1,900	1,800	3,000
11...	1120	190	400	1,100
18...	1115	110	400	300
25...	1110	50	100	80

01388720 BEAVER DAM BROOK AT RYERSON ROAD, AT LINCOLN PARK, NJ

LOCATION.--Lat 40°55'35", long 74°17'34", Morris County, Hydrologic Unit 02030103, at bridge on Ryerson Road in Lincoln Park, 700 ft north of intersection of Ryerson Road and Park Avenue, and 0.3 mi upstream of mouth.

DRAINAGE AREA.-- 13.1 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.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 3.

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...	1230	9.6	4.9	0.310	0.240	757	8.6	73	7.0	369	8.0	8.0	110
FEB													
13...	1200	5.8	6.8	0.223	0.174	760	12.6	87	7.2	512	0.0	0.5	140
MAY													
06...	1030	10	4.7	0.205	0.154	756	8.9	80	6.4	447	11.5	10.0	130
AUG													
06...	1250	72	20	0.494	0.378	755	7.0	80	6.8	259	24.5	21.4	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													
07...	31.9	8.53	2.18	25.3	64	48.5	<0.17	12.8	36.2	205	218	5	0.39
FEB													
13...	38.2	10.1	1.49	46.5	--	94.1	<0.17	13.4	35.1	--	309	2	0.37
MAY													
06...	37.4	9.98	1.64	32.8	--	66.7	<0.17	10.8	27.8	--	249	6	0.38
AUG													
06...	21.5	4.96	2.26	18.2	47	31.9	<0.17	10.6	20.1	141	173	23	0.74

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	0.035	0.24	0.005	0.034	0.10	0.018	0.040	0.63	0.73	0.4	<0.1	0.4
FEB													
13...	0.160	0.144	0.50	0.004	--	0.03	0.009	0.025	0.87	0.91	0.2	<0.1	0.2
MAY													
06...	0.085	0.091	0.55	0.012	0.020	0.07	0.008	0.027	0.93	1.0	0.4	<0.1	0.4
AUG													
06...	0.107	0.148	0.74	0.021	0.073	0.19	0.079	0.164	1.5	1.7	2.1	<0.1	2.1

01388720 BEAVER DAM BROOK AT RYERSON ROAD, AT LINCOLN PARK, 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...	8.4	E1.6	--	51
FEB				
13...	4.1	E1.2	--	37
MAY				
06...	4.9	<1.0	4.50	52
AUG				
06...	10.9	<1.0	5.30	48

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...	1005	320	<100	2,400
14...	1005	470	400	700
21...	1000	150	1,200	5,000
28...	1005	490	800	900
JUN				
04...	1000	7,200	11,000	16,000

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

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

LOCATION.--Lat 40°53'47", long 74°16'09", Passaic County, Hydrologic Unit 02030103, 400 ft downstream from the Pompton River in Two Bridges, and 1.4 mi northwest of Little Falls.

DRAINAGE AREA.--734 mi^2.

PERIOD OF RECORD.--Water years 1987 to current year.
NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1987-96.

PERIOD OF DAILY RECORD.--
DISSOLVED OXYGEN: August 1989 to current year. Unpublished fragmentary water-quality records for the period March to July 1989 are available at the U.S. Geological Survey office in West Trenton, N.J.
DISSOLVED OXYGEN PERCENT SATURATION: October 2001 to current year.
SPECIFIC CONDUCTANCE: August 1989 to current year.
WATER TEMPERATURE: August 1989 to current year.

INSTRUMENTATION.--Water-quality monitor(s) since March 1989, pumping system, data recorded hourly. Multiple-point monitoring is necessary at this site because of poor mixing below the confluence with the Pompton River. Three intakes, left, middle, and right, are positioned at 70, 160, and 220 ft, respectively, from the edge of the monitor house on the left bank (looking downstream).
Three monitors, water pumped continuously.--Water years 1989-99.
One monitor, water pumped sequentially.--Water years 2000 to current year.

REMARKS.--The station is 400 ft downstream from the confluence of the Pompton River with the left bank of the Passaic River. One water-quality sensor (monitor) measures the characteristics of water pumped sequentially from three separate intakes. The station is impacted by occasional diversion of water from the Pompton River 750 ft upstream from its junction with the left bank of the Passaic River, which is 400 ft upstream from the station. Interruptions in the daily record were due to instrument or pumping-system malfunction. The calibration of water quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous- record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in “Accuracy of Records" in the Explanation of Water-Quality Records section of this report. Data from the following periods were adjusted:
DISSOLVED OXYGEN: Nov. 18 to Dec. 10, Dec. 13 to Dec. 30, Feb. 26 to Mar. 20, May 15 to May 27, June 25 to July 10, Aug. 31 to Sept. 3.

EXTREMES FOR PERIOD OF DAILY RECORD.--
DISSOLVED OXYGEN: Maximum, 20.0 mg/L (measuring limit of instrument) from left and right intakes, on many days during July- September, 1999, from right and middle on July 25, 2001; minimum, 1.1 mg/L from left and middle intakes, Apr. 20, 2002.
DISSOLVED OXYGEN PERCENT OF SATURATION: Maximum, 253 from right intake, Aug. 19, 2002; minimum, 12 from left and middle intakes, Apr. 20, 2002.
SPECIFIC CONDUCTANCE: Maximum, 2,910 µS/cm from middle intake, Jan. 16, 1999; minimum, 101 µS/cm from right intake, Sept. 19, 20, 1999.
WATER TEMPERATURE: Maximum, 31.5°C from left intake, July 7, 1999; minimum, 0.0°C from left, middle, and right intakes, on many days during winters.

EXTREMES FOR CURRENT YEAR.--
DISSOLVED OXYGEN: Maximum, 17.4 mg/L, Feb. 16 from right intake; minimum, 2.6 mg/L, June 28 from middle intake.
DISSOLVED OXYGEN PERCENT OF SATURATION: Maximum, 136, Apr. 19 from left intake; minimum, 30, June 28 from middle intake.
SPECIFIC CONDUCTANCE: Maximum, 1,200 µS/cm, Feb. 23 from right intake; minimum, 200 µS/cm, Nov. 19 from left intake.
WATER TEMPERATURE: Maximum, 26.7°C, July 7, 8 from right intake; minimum, 0.0°C, Feb. 16, 17 from left intake.

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

DISSOLVED OXYGEN FROM LEFT INTAKE, IN 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	7.2	6.1	6.5	10.2	8.5	9.1	13.8	13.0	13.4	13.7	13.1	13.3
2	7.6	5.9	6.6	10.5	8.9	9.4	14.3	13.8	14.0	13.9	13.1	13.5
3	7.8	5.6	6.4	10.6	8.8	9.5	15.0	14.1	14.4	14.3	13.9	14.2
4	6.1	5.2	5.7	11.0	8.9	9.6	15.7	15.0	15.3	14.4	14.2	14.3
5	6.9	5.2	5.8	11.5	8.9	9.8	15.7	15.4	15.6	14.4	14.1	14.2
6	7.6	5.3	6.1	10.4	8.7	9.1	15.6	15.4	15.5	14.2	14.0	14.1
7	7.6	5.6	6.3	9.1	8.0	8.5	15.8	15.4	15.6	14.3	13.8	14.0
8	8.2	5.7	6.9	9.3	8.0	8.5	15.8	15.6	15.7	14.1	13.8	13.9
9	8.6	6.4	7.3	9.6	8.1	8.6	16.3	15.6	15.9	13.8	13.5	13.6
10	7.6	6.9	7.2	9.5	8.2	8.7	---	---	---	13.9	13.4	13.6
11	8.0	7.5	7.8	9.1	7.8	8.5	---	---	---	14.3	13.5	13.9
12	8.2	7.8	8.0	8.1	6.9	7.6	---	---	---	14.6	14.0	14.3
13	7.9	5.8	7.0	7.9	7.5	7.7	---	---	---	14.7	14.3	14.5
14	5.8	5.4	5.5	9.2	7.9	8.6	13.1	12.6	12.7	14.8	14.2	14.5
15	6.1	5.5	5.7	9.4	9.2	9.3	12.8	12.5	12.7	14.8	14.4	14.6
16	---	---	---	9.4	8.9	9.1	12.6	12.4	12.5	14.9	14.3	14.6
17	8.6	6.3	7.7	10.7	9.0	10.1	13.0	12.5	12.8	14.8	14.3	14.5
18	8.7	7.0	8.2	11.3	10.7	11.0	13.3	12.9	13.1	15.0	14.3	14.7
19	7.0	6.4	6.5	11.5	11.3	11.4	13.2	12.9	13.1	15.0	14.5	14.8
20	6.8	6.5	6.7	11.4	11.3	11.4	12.9	12.0	12.4	15.0	14.3	14.6
21	7.0	6.6	6.8	11.4	11.2	11.3	12.8	12.1	12.6	15.1	14.4	14.7
22	8.6	6.8	7.5	11.3	10.9	11.1	12.9	12.5	12.7	15.1	14.5	14.9
23	8.2	7.3	7.6	11.7	10.9	11.3	12.9	12.5	12.7	15.3	14.6	15.0
24	8.6	7.6	8.0	12.0	11.7	11.8	13.2	12.6	12.9	15.3	14.7	15.0
25	8.4	7.6	8.1	12.2	11.9	12.0	13.1	12.7	12.8	15.3	14.6	15.0
26	8.4	8.0	8.3	12.3	12.0	12.1	13.9	12.8	13.4	15.4	14.5	14.8
27	8.3	7.9	8.0	12.4	12.0	12.1	14.1	13.7	13.9	15.2	14.3	14.8
28	8.2	7.6	7.8	13.2	12.4	12.8	14.1	13.7	13.9	15.5	15.2	15.4
29	8.5	7.6	8.0	13.4	13.1	13.2	14.1	13.7	13.9	15.8	14.8	15.1
30	8.7	7.8	8.1	13.3	13.1	13.2	14.3	13.6	13.9	15.4	14.8	15.1
31	10.6	8.0	8.9	---	---	---	14.2	13.6	13.8	15.6	14.5	14.9
MONTH	10.6	5.2	7.2	13.4	6.9	10.2	16.3	12.0	13.7	15.8	13.1	14.5
		FEBRUARY			MARCH			APRIL			MAY	
1	14.8	14.0	14.3	14.7	13.8	14.2	12.4	11.5	11.9	11.5	9.1	10.3
2	14.9	14.1	14.5	14.4	13.4	13.6	12.9	11.9	12.3	10.9	8.9	10
3	15.2	14.7	14.9	14.5	13.3	13.9	12.9	11.6	12.2	11.5	8.1	9.8
4	15.5	13.6	14.3	14.8	13.9	14.3	12.2	11.5	11.9	11.5	8.7	10.1
5	15.5	13.3	14.2	14.2	13.6	13.9	12.6	11.8	12.2	11.0	9.2	10.3
6	15.7	14.4	15.2	14.0	13.2	13.6	13.9	12.1	12.9	10.8	9.1	10.1
7	15.9	14.6	15.1	14.8	13.7	14.2	13.6	12.3	12.9	12.1	9.7	11.0
8	15.7	14.6	15.1	14.6	13.5	14.0	14.4	12.9	13.6	11.1	8.3	9.1
9	15.9	15.0	15.4	14.1	13.1	13.6	13.9	12.9	13.4	10.7	8.7	9.8
10	16.1	14.7	15.2	14.4	12.8	13.6	15.0	12.8	13.8	10.9	9.0	10
11	15.5	14.6	15.1	14.6	13.2	13.8	13.5	12.3	12.9	10.2	8.7	9.1
12	16.1	15.2	15.6	14.6	13.0	13.7	13.0	11.9	12.5	10.1	8.3	9.2
13	16.0	15.1	15.6	13.9	12.6	13.3	13.6	11.9	12.7	10.6	8.9	9.8
14	16.3	15.2	15.8	14.8	12.5	13.6	14.0	11.9	12.8	11.0	9.2	10.2
15	17.0	15.2	16.0	14.6	12.7	13.6	13.9	11.7	12.7	10.7	9.3	10.1
16	17.2	15.8	16.4	14.3	12.1	13.1	13.8	11.1	12.3	10.1	8.7	9.5
17	16.0	13.5	15.3	13.6	11.7	12.5	13.2	10.4	11.9	10.5	8.8	9.7
18	13.9	13.1	13.5	12.9	11.9	12.3	14.0	11.5	12.7	10.6	8.9	9.7
19	15.2	13.5	14.4	13.1	12.2	12.7	14.8	11.9	13.3	10.9	9.0	9.9
20	15.7	14.4	15.1	12.8	12.1	12.6	14.0	10.8	12.5	10.2	8.7	9.4
21	15.8	14.2	15.2	12.1	11.5	11.8	13.2	10.3	11.9	9.2	7.2	8.0
22	15.8	13.6	14.2	11.6	11.3	11.5	12.1	10.0	11.1	7.4	7.1	7.3
23	14.0	13.6	13.8	12.8	11.3	11.6	12.5	9.7	11.1	7.9	7.2	7.6
24	14.8	14.0	14.5	12.2	11.7	11.9	13.7	10.4	12.1	8.1	7.7	7.9
25	15.0	14.4	14.7	12.1	11.4	11.8	13.7	10.4	12.2	8.3	7.9	8.1
26	15.2	14.4	14.8	11.9	11.2	11.6	12.7	9.7	10.3	8.7	7.8	8.2
27	15.0	14.4	14.7	12.1	11.2	11.5	13.1	9.4	11.3	---	---	---
28	14.9	14.0	14.5	12.1	11.2	11.6	13.0	9.5	11.4	---	---	---
29	---	---	---	11.6	10.5	11.2	11.8	9.3	10.7	---	---	---
30	---	---	---	11.3	10.3	10.9	12.4	9.3	11.0	---	---	---
31	---	---	---	12.2	11.2	11.6	---	---	---	---	---	---
MONTH	17.2	13.1	14.9	14.8	10.3	12.8	15.0	9.3	12.2	12.1	7.1	9.4

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

DISSOLVED OXYGEN FROM LEFT INTAKE, IN MILLIGRAMS PER LITER—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	---	---	---	9.0	7.5	8.2	7.8	6.4	7.0	7.9	7.2	7.5
2	---	---	---	9.2	7.3	8.3	8.5	6.2	7.3	8.2	7.4	7.9
3	---	---	---	8.7	7.4	7.9	9.2	7.2	7.9	8.0	7.5	7.8
4	---	---	---	10.4	7.4	8.8	8.0	6.3	7.1	8.0	7.6	7.8
5	---	---	---	9.2	7.2	8.2	8.4	6.7	7.5	8.4	7.6	7.9
6	9.7	9.3	9.6	8.4	6.8	7.6	8.5	7.2	7.8	8.6	7.7	8.1
7	9.3	9.1	9.2	7.3	6.2	6.8	8.6	7.6	8.1	8.9	7.8	8.2
8	9.4	9.1	9.3	6.6	5.8	6.1	8.3	7.4	7.8	8.7	7.8	8.2
9	9.5	9.2	9.3	6.0	5.4	5.8	8.3	7.6	8.0	9.4	7.7	8.4
10	9.4	8.9	9.1	6.2	5.5	5.8	7.9	7.3	7.5	10.1	7.7	8.6
11	9.0	8.7	8.8	6.7	5.8	6.3	8.4	7.5	7.9	9.8	7.7	8.6
12	8.9	8.4	8.6	7.2	6.4	6.8	8.4	7.6	8.0	9.7	7.5	8.4
13	8.8	8.2	8.6	7.7	6.6	7.1	8.6	7.9	8.3	7.8	6.7	7.4
14	9.1	8.7	8.9	8.4	6.6	7.4	---	---	---	8.1	6.7	7.4
15	9.1	8.6	8.9	11.4	7.5	9.2	8.0	7.1	7.6	8.1	7.3	7.6
16	9.2	8.6	8.9	9.8	7.8	8.7	7.8	7.2	7.4	8.2	7.2	7.7
17	9.4	8.7	9.0	10.6	7.4	8.7	7.4	6.9	7.2	8.9	7.5	8.1
18	9.2	8.8	9.0	8.3	6.7	7.6	7.5	7.0	7.3	8.5	7.7	8.1
19	9.3	8.8	9.1	9.1	6.5	7.6	7.9	7.2	7.5	8.3	7.8	8.1
20	9.1	8.8	9.0	9.3	6.8	7.9	7.9	7.2	7.4	9.1	7.7	8.4
21	9.2	8.9	9.1	8.6	6.8	7.6	7.9	7.1	7.4	8.9	7.8	8.4
22	9.4	9.2	9.3	8.0	6.4	7.2	7.9	6.9	7.3	8.5	7.7	8.0
23	9.5	9.1	9.4	8.8	6.9	7.9	7.8	6.9	7.2	8.3	7.6	7.9
24	9.3	8.8	9.1	8.8	7.3	8.0	7.9	6.9	7.2	9.1	8.3	8.7
25	9.0	8.5	8.9	8.3	7.3	7.8	8.0	6.7	7.2	9.1	8.5	8.8
26	8.9	8.2	8.5	8.1	7.3	7.7	8.0	6.7	7.2	8.7	8.3	8.5
27	8.7	7.8	8.3	8.1	7.0	7.5	8.1	6.6	7.2	8.6	8.3	8.5
28	9.5	7.4	8.4	8.0	6.7	7.2	---	---	---	8.7	8.1	8.4
29	9.3	7.5	8.4	8.2	6.6	7.2	---	---	---	9.1	8.7	8.9
30	8.9	7.6	8.1	8.5	6.5	7.4	---	---	---	9.5	8.9	9.2
31	---	---	---	8.7	6.7	7.6	---	---	---	---	---	---
MONTH	9.7	7.4	8.9	11.4	5.4	7.5	9.2	6.2	7.5	10.1	6.7	8.2
YEAR	17.2	5.2	10.6									

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

DISSOLVED OXYGEN FROM MIDDLE INTAKE, IN 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	7.0	6.3	6.5	9.4	8.7	9.0	11.0	10.2	10.5	13.2	11.7	12.3
2	7.2	6.0	6.5	9.8	8.9	9.2	12.4	10.9	11.7	14.0	13.2	13.6
3	7.1	5.6	6.2	9.8	9.0	9.3	13.4	12.3	12.8	14.3	14.0	14.2
4	6.0	5.3	5.7	10.1	9.0	9.4	14.8	13.3	14.1	14.2	12.9	13.7
5	6.4	5.2	5.7	10.4	9.0	9.5	15.0	14.6	14.8	12.9	11.8	12.2
6	6.8	5.4	6.0	9.8	8.8	9.1	15.0	14.8	14.9	12.0	11.7	11.8
7	6.9	5.7	6.2	8.9	8.1	8.4	15.0	14.8	14.9	12.0	11.7	11.8
8	7.6	5.8	6.7	8.8	8.1	8.4	15.1	14.8	15.0	12.0	11.8	11.9
9	7.9	6.4	7.1	8.9	8.2	8.5	15.5	15.0	15.2	11.8	11.6	11.7
10	7.7	7.0	7.3	8.8	7.9	8.3	---	---	---	11.8	11.5	11.6
11	7.7	7.5	7.6	7.9	6.8	7.4	---	---	---	12.4	11.8	12.0
12	7.7	6.7	7.3	7.4	6.3	6.7	---	---	---	12.8	12.4	12.6
13	6.7	5.8	6.2	7.1	5.2	5.7	---	---	---	12.9	12.8	12.8
14	5.8	5.4	5.5	6.1	5.3	5.8	12.6	12.4	12.5	13.0	12.7	12.9
15	5.8	5.5	5.6	6.6	5.8	6.2	12.5	12.1	12.4	13.2	12.7	12.9
16	---	---	---	7.0	6.5	6.7	12.2	10.6	11.4	13.8	13.0	13.4
17	6.5	6.1	6.4	10.7	7.0	9.8	10.7	10.3	10.4	14.1	13.6	13.8
18	6.5	6.4	6.5	11.3	10.7	11.1	10.4	10.3	10.4	14.6	13.8	14.2
19	6.6	6.4	6.5	11.6	11.1	11.4	10.6	10.4	10.5	14.6	13.8	14.2
20	6.8	6.5	6.7	11.1	8.7	10.2	10.9	10.5	10.6	14.6	14.0	14.3
21	7.0	6.6	6.8	8.8	7.6	8.1	11.5	10.9	11.2	14.8	14.0	14.3
22	7.5	6.8	7.2	8.6	7.7	8.1	11.3	10.6	11.0	14.8	14.1	14.5
23	7.9	7.3	7.6	9.2	8.3	8.8	10.6	10.4	10.5	14.9	13.8	14.4
24	8.3	7.7	8.0	8.8	8.1	8.4	10.7	10.5	10.6	14.7	13.8	14.4
25	8.5	7.8	8.1	8.3	8.0	8.2	11.0	10.7	10.8	15.1	14.3	14.7
26	8.4	8.1	8.3	8.2	8.0	8.0	11.5	11.0	11.3	15.1	14.3	14.6
27	8.2	7.9	8.1	8.8	8.1	8.4	11.8	11.5	11.6	14.7	13.5	14.2
28	8.0	7.7	7.8	9.7	8.8	9.3	11.8	11.6	11.8	14.8	13.0	13.9
29	8.2	7.7	7.9	10.2	9.7	10.0	11.9	11.7	11.8	14.9	14.4	14.6
30	8.4	7.9	8.1	10.2	10.1	10.1	12.2	11.8	12.0	14.8	13.9	14.5
31	9.8	8.1	8.8	---	---	---	12.1	11.8	12.0	14.9	14.2	14.4
MONTH	9.8	5.2	7.0	11.6	5.2	8.6	15.5	10.2	12.1	15.1	11.5	13.4
		FEBRUARY			MARCH			APRIL			MAY	
1	14.3	13.7	14.0	11.6	11.4	11.5	12.1	11.3	11.7	10.4	8.7	9.7
2	14.3	13.5	14.0	12.5	11.2	11.6	12.9	10.9	11.8	10.2	8.3	9.4
3	14.7	13.8	14.3	13.3	12.4	12.9	12.9	11.3	12.1	10.6	7.8	9.2
4	14.8	13.5	14.0	12.8	12.4	12.5	12.6	11.1	11.5	10.5	7.7	9.1
5	14.5	13.2	13.8	12.4	12.1	12.2	11.4	10.6	11.0	10.3	8.5	9.5
6	14.7	13.9	14.3	12.4	11.9	12.2	12.8	11.1	11.9	10.4	8.9	9.7
7	15.0	14.5	14.7	12.3	12.0	12.1	12.8	12.5	12.6	11.0	9.5	10.4
8	15.1	14.6	14.9	12.1	11.9	12.0	14.0	12.5	13.1	10.4	8.3	9.0
9	15.4	14.9	15.2	12.1	11.8	12.0	13.5	12.9	13.2	10.2	8.3	9.3
10	15.5	14.6	15.0	12.4	11.9	12.1	14.2	12.8	13.5	9.9	8.4	9.2
11	15.4	14.6	15.0	12.9	12.4	12.6	13.4	12.7	13.1	9.3	8.2	8.5
12	15.6	14.9	15.3	13.0	12.6	12.8	13.2	12.1	12.6	9.8	8.0	8.9
13	16.1	15.1	15.4	12.9	12.6	12.8	13.4	12.0	12.6	10.3	8.6	9.5
14	16.2	14.8	15.6	12.9	12.5	12.7	12.8	11.5	12.1	10.5	8.9	9.8
15	16.9	15.4	16.1	13.2	12.8	13.0	12.6	10.7	11.6	10.5	9.1	9.9
16	17.1	15.8	16.4	13.1	12.6	12.9	12.5	10.0	11.2	10.0	8.7	9.2
17	16.1	14.3	15.6	13.4	12.1	12.6	11.4	10.0	10.5	9.4	8.3	8.9
18	15.3	14.0	14.6	13.0	11.9	12.4	11.4	10.0	10.5	9.5	8.3	8.9
19	14.6	13.2	14.0	13.1	12.2	12.8	12.6	11.4	12.1	10.6	8.4	9.5
20	14.9	13.3	14.3	12.8	12.1	12.6	12.4	11.1	11.9	9.9	8.3	9.3
21	15.4	14.3	14.9	12.1	11.6	11.9	12.0	10.3	11.3	8.4	6.7	7.6
22	15.2	13.5	14.2	11.7	11.1	11.5	11.2	9.8	10.5	6.7	6.1	6.5
23	14.0	13.5	13.7	12.6	10.9	11.5	11.7	9.2	10.5	6.7	6.2	6.5
24	14.6	14.0	14.3	11.8	11.1	11.4	12.9	9.9	11.5	7.1	6.7	7.0
25	14.1	13.0	13.6	11.5	10.6	11.1	12.6	10.2	11.6	7.2	6.9	7.0
26	13.0	12.5	12.8	11.3	10.1	10.7	11.8	9.6	10.2	8.7	7.1	8.0
27	12.5	11.9	12.2	11.8	10.0	10.9	10.9	8.7	9.9	---	---	---
28	11.9	11.6	11.7	12.1	10.3	11.1	11.2	8.9	10.2	---	---	---
29	---	---	---	11.3	10.0	10.6	10.8	8.8	9.9	---	---	---
30	---	---	---	11.4	10.3	10.9	11.3	8.5	10.1	---	---	---
31	---	---	---	12.3	11.0	11.6	---	---	---	---	---	---
MONTH	17.1	11.6	14.4	13.4	10.0	12.0	14.2	8.5	11.5	11.0	6.1	8.8

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

DISSOLVED OXYGEN FROM MIDDLE INTAKE, IN MILLIGRAMS PER LITER—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	---	---	---	3.9	3.6	3.7	6.7	5.6	6.0	7.8	6.5	7.0
2	---	---	---	4.0	3.7	3.8	6.9	5.5	6.0	8.0	7.1	7.6
3	---	---	---	4.5	3.7	4.0	7.9	5.5	6.6	7.9	6.8	7.1
4	---	---	---	5.1	4.0	4.6	7.9	6.0	6.9	6.8	6.5	6.7
5	---	---	---	5.7	4.6	5.1	7.9	6.3	6.8	6.9	6.5	6.7
6	8.6	5.9	7.0	6.1	4.8	5.5	7.9	6.7	7.2	7.3	6.4	6.7
7	6.2	5.3	5.7	6.0	4.8	5.4	6.7	5.2	5.8	7.2	6.5	6.9
8	6.7	5.8	6.3	5.5	4.5	5.0	5.2	4.6	4.9	7.3	6.6	6.9
9	6.2	5.2	5.6	5.0	4.5	4.7	5.9	4.2	4.7	7.9	6.8	7.2
10	5.5	5.1	5.2	5.3	4.4	4.8	5.7	4.4	4.8	8.3	6.8	7.5
11	5.1	4.5	4.7	5.2	4.7	4.9	4.4	3.9	4.0	8.5	6.9	7.5
12	4.9	4.4	4.7	5.3	4.7	5.1	5.3	4.2	4.9	8.7	6.8	7.6
13	7.9	4.8	6.7	5.5	4.9	5.2	4.4	3.8	4.1	7.7	6.6	7.1
14	7.5	6.1	6.8	6.1	5.2	5.6	---	---	---	7.3	6.4	6.8
15	6.7	5.0	6.0	6.8	5.6	6.1	4.0	3.7	3.8	7.1	6.3	6.6
16	5.1	4.5	4.8	6.6	5.8	6.1	3.9	3.7	3.8	7.5	6.7	7.2
17	5.0	4.3	4.6	7.1	5.7	6.4	3.9	3.7	3.8	7.2	6.6	6.8
18	4.8	4.4	4.6	6.8	5.6	6.2	4.1	3.9	4.0	7.0	6.7	6.8
19	4.5	4.1	4.2	7.4	5.3	6.1	4.3	4.1	4.2	7.7	6.9	7.3
20	4.4	4.1	4.3	7.2	5.2	6.1	4.7	4.2	4.5	7.2	6.4	6.9
21	8.7	4.4	5.4	7.8	5.4	6.4	5.6	4.5	5.0	6.4	5.7	6.1
22	9.3	8.7	9.1	7.7	6.3	7.0	6.5	5.0	5.5	5.8	5.5	5.7
23	9.2	7.2	8.3	7.7	5.9	7.0	6.8	5.8	6.3	8.2	5.4	6.8
24	7.2	5.0	5.8	5.9	5.5	5.7	7.1	5.8	6.3	9.0	8.1	8.6
25	5.0	4.5	4.6	5.8	5.2	5.6	7.1	5.7	6.2	8.6	7.2	8.2
26	4.5	3.7	4.0	5.6	5.2	5.4	7.3	5.6	6.3	7.2	6.5	6.8
27	3.8	3.0	3.3	5.7	5.2	5.4	7.2	5.6	6.3	7.1	6.3	6.6
28	3.3	2.6	3.0	6.3	5.1	5.6	---	---	---	8.7	6.8	8.0
29	3.6	2.9	3.2	6.3	4.9	5.5	---	---	---	9.1	8.7	8.9
30	3.6	3.3	3.5	6.4	5.1	5.7	---	---	---	8.8	7.7	8.4
31	---	---	---	7.1	5.5	6.2	---	---	---	---	---	---
MONTH	9.3	2.6	5.3	7.8	3.6	5.5	7.9	3.7	5.3	9.1	5.4	7.2
YEAR	17.1	2.6	9.3									

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

DISSOLVED OXYGEN FROM RIGHT INTAKE, IN 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	6.9	6.3	6.5	9.5	8.7	9.1	10.6	9.9	10.2	11.8	11.6	11.7
2	7.2	6.1	6.5	10.0	9.0	9.4	11.7	10.6	11.1	12.7	11.8	12.2
3	7.1	5.7	6.3	10.0	9.0	9.4	12.6	11.7	12.1	12.7	11.8	12.2
4	6.1	5.3	5.7	10.2	9.1	9.5	13.6	12.6	13.0	12.0	11.7	11.8
5	6.4	5.3	5.7	10.4	9.1	9.6	14.0	13.6	13.8	11.7	11.5	11.6
6	6.7	5.4	6.0	9.9	9.0	9.3	14.2	13.9	14.1	11.7	11.5	11.6
7	7.0	5.7	6.2	9.1	8.2	8.5	14.2	13.9	14.1	11.9	11.6	11.8
8	7.4	5.8	6.7	8.7	8.2	8.5	14.4	13.9	14.2	11.9	11.8	11.9
9	7.9	6.4	7.2	8.8	8.3	8.6	14.4	14.3	14.3	11.8	11.6	11.7
10	7.7	7.0	7.3	8.8	8.1	8.4	---	---	---	11.7	11.4	11.6
11	7.8	7.5	7.6	8.1	6.9	7.5	---	---	---	12.4	11.7	12.0
12	7.7	6.8	7.4	6.9	5.9	6.4	---	---	---	12.8	12.4	12.6
13	6.8	5.9	6.3	5.9	5.2	5.5	---	---	---	12.9	12.8	12.8
14	5.9	5.5	5.6	6.2	5.4	5.9	11.9	11.0	11.5	13.1	12.7	12.9
15	5.8	5.6	5.7	6.7	5.9	6.3	11.0	10.3	10.6	13.1	12.7	12.9
16	---	---	---	7.1	6.7	6.8	10.3	9.9	10.0	13.4	12.9	13.1
17	6.5	6.2	6.4	8.7	7.1	7.8	10.3	9.9	10.1	13.5	13.2	13.3
18	6.6	6.4	6.5	9.4	8.7	9.1	10.4	10.3	10.4	13.8	13.4	13.5
19	6.6	6.4	6.6	8.7	7.2	7.9	10.8	10.4	10.6	13.8	13.6	13.7
20	6.8	6.6	6.7	7.2	6.9	7.0	10.6	10.4	10.6	13.7	13.3	13.6
21	7.0	6.7	6.9	7.4	6.9	7.2	10.4	10.0	10.2	13.8	13.4	13.6
22	7.4	6.9	7.2	7.7	7.4	7.6	10.4	10.2	10.4	14.0	13.5	13.8
23	8.0	7.4	7.7	7.7	7.4	7.5	10.5	10.4	10.4	14.2	13.5	13.9
24	8.4	7.7	8.1	8.0	7.7	7.9	10.8	10.5	10.6	14.3	13.5	13.9
25	8.5	7.7	8.2	8.2	8.0	8.1	11.0	10.8	10.9	14.2	13.5	13.8
26	8.5	8.1	8.3	8.2	8.0	8.1	11.5	11.0	11.1	13.9	13.3	13.6
27	8.2	8.0	8.1	8.8	8.2	8.5	11.8	11.5	11.6	13.8	13.2	13.5
28	8.1	7.7	7.9	9.8	8.8	9.3	11.9	11.6	11.8	13.8	13.1	13.5
29	8.2	7.7	8.0	10.3	9.8	10.1	12.0	11.8	11.9	14.1	13.4	13.8
30	8.6	8.0	8.2	10.2	10.0	10.1	12.2	11.9	12.0	13.9	13.4	13.7
31	9.7	8.2	8.8	---	---	---	12.0	11.7	11.9	13.5	13.1	13.4
MONTH	9.7	5.3	7.0	10.4	5.2	8.2	14.4	9.9	11.6	14.3	11.4	12.9
		FEBRUARY			MARCH			APRIL			MAY	
1	13.5	13.0	13.2	11.7	11.5	11.6	11.7	10.2	11.0	10.2	8.4	9.4
2	13.2	12.6	12.9	11.5	11.3	11.4	13.2	10.2	11.4	9.6	8.0	8.8
3	13.5	12.7	13.0	12.0	11.2	11.6	13.3	10.9	12.0	8.8	5.7	7.2
4	13.7	12.8	13.1	12.5	12.0	12.3	12.8	10.6	11.3	8.2	5.6	7.0
5	13.7	12.7	13.1	12.4	12.1	12.2	10.9	10.0	10.4	8.9	7.0	7.9
6	14.0	13.0	13.6	12.1	11.6	11.8	12.4	10.8	11.3	9.0	7.8	8.4
7	14.6	13.9	14.3	12.1	11.6	11.8	12.6	12.3	12.5	9.1	8.5	8.8
8	15.1	14.1	14.6	12.2	12.0	12.0	13.0	12.2	12.7	8.9	7.6	8.1
9	15.4	14.3	14.8	12.1	11.9	12.0	13.4	12.6	13.0	7.7	6.4	6.8
10	15.3	14.4	14.8	12.4	12.0	12.1	13.4	12.6	13.0	7.7	6.8	7.3
11	15.5	14.3	14.8	12.9	12.4	12.7	13.9	12.4	13.2	7.7	7.1	7.4
12	15.6	14.3	14.9	13.1	12.7	12.9	12.5	12.1	12.3	7.5	6.7	7.0
13	16.0	14.6	15.3	13.0	12.6	12.9	12.4	11.1	11.8	7.5	6.8	7.0
14	16.4	14.9	15.7	12.9	12.6	12.8	12.0	10.2	11.1	7.9	7.3	7.5
15	17.2	15.6	16.3	13.2	12.9	13.1	12.4	10.1	11.2	7.9	7.6	7.8
16	17.4	16.1	16.6	13.2	12.7	13.0	12.2	9.8	11.0	7.8	7.5	7.7
17	16.8	15.5	16.1	12.8	12.2	12.5	11.5	9.7	10.4	7.6	7.1	7.4
18	16.0	15.1	15.7	12.3	12.0	12.1	11.4	10.1	10.5	8.0	7.3	7.7
19	15.1	12.7	14.0	12.1	11.6	11.9	12.6	11.4	12.1	8.1	7.6	7.9
20	14.7	13.0	14.2	12.0	10.7	11.1	12.5	11.1	12.0	8.1	7.2	7.7
21	15.6	14.5	14.9	---	---	---	12.0	10.1	11.2	7.4	6.0	6.8
22	15.5	13.9	14.8	---	---	---	11.2	9.4	10.3	6.0	5.5	5.8
23	14.2	12.7	13.1	---	---	---	10.4	8.9	9.6	5.8	5.3	5.6
24	13.3	12.9	13.1	---	---	---	11.3	8.9	10.2	6.8	5.8	6.4
25	13.4	13.1	13.3	10.2	8.5	9.5	11.8	9.9	10.9	6.9	6.7	6.8
26	13.1	12.6	12.9	10.6	9.1	9.9	10.9	9.4	10.0	7.2	6.8	7.0
27	12.6	12.0	12.3	11.6	8.7	10.1	9.5	8.2	8.9	---	---	---
28	12.0	11.7	11.9	12.3	9.2	10.7	10.7	8.7	9.7	---	---	---
29	---	---	---	11.2	9.3	10.2	10.4	8.5	9.4	---	---	---
30	---	---	---	10.0	8.2	8.8	10.7	8.1	9.4	---	---	---
31	---	---	---	11.7	8.1	9.6	---	---	---	---	---	---
MONTH	17.4	11.7	14.2	13.2	8.1	11.6	13.9	8.1	11.1	10.2	5.3	7.4

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

DISSOLVED OXYGEN FROM RIGHT INTAKE, IN MILLIGRAMS PER LITER—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	---	---	---	3.9	3.6	3.8	6.1	5.2	5.6	6.6	6.0	6.4
2	---	---	---	4.0	3.7	3.8	6.3	5.2	5.6	7.3	6.3	6.7
3	---	---	---	4.1	3.7	3.9	6.2	5.3	5.5	7.5	6.5	6.9
4	---	---	---	4.5	3.8	4.2	6.9	4.9	5.4	6.6	6.3	6.5
5	---	---	---	4.9	4.3	4.6	5.9	4.8	5.3	6.9	6.5	6.7
6	5.6	5.4	5.5	4.8	4.2	4.5	6.0	5.6	5.8	7.0	6.4	6.7
7	5.6	5.3	5.5	4.7	4.1	4.3	5.6	5.1	5.3	7.1	6.5	6.8
8	5.5	5.0	5.1	4.8	4.0	4.4	5.1	4.6	4.9	7.0	6.5	6.8
9	5.1	4.8	4.9	4.3	4.0	4.1	5.4	4.4	4.7	7.3	6.6	6.8
10	5.1	5.0	5.1	4.6	4.0	4.3	5.3	4.3	4.5	7.4	6.5	6.8
11	5.1	4.6	4.7	4.9	4.3	4.6	4.3	3.9	4.1	7.7	6.6	6.9
12	4.7	4.5	4.6	5.5	4.7	5.1	4.1	3.9	4.0	8.1	6.6	7.1
13	4.8	4.0	4.4	5.5	4.9	5.2	4.3	3.8	4.0	7.2	6.6	6.8
14	4.6	3.9	4.2	5.5	5.0	5.2	---	---	---	7.1	6.1	6.6
15	4.7	4.3	4.5	6.3	5.0	5.5	4.1	3.7	3.9	6.6	6.2	6.3
16	4.8	4.3	4.5	6.1	5.2	5.5	4.0	3.8	3.9	6.6	6.2	6.4
17	5.1	4.3	4.7	6.7	5.1	5.8	4.0	3.8	3.9	7.0	6.4	6.7
18	4.9	4.5	4.6	6.1	5.1	5.5	4.2	4.0	4.1	7.0	6.6	6.8
19	4.5	4.1	4.2	6.6	5.0	5.7	4.4	4.2	4.3	7.2	6.8	7.0
20	4.4	4.2	4.3	7.0	5.1	5.9	4.7	4.2	4.4	6.8	6.2	6.5
21	6.0	4.4	4.8	6.8	5.3	5.8	4.9	4.3	4.6	6.2	5.7	6.0
22	6.5	5.5	6.0	6.1	5.2	5.6	5.0	4.5	4.7	5.8	5.5	5.7
23	5.6	4.7	5.0	5.5	5.0	5.3	5.2	4.4	4.7	6.0	5.4	5.8
24	5.1	4.8	4.9	5.9	5.3	5.7	5.5	4.6	5.0	6.5	5.8	6.2
25	5.0	4.5	4.6	5.9	5.4	5.7	5.9	4.9	5.3	6.6	6.1	6.4
26	4.5	3.8	4.0	5.8	5.3	5.5	6.3	5.1	5.5	6.1	5.8	6.0
27	3.8	3.1	3.4	5.8	5.3	5.5	6.4	5.2	5.7	5.9	5.8	5.8
28	3.4	2.7	3.0	6.4	5.2	5.7	---	---	---	6.1	5.8	5.9
29	3.6	3.0	3.3	6.4	5.0	5.6	---	---	---	6.3	5.8	6.2
30	3.7	3.4	3.5	6.1	5.1	5.6	---	---	---	6.4	6.2	6.3
31	---	---	---	6.8	5.4	5.9	---	---	---	---	---	---
MONTH	6.5	2.7	4.5	7.0	3.6	5.1	6.9	3.7	4.8	8.1	5.4	6.5
YEAR	17.4	2.7	8.8									

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

DISSOLVED OXYGEN FROM LEFT INTAKE, IN 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	79	65	70	89	71	77	105	100	102	105	100	102
2	85	64	72	89	74	78	107	103	105	104	99	102
3	88	62	71	89	72	78	109	104	106	104	102	103
4	67	58	63	92	73	79	113	106	109	104	101	102
5	80	58	65	97	73	81	113	109	111	104	102	103
6	87	58	68	88	74	77	113	109	111	104	102	103
7	85	60	68	79	68	73	114	109	112	104	101	102
8	90	60	73	79	68	72	115	111	113	103	100	101
9	91	66	75	83	68	73	116	112	114	102	99	101
10	78	71	74	84	71	76	---	---	---	105	100	102
11	80	76	78	84	72	78	---	---	---	105	99	102
12	83	79	81	75	64	70	---	---	---	106	100	103
13	80	58	71	71	68	70	---	---	---	105	101	104
14	58	52	55	81	70	76	97	94	95	106	100	103
15	59	53	54	84	81	82	97	94	96	106	102	103
16	---	---	---	83	78	80	96	93	95	106	100	103
17	82	59	73	90	78	85	96	93	94	106	101	103
18	83	65	78	94	89	91	97	94	95	105	99	102
19	65	59	60	94	93	94	98	95	96	105	100	103
20	63	60	61	94	93	93	96	92	94	105	99	103
21	65	61	63	95	92	94	97	93	95	105	99	103
22	80	62	69	94	92	93	99	95	97	106	100	104
23	76	66	69	96	91	94	99	95	97	106	101	104
24	79	68	73	99	96	97	101	95	98	106	101	104
25	75	68	72	101	97	99	100	93	96	107	101	105
26	76	71	74	102	98	100	102	93	98	107	101	103
27	76	72	73	101	98	99	104	100	102	106	99	103
28	75	69	71	103	98	101	104	100	102	109	105	107
29	76	68	71	104	100	102	105	100	102	110	103	105
30	76	68	71	104	101	102	107	100	103	108	103	106
31	95	68	77	---	---	---	107	102	104	111	104	106
MONTH	95	52	70	104	64	85	116	92	102	111	99	103
		FEBRUARY			MARCH			APRIL			MAY	
1	106	101	103	106	99	103	101	94	97	116	90	104
2	109	102	105	105	97	99	108	96	101	112	91	103
3	113	107	110	105	96	100	109	97	103	120	82	102
4	116	102	107	108	97	102	102	97	100	116	87	102
5	113	97	104	104	97	100	103	97	100	108	90	101
6	114	102	109	100	96	97	116	98	106	105	88	97
7	115	104	109	107	96	101	110	101	105	123	93	110
8	112	103	108	109	96	102	113	101	107	114	84	92
9	114	106	111	106	96	101	110	101	106	108	87	98
10	116	106	110	106	93	100	122	100	110	111	89	100
11	111	103	107	108	95	101	110	100	105	104	87	92
12	114	108	110	111	96	103	111	99	104	102	83	93
13	112	106	110	105	95	100	118	101	109	106	88	97
14	115	107	111	113	92	102	124	102	111	110	90	100
15	120	105	111	115	95	104	127	102	114	107	90	100
16	119	109	113	115	92	103	132	102	116	102	86	95
17	110	93	105	109	92	99	121	99	110	106	86	96
18	97	91	94	104	94	98	124	102	112	108	87	97
19	105	94	100	103	96	99	136	104	120	113	89	100
20	109	100	105	99	93	96	132	98	116	106	89	98
21	110	98	106	93	91	92	124	95	111	97	74	83
22	110	95	100	94	90	92	115	92	104	75	71	74
23	99	95	97	106	91	94	116	90	104	79	72	76
24	103	98	101	101	96	98	127	93	110	79	76	78
25	107	100	103	101	95	97	130	94	113	82	77	79
26	107	99	103	100	94	97	121	91	97	84	76	80
27	107	100	103	103	93	98	128	88	108	---	---	---
28	107	99	103	105	95	100	131	91	113	---	---	---
29	---	---	---	102	94	98	119	92	107	---	---	---
30	---	---	---	97	93	95	126	91	110	---	---	---
31	---	---	---	103	94	98	---	---	---	---	---	---
MONTH	120	91	106	115	90	99	136	88	108	123	71	94

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

DISSOLVED OXYGEN FROM LEFT INTAKE, IN 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	---	---	---	106	85	95	92	75	83	90	80	85
2	---	---	---	109	84	97	102	72	86	89	82	87
3	---	---	---	102	85	91	112	86	95	88	82	85
4	---	---	---	123	84	102	96	75	85	88	83	86
5	---	---	---	109	85	98	102	80	90	94	83	88
6	99	94	96	103	81	92	102	84	93	97	84	90
7	96	92	94	90	76	83	102	90	96	100	86	92
8	95	92	94	82	71	75	98	87	92	98	87	92
9	98	93	95	73	64	70	98	89	94	107	85	94
10	99	91	95	72	65	67	93	85	88	115	85	96
11	96	92	93	77	66	72	100	88	94	112	84	96
12	94	89	92	85	73	79	100	89	94	111	83	94
13	94	88	91	92	76	83	104	93	99	87	74	82
14	97	92	94	98	76	86	---	---	---	92	74	83
15	99	92	95	135	85	107	97	86	93	93	83	87
16	99	93	96	117	91	102	95	87	90	94	81	87
17	101	92	97	128	85	103	90	82	86	101	84	92
18	97	92	94	98	78	89	89	82	86	96	85	90
19	98	92	95	109	74	89	94	84	88	94	86	91
20	96	92	94	112	78	93	95	85	88	104	86	95
21	95	92	94	102	79	89	96	84	89	101	87	94
22	98	94	96	94	74	84	97	83	89	96	85	89
23	101	97	98	104	81	92	95	82	87	92	84	87
24	102	96	98	105	85	95	93	79	84	100	90	95
25	102	97	100	99	85	92	94	77	84	99	92	95
26	102	93	97	97	86	92	95	77	84	95	90	93
27	102	90	96	99	84	91	97	76	84	94	90	92
28	112	86	98	98	80	87	---	---	---	94	89	92
29	109	87	98	101	79	87	---	---	---	97	93	95
30	104	88	94	103	77	88	---	---	---	100	93	96
31	---	---	---	105	78	90	---	---	---	---	---	---
MONTH	112	86	95	135	64	89	112	72	89	115	74	91
YEAR	136	52	94									

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

DISSOLVED OXYGEN FROM MIDDLE INTAKE, IN 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	76	67	70	81	73	77	84	78	81	102	89	94
2	80	65	71	83	75	78	94	83	89	105	101	103
3	79	62	69	82	74	77	99	93	96	105	101	104
4	66	59	63	84	74	78	107	97	102	102	93	98
5	73	58	63	87	75	79	107	105	106	93	85	88
6	76	59	66	83	75	77	109	106	108	87	84	85
7	77	62	67	76	69	73	109	106	108	85	84	85
8	83	62	72	75	69	71	110	106	109	85	83	84
9	83	67	75	76	69	72	112	108	110	86	83	85
10	78	72	75	77	70	72	---	---	---	88	84	86
11	78	76	77	71	63	68	---	---	---	89	86	87
12	77	68	74	68	60	63	---	---	---	91	88	89
13	68	58	63	66	48	53	---	---	---	91	90	91
14	58	53	55	55	49	53	95	92	94	92	90	90
15	55	53	54	59	51	55	96	93	94	93	89	91
16	---	---	---	61	58	59	93	80	87	98	90	94
17	61	57	60	90	61	82	80	74	76	100	96	98
18	61	60	61	94	90	92	74	73	73	102	95	99
19	62	59	60	95	92	94	76	74	75	103	95	99
20	63	60	62	92	71	84	82	76	78	103	98	101
21	65	61	63	72	63	66	88	82	85	103	97	100
22	69	63	66	72	63	67	86	80	83	103	97	101
23	73	66	69	77	70	73	80	78	79	103	95	100
24	76	69	72	72	66	68	80	79	79	103	95	100
25	76	70	72	67	65	66	80	79	80	106	99	103
26	76	72	75	67	65	65	83	80	81	106	100	102
27	75	72	74	70	66	68	86	83	85	103	93	99
28	73	70	71	75	70	73	86	84	86	103	89	97
29	73	69	71	78	74	76	88	85	87	104	100	102
30	74	69	71	79	77	78	90	86	89	105	96	102
31	86	70	76	---	---	---	92	89	90	105	101	102
MONTH	86	53	68	95	48	72	112	73	89	106	83	95
		FEBRUARY			MARCH			APRIL			MAY	
1	102	98	100	81	79	80	99	93	96	106	86	98
2	104	96	100	90	79	83	110	88	98	107	85	98
3	109	99	105	95	89	92	113	96	104	111	80	95
4	111	101	105	90	86	88	110	94	98	106	78	92
5	108	97	102	88	85	86	94	88	91	101	84	94
6	107	100	104	87	85	86	107	90	98	101	86	94
7	108	103	105	87	83	84	105	101	104	111	91	103
8	109	103	106	87	83	85	110	99	103	106	84	91
9	111	105	108	89	85	87	107	101	104	103	83	93
10	111	104	108	89	86	88	116	101	108	101	83	93
11	111	103	106	93	88	90	110	104	107	95	83	86
12	112	105	108	96	91	93	112	101	105	99	80	90
13	114	105	108	97	94	95	117	102	109	102	85	94
14	115	102	109	97	92	95	117	100	108	105	87	97
15	118	106	111	102	95	99	123	96	107	105	89	98
16	119	109	113	104	99	101	127	96	111	101	86	92
17	111	99	107	108	97	101	115	97	102	94	82	88
18	105	97	101	105	95	99	101	90	95	96	82	89
19	101	91	97	103	97	100	116	100	108	109	84	96
20	103	92	99	100	93	97	118	104	111	104	86	97
21	108	99	104	94	91	93	115	97	106	87	69	79
22	106	96	100	95	91	93	107	92	99	69	62	67
23	99	95	97	105	89	94	110	86	98	67	62	65
24	102	98	100	98	92	95	120	89	106	70	66	68
25	98	90	95	99	90	94	120	93	108	70	67	69
26	90	86	88	100	87	94	113	90	96	84	69	77
27	86	83	84	105	87	96	106	82	95	---	---	---
28	83	81	82	110	90	99	113	85	100	---	---	---
29	---	---	---	103	91	97	109	87	99	---	---	---
30	---	---	---	98	93	96	115	84	101	---	---	---
31	---	---	---	104	93	97	---	---	---	---	---	---
MONTH	119	81	102	110	79	93	127	82	102	111	62	89

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

DISSOLVED OXYGEN FROM MIDDLE INTAKE, IN 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	---	---	---	46	42	43	79	65	71	89	75	80
2	---	---	---	48	43	45	82	64	71	88	78	83
3	---	---	---	53	43	48	95	65	80	85	73	76
4	---	---	---	61	46	54	95	72	83	74	70	72
5	---	---	---	69	54	61	95	76	82	77	71	74
6	86	60	70	75	58	67	94	79	86	82	71	75
7	63	54	58	74	59	66	79	62	68	81	72	76
8	68	59	64	68	56	61	62	54	58	82	73	77
9	63	53	57	61	54	58	69	49	55	89	76	81
10	57	52	54	62	52	57	67	52	57	94	75	83
11	54	48	50	60	54	56	52	46	48	96	76	84
12	53	47	50	62	54	58	62	50	58	99	75	85
13	83	52	72	65	57	61	53	45	49	86	73	79
14	79	66	73	72	61	65	---	---	---	82	72	76
15	72	55	65	80	65	71	49	44	46	81	72	75
16	56	49	52	79	69	72	47	44	46	86	76	82
17	54	46	50	86	67	76	47	44	46	82	74	77
18	51	47	49	81	65	73	49	46	47	78	74	76
19	48	44	45	89	62	73	51	48	50	86	76	82
20	47	44	46	87	60	72	56	49	53	82	72	78
21	89	47	57	93	63	75	68	54	60	72	64	69
22	96	89	93	90	73	82	80	60	68	64	60	63
23	95	77	86	91	69	82	83	70	76	90	59	75
24	77	55	63	71	64	67	85	68	74	98	88	93
25	55	51	52	70	61	66	84	66	73	94	78	89
26	51	42	45	67	61	64	87	65	73	78	71	74
27	44	35	39	69	61	65	86	65	74	78	68	72
28	39	30	35	78	61	68	---	---	---	94	75	87
29	42	34	38	77	59	67	---	---	---	97	93	95
30	42	38	40	77	61	69	---	---	---	93	80	88
31	---	---	---	86	65	74	---	---	---	---	---	---
MONTH	96	30	56	93	42	65	95	44	64	99	59	79
YEAR	127	30	81									

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

DISSOLVED OXYGEN FROM RIGHT INTAKE, IN 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	74	67	70	82	73	77	81	76	79	91	88	89
2	80	66	71	85	76	79	89	81	84	96	90	93
3	79	63	70	84	75	78	93	88	90	96	85	90
4	67	59	63	85	75	79	98	93	95	86	83	84
5	73	59	64	87	76	79	99	98	99	83	82	83
6	74	59	66	84	76	78	102	99	101	85	82	83
7	78	62	68	77	70	73	102	100	102	85	83	84
8	80	62	72	73	70	72	104	101	103	85	83	84
9	83	67	75	75	70	73	104	102	104	86	84	85
10	78	72	75	77	71	73	---	---	---	87	84	85
11	79	76	77	72	64	69	---	---	---	88	86	87
12	78	69	75	64	55	60	---	---	---	90	88	89
13	69	59	64	55	48	52	---	---	---	91	90	91
14	59	53	56	56	50	54	89	83	86	92	89	91
15	55	54	55	60	52	56	83	79	81	93	89	91
16	---	---	---	62	59	60	79	75	77	94	89	92
17	61	58	60	73	62	67	75	74	74	95	92	93
18	62	60	61	79	72	76	75	74	74	95	92	93
19	62	60	61	72	59	64	78	74	76	95	94	94
20	63	61	62	59	56	57	80	77	78	95	92	93
21	65	61	63	61	56	59	79	77	78	95	92	94
22	68	63	66	64	61	63	79	77	78	97	93	95
23	73	67	70	63	61	62	79	79	79	98	93	96
24	77	69	73	65	63	64	81	79	80	99	93	96
25	76	69	73	66	65	66	81	80	80	99	93	95
26	76	72	75	67	65	66	83	79	81	96	92	94
27	75	73	74	70	67	69	87	83	85	95	91	93
28	74	70	72	75	70	73	87	85	86	95	90	93
29	73	70	72	79	75	77	88	86	87	97	92	95
30	75	70	72	79	77	78	90	87	89	96	92	94
31	85	71	76	---	---	---	91	89	90	93	90	92
MONTH	85	53	68	87	48	68	104	74	86	99	82	91
		FEBRUARY			MARCH			APRIL			MAY	
1	94	90	92	82	81	81	97	84	91	105	84	96
2	93	88	91	82	79	80	115	83	95	100	82	92
3	98	90	94	84	79	82	118	94	105	93	60	76
4	103	95	98	88	84	86	113	90	98	84	58	72
5	103	95	98	87	86	86	90	83	87	88	69	78
6	101	96	98	86	81	83	104	88	94	87	75	82
7	104	98	101	85	80	82	106	100	104	90	85	86
8	107	99	102	88	84	85	102	97	100	90	77	82
9	109	100	104	89	85	87	106	99	103	79	65	70
10	109	102	105	90	86	88	109	99	104	79	68	74
11	111	101	105	93	88	91	114	101	108	79	72	75
12	111	101	105	97	91	94	107	100	102	77	68	72
13	113	101	107	97	94	96	110	97	104	75	68	71
14	115	103	109	97	93	95	113	91	101	79	73	75
15	120	108	113	102	96	99	122	92	105	---	---	---
16	121	111	115	104	100	102	126	95	109	79	75	77
17	116	107	111	103	101	102	118	95	101	76	71	74
18	110	104	108	102	100	101	101	91	95	81	73	77
19	104	88	97	102	96	98	115	101	108	84	77	80
20	101	90	98	99	85	89	118	104	111	85	75	80
21	108	100	102	---	---	---	115	95	106	78	62	71
22	107	97	103	---	---	---	107	90	98	62	56	60
23	100	90	93	---	---	---	99	84	91	57	53	56
24	93	90	92	---	---	---	107	82	95	66	57	62
25	94	91	92	---	---	---	113	90	102	67	65	66
26	91	87	89	97	81	90	105	90	96	71	66	69
27	87	83	85	108	77	92	93	77	86	---	---	---
28	84	82	83	115	83	98	108	83	96	---	---	---
29	---	---	---	104	86	96	106	84	95	---	---	---
30	---	---	---	95	76	82	110	81	96	---	---	---
31	---	---	---	102	70	83	---	---	---	---	---	---
MONTH	121	82	100	115	70	90	126	77	100	105	53	75

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

DISSOLVED OXYGEN FROM RIGHT INTAKE, IN 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	---	---	---	46	42	44	72	61	66	76	68	73
2	---	---	---	48	43	45	75	61	66	82	71	74
3	---	---	---	49	43	46	75	63	66	80	71	74
4	---	---	---	54	44	49	83	60	65	71	67	70
5	---	---	---	60	51	55	71	58	64	77	71	73
6	57	54	55	59	51	55	72	66	70	78	71	74
7	57	54	56	59	51	54	67	60	63	79	71	75
8	56	51	52	60	50	54	60	54	58	78	72	75
9	52	49	50	53	49	51	63	52	55	82	74	76
10	54	51	52	55	48	51	62	50	53	84	72	76
11	54	49	50	57	50	53	51	46	48	87	73	77
12	50	48	49	64	54	59	49	46	48	92	73	79
13	52	43	48	65	57	61	52	45	48	80	73	76
14	50	41	45	65	58	62	---	---	---	80	68	74
15	51	46	49	75	58	65	50	45	47	75	71	72
16	52	47	50	74	61	66	48	46	47	76	71	74
17	55	46	50	82	60	70	48	45	47	79	73	76
18	53	48	49	73	60	66	50	47	49	77	74	75
19	48	44	45	80	58	67	52	49	50	80	76	78
20	47	45	46	85	59	70	56	49	52	76	70	74
21	62	47	51	82	62	68	59	51	55	70	64	68
22	67	57	62	73	61	67	61	55	57	64	60	63
23	58	48	52	65	58	62	64	54	58	66	59	63
24	55	51	53	71	62	67	67	55	60	72	64	68
25	55	49	51	71	64	68	71	57	63	71	66	70
26	51	43	46	70	63	66	75	59	65	66	63	65
27	44	36	40	70	63	66	77	61	67	65	63	64
28	40	31	36	79	62	69	---	---	---	68	64	66
29	42	35	38	78	60	68	---	---	---	69	64	67
30	44	40	42	74	61	67	---	---	---	68	65	67
31	---	---	---	82	64	71	---	---	---	---	---	---
MONTH	67	31	49	85	42	61	83	45	57	92	59	72
YEAR	126	31	77									

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

SPECIFIC CONDUCTANCE FROM LEFT INTAKE, IN 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	480	414	447	571	512	549	347	332	341	499	422	475
2	557	480	532	587	556	577	358	345	352	423	354	401
3	632	549	592	604	566	588	366	353	360	477	332	378
4	673	608	636	627	590	612	374	362	369	522	468	493
5	718	673	694	629	592	612	375	368	372	498	480	485
6	755	706	732	649	602	624	407	365	383	530	489	511
7	750	704	725	646	472	563	430	407	421	503	487	492
8	741	683	712	485	460	476	422	407	414	511	483	496
9	771	738	752	492	479	485	412	400	407	512	501	504
10	771	740	759	519	450	499	---	---	---	506	493	501
11	751	268	485	499	436	470	---	---	---	511	491	502
12	399	275	351	514	416	461	---	---	---	514	507	510
13	397	233	320	416	365	383	---	---	---	516	493	506
14	248	234	243	401	378	390	507	444	463	516	503	510
15	287	248	257	413	395	406	453	384	417	511	505	509
16	---	---	---	412	402	408	384	344	363	511	500	505
17	368	288	337	403	259	318	344	320	331	523	494	505
18	369	326	358	289	203	231	327	317	322	522	500	512
19	336	317	328	217	200	207	337	324	332	501	489	495
20	358	333	346	235	217	227	339	311	329	498	492	494
21	392	349	365	249	233	242	319	309	317	502	493	497
22	433	375	392	249	244	248	323	319	321	514	501	507
23	482	433	462	258	244	252	322	319	321	522	509	515
24	541	482	522	264	256	261	321	316	319	521	513	516
25	592	527	557	271	263	268	471	319	381	518	503	510
26	617	572	594	281	270	276	489	427	456	505	496	500
27	613	389	457	319	279	300	487	411	445	514	499	507
28	421	373	394	322	311	315	425	410	417	531	512	522
29	442	421	430	321	309	315	443	418	433	532	522	526
30	469	441	450	335	319	330	455	442	449	530	518	523
31	523	469	504	---	---	---	473	455	465	533	515	523
MONTH	771	233	491	649	200	396	507	309	381	533	332	498
		FEBRUARY			MARCH			APRIL			MAY	
1	534	526	530	446	433	439	290	279	284	443	432	437
2	534	522	528	482	417	437	295	290	293	445	437	442
3	534	526	531	430	403	414	306	295	300	443	437	440
4	546	526	533	431	423	426	313	304	310	444	436	440
5	567	546	556	444	427	432	321	313	318	445	439	442
6	555	538	545	428	399	413	320	317	319	441	433	438
7	556	527	533	516	418	447	457	318	344	437	429	434
8	626	556	597	520	458	486	520	403	468	431	414	422
9	653	575	617	508	488	500	416	388	401	421	411	417
10	577	561	569	498	482	486	442	409	426	428	418	423
11	630	564	607	500	486	494	457	437	444	422	416	419
12	649	617	634	503	494	499	444	393	418	417	407	412
13	638	619	630	545	490	499	394	366	381	410	398	404
14	739	608	623	545	474	503	367	344	353	406	398	402
15	1,020	739	969	477	470	473	347	339	343	408	401	405
16	989	945	967	471	440	464	346	341	344	421	406	414
17	945	643	805	440	412	433	352	343	346	428	416	422
18	667	636	650	412	310	367	360	349	356	430	419	424
19	664	611	629	310	251	275	367	358	363	431	418	425
20	656	635	641	262	246	250	376	363	372	433	420	428
21	678	632	651	262	241	247	390	375	384	439	426	434
22	755	636	690	241	220	230	404	389	397	440	431	436
23	715	622	660	225	217	220	410	396	406	446	433	441
24	689	618	659	238	223	229	401	390	394	443	433	439
25	618	546	577	263	229	242	423	399	408	435	422	430
26	546	489	517	277	263	271	439	420	432	433	360	400
27	489	464	477	281	267	274	441	432	438	---	---	---
28	464	445	455	291	276	283	440	434	436	---	---	---
29	---	---	---	305	285	297	441	433	438	---	---	---
30	---	---	---	292	273	287	440	436	438	---	---	---
31	---	---	---	288	276	281	---	---	---	---	---	---
MONTH	1,020	445	621	545	217	374	520	279	378	446	360	426

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

SPECIFIC CONDUCTANCE FROM LEFT INTAKE, IN 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	---	---	---	365	340	352	461	437	448	---	---	---
2	---	---	---	368	354	364	451	430	441	---	---	---
3	---	---	---	389	360	375	442	385	431	---	---	---
4	---	---	---	400	379	390	385	294	347	461	452	457
5	---	---	---	414	393	404	427	293	382	467	453	462
6	236	229	231	425	406	416	392	293	359	464	456	460
7	246	225	238	434	417	426	380	322	353	460	452	456
8	235	224	230	445	426	435	322	288	302	462	450	458
9	243	234	238	453	430	444	315	229	303	467	455	462
10	255	242	250	465	445	458	279	212	252	471	458	465
11	269	254	262	468	453	463	300	279	292	481	463	472
12	275	253	268	480	455	469	298	238	266	489	467	478
13	271	244	258	483	464	476	290	273	283	483	454	469
14	252	233	245	486	470	480	---	---	---	454	423	441
15	242	231	236	488	476	483	320	302	310	451	427	442
16	254	241	248	491	477	484	339	317	329	440	323	367
17	270	254	264	498	485	493	357	335	347	429	407	417
18	284	269	278	517	496	507	364	349	359	440	429	434
19	291	282	287	518	502	511	375	355	368	438	357	393
20	298	289	295	513	502	507	387	367	378	410	390	396
21	300	237	291	506	474	500	404	380	394	390	374	379
22	254	229	242	484	408	439	419	396	407	383	372	379
23	229	220	222	499	405	461	419	402	411	383	288	348
24	237	221	229	453	427	438	416	397	408	334	270	301
25	253	236	246	439	414	425	431	409	420	273	268	270
26	272	251	261	441	425	434	437	423	430	275	269	272
27	297	268	281	443	430	437	442	428	436	269	263	266
28	311	295	302	442	424	434	---	---	---	266	232	248
29	335	306	320	447	426	434	---	---	---	261	236	248
30	349	330	339	447	433	440	---	---	---	238	234	236
31	---	---	---	451	438	444	---	---	---	---	---	---
MONTH	349	220	262	518	340	446	461	212	364	489	232	388
YEAR	1,020	200	421									

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

SPECIFIC CONDUCTANCE FROM MIDDLE INTAKE, IN 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	481	418	449	575	512	550	428	413	419	555	431	524
2	558	481	532	588	556	577	425	406	413	431	357	406
3	635	550	596	605	567	589	424	409	417	467	334	377
4	678	611	640	629	590	613	434	404	424	506	447	475
5	722	678	698	630	593	613	428	413	420	610	486	541
6	758	707	735	650	600	625	446	415	430	685	602	656
7	750	706	726	648	470	562	492	446	465	688	672	682
8	745	684	714	487	461	478	520	491	503	704	673	692
9	774	739	755	494	478	486	532	467	513	724	702	711
10	774	744	761	524	494	513	---	---	---	746	721	733
11	763	380	664	559	506	541	---	---	---	750	737	745
12	380	236	285	584	468	540	---	---	---	743	705	724
13	238	222	229	580	431	531	---	---	---	706	672	688
14	249	233	243	431	377	401	525	452	471	672	655	662
15	264	249	255	408	369	390	459	397	428	670	647	657
16	---	---	---	414	387	400	407	389	396	647	596	625
17	305	279	296	414	267	327	417	398	410	597	571	582
18	314	295	306	291	206	234	423	413	420	605	543	570
19	337	314	328	221	202	210	422	418	421	663	550	593
20	359	334	347	238	221	231	419	375	406	564	540	554
21	393	350	366	251	237	246	376	350	362	585	536	565
22	435	391	402	257	251	254	359	351	354	610	536	575
23	486	435	463	263	255	259	353	350	352	710	555	631
24	541	486	524	267	261	265	359	352	355	719	575	629
25	594	528	557	273	266	268	377	359	366	590	532	561
26	621	569	595	287	272	279	546	377	454	544	525	534
27	613	389	457	301	287	293	688	542	612	707	533	609
28	423	373	395	424	301	359	712	688	701	757	591	678
29	443	422	431	426	408	418	701	645	670	616	576	593
30	474	443	451	418	401	409	645	588	615	673	584	615
31	524	474	506	---	---	---	588	554	569	623	584	602
MONTH	774	222	490	650	202	415	712	350	458	757	334	606
		FEBRUARY			MARCH			APRIL			MAY	
1	621	597	608	649	636	644	357	298	326	525	507	514
2	643	596	620	636	502	595	369	338	354	528	476	502
3	642	588	609	516	478	496	390	354	371	498	465	482
4	621	579	600	549	504	538	398	371	389	502	467	485
5	660	594	633	561	535	553	405	385	396	498	484	493
6	706	654	679	553	522	533	406	384	396	493	480	487
7	679	620	649	608	524	559	451	392	416	507	483	496
8	716	665	691	716	607	655	510	451	473	500	447	463
9	730	676	701	779	716	744	607	510	565	473	453	460
10	751	692	731	818	779	804	588	541	561	489	459	474
11	799	744	772	814	775	800	593	488	557	485	459	475
12	787	738	763	775	693	738	494	402	440	464	434	447
13	877	736	797	693	660	674	420	391	401	448	427	436
14	1,050	728	873	740	651	681	436	390	414	455	433	440
15	1,030	986	1,020	740	664	703	459	425	445	464	431	444
16	986	946	967	664	546	629	466	452	460	513	437	467
17	946	670	831	549	421	487	490	458	475	526	496	507
18	866	705	804	421	321	376	500	486	494	538	508	525
19	897	778	851	321	258	282	508	494	501	565	458	494
20	788	727	750	275	250	263	513	501	506	538	455	469
21	787	704	756	283	244	253	514	503	509	561	503	528
22	842	731	779	259	226	240	511	479	492	605	548	578
23	750	632	690	273	226	243	492	451	476	598	562	582
24	698	617	664	306	238	271	459	446	452	636	558	592
25	617	584	594	342	283	305	507	452	480	638	552	594
26	654	604	632	352	323	336	509	492	501	555	379	456
27	668	654	664	349	323	333	513	502	507	---	---	---
28	664	649	659	367	329	350	517	499	509	---	---	---
29	---	---	---	381	314	365	512	499	505	---	---	---
30	---	---	---	315	291	298	520	500	509	---	---	---
31	---	---	---	307	290	298	---	---	---	---	---	---
MONTH	1,050	579	728	818	226	485	607	298	463	638	379	496

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

SPECIFIC CONDUCTANCE FROM MIDDLE INTAKE, IN 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	---	---	---	380	355	368	547	523	534	---	---	---
2	---	---	---	406	379	392	591	523	556	---	---	---
3	---	---	---	431	400	416	610	400	524	---	---	---
4	---	---	---	464	424	444	433	309	372	405	366	385
5	---	---	---	470	455	464	423	302	379	422	405	413
6	266	242	258	469	458	464	377	302	344	436	407	422
7	266	255	264	499	459	472	335	259	284	465	429	443
8	258	251	254	523	480	498	261	247	251	497	465	476
9	261	256	258	526	500	511	264	234	254	516	491	497
10	267	260	263	536	516	523	255	232	246	526	514	518
11	278	267	272	608	526	562	255	243	248	554	526	545
12	282	276	278	612	584	596	267	251	261	587	551	563
13	281	260	268	597	558	572	271	266	269	591	516	548
14	266	256	262	560	524	537	---	---	---	603	539	574
15	268	254	261	582	535	557	297	282	290	580	468	528
16	278	266	271	598	549	575	315	297	307	468	363	401
17	284	275	279	620	558	591	334	315	325	394	345	362
18	294	284	288	607	584	596	357	334	347	357	311	334
19	308	293	300	648	582	610	391	357	374	358	310	335
20	320	308	315	675	625	654	441	391	414	331	305	321
21	320	253	311	659	533	612	473	436	450	323	302	314
22	259	233	248	533	426	474	491	461	476	351	323	339
23	244	229	235	472	338	435	479	440	461	372	297	341
24	254	243	250	338	311	322	504	458	478	338	276	306
25	259	254	257	326	312	320	549	484	517	296	275	284
26	275	259	267	352	322	340	551	509	532	316	296	309
27	294	275	285	372	350	361	580	531	551	333	315	323
28	314	294	304	414	370	392	---	---	---	320	242	270
29	334	313	323	470	413	440	---	---	---	264	244	253
30	355	332	345	502	470	482	---	---	---	280	246	258
31	---	---	---	533	502	516	---	---	---	---	---	---
MONTH	355	229	277	675	311	487	610	232	386	603	242	395
YEAR	1,050	202	477									

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

SPECIFIC CONDUCTANCE FROM RIGHT INTAKE, IN 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	480	416	447	572	512	548	443	422	430	559	509	548
2	557	480	531	586	556	577	442	423	431	520	395	470
3	632	548	592	605	567	589	459	439	447	423	395	407
4	671	608	637	628	590	612	488	459	473	470	391	415
5	719	671	694	630	592	613	499	472	485	629	470	555
6	756	704	732	650	599	624	508	493	501	697	629	674
7	749	703	724	646	471	562	565	491	512	698	695	697
8	742	682	712	486	461	477	654	565	605	709	695	701
9	772	738	752	493	478	485	684	647	669	735	708	720
10	772	741	759	523	493	512	---	---	---	765	735	752
11	758	378	660	558	505	540	---	---	---	766	754	763
12	378	235	283	589	542	570	---	---	---	754	715	735
13	238	222	229	602	430	555	---	---	---	715	681	696
14	248	234	243	430	375	399	536	488	499	688	662	675
15	264	248	255	407	367	389	488	448	469	688	672	679
16	---	---	---	412	387	399	448	419	428	675	662	669
17	306	280	296	412	335	378	420	418	419	676	649	658
18	314	296	307	335	232	252	423	418	421	683	663	671
19	336	314	327	232	224	226	423	418	421	731	678	709
20	358	334	346	233	227	230	419	400	411	748	730	740
21	392	349	365	249	233	244	403	379	390	737	709	722
22	433	391	403	255	249	252	379	356	366	734	700	712
23	482	433	462	262	254	258	357	353	355	748	724	733
24	541	482	522	265	261	264	360	353	356	762	742	750
25	593	527	556	271	264	267	372	360	365	777	755	763
26	620	559	592	286	271	278	551	372	455	782	748	762
27	613	389	458	299	285	292	699	549	621	766	736	750
28	422	373	394	427	299	360	721	699	712	759	737	749
29	443	421	430	429	410	421	707	652	677	773	748	764
30	470	443	450	423	404	413	652	594	621	779	768	774
31	524	470	505	---	---	---	594	559	574	778	744	763
MONTH	772	222	489	650	224	420	721	353	486	782	391	683
		FEBRUARY			MARCH			APRIL			MAY	
1	774	744	758	649	635	643	394	391	392	563	542	550
2	777	744	761	635	599	620	404	392	398	567	555	561
3	773	738	752	635	570	598	417	404	411	580	493	548
4	771	738	752	570	552	558	427	417	423	570	503	552
5	773	745	758	566	553	560	434	427	431	581	562	572
6	829	758	785	579	555	569	444	433	439	607	581	593
7	807	764	778	614	560	578	447	439	444	618	595	605
8	807	741	773	719	614	661	588	447	477	615	592	602
9	856	750	792	792	719	751	763	588	724	607	568	584
10	965	856	919	828	792	816	784	714	749	569	557	563
11	966	911	939	821	779	808	714	632	681	568	553	560
12	927	892	909	779	698	740	632	548	586	578	564	569
13	1,020	927	998	698	663	677	548	499	517	591	566	578
14	1,070	1,020	1,040	746	655	685	499	476	485	598	566	578
15	1,030	987	1,020	742	666	706	479	475	477	611	582	596
16	987	946	967	666	599	640	489	479	484	628	598	607
17	946	846	913	599	541	574	493	489	492	639	612	620
18	936	892	920	541	489	520	501	493	498	641	624	633
19	923	831	902	490	425	466	513	500	507	653	631	638
20	831	792	801	465	418	450	523	510	516	656	632	646
21	903	820	843	---	---	---	533	521	527	688	647	676
22	1,000	903	939	---	---	---	540	526	532	707	672	694
23	1,200	859	975	---	---	---	547	531	538	708	660	684
24	859	597	709	---	---	---	548	535	542	684	667	678
25	609	583	593	---	---	---	562	541	550	680	582	635
26	653	609	634	394	388	392	567	549	557	588	526	563
27	668	653	663	398	387	391	556	540	549	---	---	---
28	663	649	659	412	398	405	541	529	534	---	---	---
29	---	---	---	420	410	416	546	527	533	---	---	---
30	---	---	---	410	383	403	553	539	546	---	---	---
31	---	---	---	399	386	396	---	---	---	---	---	---
MONTH	1,200	583	830	828	383	578	784	391	518	708	493	603

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

SPECIFIC CONDUCTANCE FROM RIGHT INTAKE, IN 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	---	---	---	384	356	370	594	560	579	---	---	---
2	---	---	---	410	382	395	628	577	611	---	---	---
3	---	---	---	439	406	421	640	550	602	---	---	---
4	---	---	---	479	432	452	578	406	517	399	343	368
5	---	---	---	495	469	480	450	298	383	418	399	409
6	270	264	267	509	482	495	344	248	290	434	404	419
7	264	258	261	545	496	514	270	257	260	463	426	441
8	259	257	258	571	531	543	258	247	249	503	463	478
9	259	257	258	589	554	566	262	234	253	538	498	509
10	264	257	260	595	574	583	255	234	246	559	538	544
11	275	264	269	623	589	597	254	242	248	598	559	583
12	280	273	276	623	591	605	267	253	260	626	580	613
13	279	267	272	602	569	579	273	266	270	646	603	630
14	276	272	275	581	538	553	---	---	---	649	590	625
15	272	268	269	592	559	580	299	283	292	605	529	553
16	274	269	271	614	569	602	316	299	308	541	385	481
17	283	273	278	644	596	628	336	316	326	385	339	354
18	292	283	286	659	625	647	358	336	348	355	311	330
19	306	292	299	674	632	658	394	358	376	328	296	310
20	317	305	312	699	658	683	449	394	418	310	284	296
21	320	300	317	697	664	680	496	447	465	323	296	311
22	300	271	285	675	462	633	544	496	514	352	323	340
23	273	264	268	473	299	393	564	544	550	367	342	354
24	264	253	257	325	297	317	604	564	590	368	308	333
25	261	254	257	328	315	323	631	589	615	323	306	311
26	276	258	267	354	325	343	646	606	630	329	313	323
27	295	275	285	376	354	364	663	619	648	355	329	345
28	317	294	305	416	372	395	---	---	---	361	344	355
29	337	315	324	480	414	443	---	---	---	344	306	321
30	358	335	345	528	480	494	---	---	---	316	303	307
31	---	---	---	560	528	545	---	---	---	---	---	---
MONTH	358	253	281	699	297	512	663	234	417	649	284	416
YEAR	1,200	222	522									

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

TEMPERATURE FROM LEFT INTAKE, IN 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	19.5	17.7	18.3	9.1	7.4	8.0	4.6	3.6	4.1	4.2	3.9	4.0
2	20.9	18.0	19.6	8.3	7.1	7.6	3.6	3.0	3.2	3.9	3.1	3.6
3	21.3	19.2	20.4	7.8	6.7	7.2	3.4	2.1	2.6	3.1	1.6	2.3
4	20.6	19.9	20.2	7.5	6.3	7.0	2.1	1.2	1.5	1.9	1.2	1.5
5	22.5	19.5	20.8	7.8	6.4	7.2	1.6	0.9	1.3	2.1	1.8	1.9
6	21.6	19.3	20.0	8.3	7.4	7.8	2.2	0.9	1.6	2.6	2.1	2.4
7	20.7	18.1	19.4	9.1	7.9	8.6	2.1	1.3	1.7	2.5	2.1	2.3
8	20.0	16.9	18.2	8.4	7.6	7.9	2.2	1.3	1.8	2.6	1.9	2.2
9	18.2	16.8	17.2	8.7	7.7	8.1	2.1	1.3	1.6	3.2	2.6	2.9
10	17.0	15.9	16.5	10.5	8.2	9.5	---	---	---	3.4	3.0	3.2
11	15.9	15.4	15.6	12.0	10.1	11.2	---	---	---	3.1	2.1	2.5
12	16.1	15.5	16.0	12.1	11.2	11.7	---	---	---	2.1	1.5	1.8
13	16.0	15.2	15.8	11.2	10.3	10.8	---	---	---	1.8	1.2	1.5
14	15.4	13.6	14.8	10.3	9.4	9.7	3.3	2.6	3.1	1.6	1.0	1.4
15	13.7	12.8	13.3	10.1	9.3	9.7	3.9	3.3	3.6	1.5	1.0	1.2
16	---	---	---	9.9	9.1	9.6	3.9	3.3	3.8	1.4	0.7	1.1
17	13.3	12.3	12.8	9.1	7.1	7.8	3.3	2.3	2.8	1.7	1.1	1.4
18	13.3	12.2	12.8	7.6	7.1	7.3	2.3	1.8	2.1	1.2	0.2	0.6
19	12.2	11.5	11.8	7.1	6.6	6.8	3.1	1.9	2.4	0.9	0.2	0.5
20	12.0	11.2	11.6	7.1	6.5	6.8	4.6	3.0	3.7	1.2	0.5	0.8
21	12.0	11.1	11.6	7.3	6.6	6.9	4.2	3.4	3.7	0.9	0.2	0.6
22	12.0	10.8	11.4	7.8	7.3	7.6	4.1	3.6	3.8	1.0	0.2	0.5
23	12.0	10.3	11.1	7.7	6.8	7.3	4.2	3.9	4.0	1.0	0.1	0.5
24	11.9	10.1	10.7	7.0	6.5	6.8	3.9	3.6	3.8	1.1	0.1	0.5
25	10.5	9.9	10.1	7.0	6.4	6.7	3.8	2.2	3.2	1.2	0.3	0.7
26	11.1	10.1	10.5	7.1	6.7	6.9	2.4	1.9	2.2	0.9	0.5	0.7
27	11.5	10.9	11.2	7.0	5.9	6.5	2.6	2.1	2.4	1.1	0.3	0.7
28	11.2	10.7	11.0	5.9	4.7	5.1	2.6	2.1	2.4	0.8	0.2	0.5
29	10.9	9.8	10.2	4.7	4.1	4.3	2.9	2.3	2.6	0.9	0.4	0.6
30	9.8	8.6	9.3	4.7	4.2	4.4	3.3	2.5	2.9	1.5	0.5	1.0
31	10.4	7.8	8.9	---	---	---	4.0	3.3	3.6	1.6	1.1	1.3
MONTH	22.5	7.8	14.4	12.1	4.1	7.8	4.6	0.9	2.8	4.2	0.1	1.5
		FEBRUARY			MARCH			APRIL			MAY	
1	1.9	1.5	1.7	2.1	1.6	1.9	7.6	6.2	6.6	16.5	14.6	15.4
2	2.4	1.7	2.0	2.4	2.0	2.2	7.9	5.9	6.8	17.4	16.1	16.8
3	3.2	2.0	2.6	2.2	1.1	1.6	8.3	7.2	7.7	17.4	15.8	16.7
4	3.5	3.0	3.3	2.2	0.7	1.4	8.3	7.1	7.6	16.5	15.1	15.6
5	3.0	2.1	2.4	2.6	1.6	2.0	7.1	6.5	6.7	15.4	14.2	14.5
6	2.1	1.3	1.8	2.5	1.0	1.6	7.3	6.0	6.7	14.2	13.5	13.8
7	2.1	1.5	1.7	2.1	0.6	1.3	7.2	5.2	6.2	16.4	13.5	14.9
8	2.1	1.0	1.5	3.1	1.4	2.2	5.2	4.8	5.0	16.4	15.4	15.7
9	2.0	1.1	1.6	3.5	2.3	3.0	5.3	5.1	5.2	15.6	15.1	15.3
10	1.9	1.7	1.8	3.2	1.8	2.4	6.8	4.9	5.8	16.2	14.6	15.4
11	1.7	0.9	1.4	2.9	1.6	2.2	6.8	6.3	6.4	16.1	15.5	15.7
12	1.7	0.8	1.2	3.8	2.5	3.1	8.7	6.3	7.3	15.7	15.1	15.4
13	1.7	0.6	0.9	3.7	3.1	3.4	9.6	7.6	8.6	15.4	14.5	14.8
14	1.8	0.4	1.0	3.8	2.4	3.1	10.1	8.3	9.2	15.1	14.1	14.7
15	1.1	0.1	0.5	5.1	3.1	4.0	11.9	9.3	10.4	15.6	14.0	14.9
16	0.4	0.0	0.2	6.1	3.9	4.9	13.5	11.5	12.4	15.7	14.8	15.2
17	0.3	0.0	0.1	6.0	4.8	5.5	13.4	10.5	12.0	15.7	14.2	14.9
18	0.6	0.3	0.4	6.0	4.9	5.5	10.5	9.7	9.9	16.2	14.4	15.3
19	0.6	0.2	0.4	5.5	4.3	4.7	11.7	9.4	10.5	17.0	14.5	15.8
20	1.0	0.2	0.5	4.6	4.1	4.2	12.6	11.0	11.8	18.1	16.1	17.1
21	1.0	0.2	0.6	5.6	4.1	4.7	12.3	11.3	12.0	17.7	16.2	17.0
22	1.3	0.7	0.9	6.6	5.0	5.8	12.9	11.5	12.2	16.2	15.5	15.8
23	1.2	0.6	0.9	7.1	5.7	6.4	12.7	11.1	12.0	15.5	14.7	15.1
24	0.7	0.2	0.5	7.4	5.9	6.6	11.9	10.1	11.1	14.7	14.4	14.5
25	1.3	0.3	0.8	7.7	6.2	7.0	13.1	10.9	12.0	14.5	14.1	14.3
26	0.9	0.2	0.6	8.3	6.9	7.5	13.0	12.2	12.5	14.5	13.8	14.1
27	1.4	0.4	0.9	9.0	7.3	8.0	14.3	12.1	13.2	---	---	---
28	1.9	1.1	1.5	9.5	8.0	8.7	15.7	13.4	14.6	---	---	---
29	---	---	---	10.4	8.9	9.4	15.5	14.5	15.0	---	---	---
30	---	---	---	10.7	8.1	9.2	16.0	14.1	15.2	---	---	---
31	---	---	---	8.1	7.1	7.6	---	---	---	---	---	---
MONTH	3.5	0.0	1.2	10.7	0.6	4.6	16.0	4.8	9.8	18.1	13.5	15.3

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

TEMPERATURE FROM LEFT INTAKE, IN 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	---	---	---	23.3	21.5	22.5	23.7	22.8	23.3	21.9	20.3	21.3
2	---	---	---	23.6	22.4	23.0	24.4	22.6	23.5	20.3	19.4	19.8
3	---	---	---	23.2	22.0	22.3	25.3	23.9	24.5	19.9	19.6	19.8
4	---	---	---	23.9	21.7	22.7	24.8	24.1	24.4	19.8	19.5	19.6
5	---	---	---	24.8	23.2	24.0	24.9	23.5	24.5	20.7	19.6	20.1
6	16.7	14.9	15.6	25.3	24.0	24.7	24.2	23.0	23.6	21.0	19.7	20.4
7	16.7	15.7	16.1	25.8	24.7	25.3	23.8	23.5	23.7	21.0	20.0	20.5
8	16.0	15.4	15.7	26.0	25.2	25.6	23.6	22.9	23.2	21.3	20.2	20.7
9	16.6	15.6	16.0	25.7	23.8	24.8	23.6	23.0	23.4	21.7	20.2	20.7
10	18.2	16.5	17.1	23.8	21.8	22.7	23.6	22.5	23.1	21.6	19.9	20.6
11	18.2	17.7	17.9	22.4	21.4	21.8	23.8	23.3	23.6	21.9	19.7	20.6
12	18.8	17.8	18.2	23.3	21.8	22.4	24.0	23.1	23.5	21.9	19.9	20.8
13	18.9	17.6	18.3	23.9	22.4	23.0	24.8	23.6	24.2	20.5	19.9	20.2
14	18.7	17.2	17.8	23.1	21.9	22.6	---	---	---	21.7	19.8	20.7
15	19.3	18.2	18.7	23.7	21.6	22.6	25.2	24.7	25.0	22.1	21.2	21.6
16	19.3	18.4	18.9	24.1	22.5	23.2	25.3	24.6	24.9	21.8	20.9	21.4
17	18.8	17.9	18.3	24.8	22.2	23.4	24.9	24.0	24.3	21.5	20.5	21.0
18	18.5	17.5	17.8	23.6	22.5	23.1	24.0	23.3	23.5	21.1	20.0	20.3
19	17.7	17.4	17.5	24.3	21.8	22.9	24.0	22.9	23.5	21.4	19.9	20.6
20	17.7	17.4	17.5	24.7	22.1	23.3	24.4	23.3	23.8	21.6	20.8	21.2
21	17.4	16.3	16.8	24.0	22.5	23.2	24.8	23.8	24.3	21.3	20.5	20.9
22	17.0	16.3	16.6	23.2	22.3	22.8	25.5	24.5	24.9	21.0	20.1	20.2
23	18.8	16.6	17.5	23.5	22.9	23.2	24.9	23.1	24.3	20.3	19.8	20.0
24	20.4	18.4	19.1	23.9	22.5	23.2	23.6	22.1	22.9	19.8	19.1	19.4
25	21.6	20.1	20.9	23.9	22.8	23.5	23.4	22.1	22.6	19.5	18.9	19.2
26	22.7	21.0	21.7	24.5	23.6	24.1	23.7	22.2	22.9	19.5	19.1	19.3
27	23.2	22.1	22.7	25.3	24.3	24.7	24.1	22.4	23.2	19.8	19.0	19.4
28	23.4	22.8	23.1	25.6	24.2	24.8	---	---	---	19.8	18.9	19.5
29	23.2	22.5	22.8	25.6	24.0	24.6	---	---	---	18.9	18.0	18.4
30	23.0	22.2	22.5	24.9	23.3	24.2	---	---	---	18.0	17.2	17.5
31	---	---	---	24.8	23.0	23.7	---	---	---	---	---	---
MONTH	23.4	14.9	18.6	26.0	21.4	23.5	25.5	22.1	23.8	22.1	17.2	20.2
YEAR	26.0	0.0	11.8									

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

TEMPERATURE FROM MIDDLE INTAKE, IN 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	19.2	17.8	18.3	8.8	7.7	8.2	4.3	4.0	4.1	4.4	3.6	4.1
2	20.3	18.2	19.5	8.2	7.4	7.8	4.0	3.4	3.6	4.1	3.2	3.8
3	20.9	19.3	20.3	7.7	7.0	7.4	3.7	2.6	3.0	3.2	1.8	2.4
4	20.6	20.0	20.3	7.6	6.6	7.2	2.6	1.8	2.0	1.8	1.4	1.6
5	21.7	19.8	20.7	7.6	6.7	7.3	1.9	1.3	1.6	1.8	1.5	1.6
6	20.8	19.5	20.0	8.4	7.5	7.9	2.3	1.3	1.8	2.1	1.6	1.8
7	20.3	18.5	19.5	9.0	8.1	8.7	2.1	1.6	1.9	1.9	1.1	1.5
8	19.6	17.3	18.3	8.5	7.7	8.0	2.3	1.6	2.0	1.5	0.8	1.1
9	17.8	17.0	17.2	8.4	7.9	8.1	2.2	1.6	1.9	2.6	1.5	2.0
10	17.0	16.0	16.5	9.8	8.4	9.3	---	---	---	2.9	2.5	2.7
11	16.1	15.5	15.9	11.7	9.8	11.1	---	---	---	2.7	1.5	2.0
12	15.9	15.5	15.7	12.7	11.7	12.1	---	---	---	1.5	1.0	1.2
13	15.9	15.3	15.7	12.5	11.5	12.1	---	---	---	1.2	0.8	1.0
14	15.4	13.8	14.8	11.5	10.3	10.7	3.5	2.7	3.3	1.1	0.8	1.0
15	13.8	12.9	13.4	10.3	9.6	10	4.0	3.4	3.8	1.1	0.7	1.0
16	---	---	---	10.0	9.4	9.7	4.0	3.3	3.8	1.2	0.5	0.9
17	12.7	12.3	12.5	9.4	7.4	8.1	3.3	1.5	2.2	1.6	0.9	1.2
18	12.6	12.1	12.3	7.7	7.2	7.4	1.5	1.0	1.2	1.2	0.3	0.7
19	12.1	11.7	11.9	7.2	6.7	6.9	1.8	1.0	1.3	0.9	0.2	0.6
20	12.0	11.4	11.7	7.0	6.6	6.8	3.6	1.8	2.7	1.3	0.6	0.9
21	12.0	11.3	11.7	6.9	6.5	6.7	3.9	3.5	3.7	1.0	0.4	0.7
22	11.8	11.0	11.4	7.7	6.9	7.3	3.7	3.4	3.6	1.0	0.2	0.6
23	11.5	10.6	11.1	7.7	6.8	7.3	3.7	3.5	3.6	0.9	0.1	0.5
24	11.4	10.3	10.8	6.8	6.3	6.4	3.5	3.1	3.2	1.0	0.1	0.5
25	10.5	10.1	10.3	6.5	6.0	6.2	3.1	2.0	2.6	1.3	0.4	0.8
26	11.2	10.2	10.6	6.7	6.4	6.6	2.0	1.7	1.9	1.0	0.6	0.8
27	11.5	11.0	11.3	6.7	5.6	6.2	2.3	1.9	2.1	1.0	0.2	0.6
28	11.3	10.8	11.1	5.6	4.2	4.9	2.4	2.1	2.3	0.7	0.1	0.4
29	11.0	10.0	10.3	4.2	3.7	3.9	2.6	2.2	2.4	0.9	0.4	0.7
30	10.0	8.9	9.4	4.4	3.7	4.1	2.9	2.3	2.6	1.2	0.4	0.8
31	9.7	8.1	8.9	---	---	---	3.7	2.8	3.3	1.3	0.9	1.1
MONTH	21.7	8.1	14.4	12.7	3.7	7.8	4.3	1.0	2.6	4.4	0.1	1.3
		FEBRUARY			MARCH			APRIL			MAY	
1	1.7	1.2	1.4	0.9	0.6	0.8	7.8	6.3	6.8	16.9	14.9	15.8
2	2.0	1.2	1.7	1.9	0.9	1.3	8.7	6.0	7.1	17.6	16.3	17.0
3	2.9	1.7	2.4	1.8	1.1	1.4	9.4	8.0	8.6	17.5	16.3	17.0
4	3.6	2.9	3.3	1.1	0.4	0.8	9.4	7.9	8.6	16.9	15.4	15.8
5	3.1	2.4	2.8	1.6	0.9	1.2	7.9	6.8	7.2	15.6	14.3	14.6
6	2.4	1.7	2.0	1.5	0.6	1.2	7.6	6.4	7.0	14.3	13.5	13.8
7	1.9	1.3	1.6	1.0	0.2	0.6	7.5	5.7	6.9	16.2	13.5	14.8
8	1.8	0.9	1.3	1.8	0.7	1.3	5.7	5.0	5.2	16.2	15.5	15.8
9	1.8	1.0	1.3	2.6	1.6	2.1	5.4	5.0	5.2	15.8	15.3	15.6
10	1.7	1.4	1.6	2.3	1.6	2.0	6.7	5.1	5.9	16.3	14.8	15.6
11	1.8	1.0	1.4	1.8	1.1	1.5	6.7	6.5	6.6	16.2	15.7	15.9
12	1.7	0.7	1.2	2.7	1.7	2.1	8.7	6.5	7.4	15.8	15.3	15.6
13	1.4	0.6	0.9	3.2	2.7	3.0	9.9	7.7	8.7	15.4	14.6	14.9
14	1.3	0.2	0.8	3.4	2.6	3.0	11.5	8.9	10.0	15.1	14.2	14.7
15	0.8	0.2	0.4	4.3	3.0	3.7	14.0	10.4	11.9	15.6	14.2	15.0
16	0.5	0.1	0.3	5.8	4.1	4.9	16.3	13.4	14.6	15.7	14.8	15.2
17	0.4	0.1	0.2	6.2	5.4	5.8	15.7	12.2	14.0	15.6	14.5	15.0
18	0.4	0.2	0.3	6.1	5.0	5.6	12.2	9.9	10.7	15.9	14.7	15.3
19	0.3	0.1	0.2	5.6	4.4	4.8	11.4	9.6	10.5	16.7	14.8	15.8
20	0.7	0.2	0.4	4.8	4.2	4.3	13.1	11.1	12.1	17.8	16.1	17.0
21	0.8	0.2	0.5	5.6	4.2	4.7	13.3	12.0	12.7	17.4	16.6	17.1
22	1.6	0.4	0.9	6.8	5.1	5.9	13.3	12.1	12.7	16.6	15.7	16.2
23	1.4	0.8	1.2	7.4	5.9	6.7	13.0	11.5	12.4	15.7	14.7	15.2
24	0.8	0.4	0.6	8.3	6.4	7.3	12.1	10.6	11.4	14.7	14.2	14.4
25	1.0	0.3	0.6	9.5	7.2	8.3	13.4	11.0	12.2	14.3	14.1	14.2
26	0.4	0.1	0.2	10.3	8.5	9.3	13.3	12.5	12.8	14.3	13.9	14.1
27	0.5	0.1	0.3	10.6	8.6	9.5	14.2	12.5	13.4	---	---	---
28	0.9	0.3	0.6	11.2	9.1	10.1	15.9	13.2	14.6	---	---	---
29	---	---	---	11.6	10.5	10.9	15.9	14.7	15.3	---	---	---
30	---	---	---	10.9	8.2	9.4	16.3	14.6	15.6	---	---	---
31	---	---	---	8.2	7.2	7.8	---	---	---	---	---	---
MONTH	3.6	0.1	1.1	11.6	0.2	4.6	16.3	5.0	10.3	17.8	13.5	15.4

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

TEMPERATURE FROM MIDDLE INTAKE, IN 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	---	---	---	23.8	22.6	23.2	23.6	23.0	23.4	22.6	20.5	21.7
2	---	---	---	24.0	22.6	23.3	24.1	22.9	23.5	20.5	19.6	19.9
3	---	---	---	23.5	22.9	23.2	25.0	23.9	24.3	19.6	18.8	19.0
4	---	---	---	24.3	22.5	23.4	24.7	24.0	24.3	19.2	18.7	18.9
5	---	---	---	25.1	23.4	24.2	24.8	23.6	24.4	20.6	19.0	19.8
6	16.1	15.0	15.4	25.7	24.7	25.2	24.1	23.2	23.7	21.0	19.8	20.5
7	16.1	15.8	16.0	26.1	25.3	25.8	23.8	23.5	23.7	20.7	19.7	20.4
8	16.0	15.6	15.8	26.4	25.8	26.1	23.6	23.2	23.4	20.7	20.3	20.5
9	16.6	15.9	16.2	26.1	24.4	25.4	23.5	23.1	23.3	21.2	20.4	20.7
10	17.9	16.5	17.1	24.4	22.4	23.4	23.8	22.9	23.4	21.4	20.2	20.7
11	18.5	17.7	18.0	22.6	21.9	22.3	24.0	23.5	23.8	21.4	20.1	20.7
12	19.4	18.5	18.9	22.9	21.8	22.4	24.3	23.4	23.9	21.4	20.1	20.7
13	19.4	17.9	18.6	23.8	22.7	23.3	25.0	23.9	24.5	20.5	20.0	20.2
14	18.9	17.6	18.1	23.5	22.6	23.2	---	---	---	21.2	19.9	20.6
15	19.5	18.4	19.0	23.9	22.4	23.1	25.2	24.4	24.8	21.9	21.1	21.5
16	19.5	19.0	19.3	24.5	23.1	23.7	24.9	24.3	24.6	22.0	21.1	21.6
17	19.1	18.2	18.6	25.1	22.9	23.9	24.7	24.1	24.4	21.5	20.7	21.1
18	18.6	18.1	18.2	24.1	23.0	23.6	24.1	23.4	23.8	20.8	19.7	20.2
19	18.6	18.1	18.3	24.6	22.5	23.4	24.0	22.7	23.4	20.8	19.6	20.3
20	18.6	18.3	18.5	24.7	22.6	23.6	24.4	22.9	23.8	21.6	20.7	21.2
21	18.3	16.4	17.7	24.1	23.0	23.5	24.9	23.8	24.4	21.6	20.7	21.2
22	16.9	16.3	16.6	23.2	22.6	22.9	25.6	24.8	25.1	20.7	19.8	20.2
23	18.6	16.6	17.4	23.4	22.8	23.1	25.2	23.7	24.6	20.3	19.7	19.9
24	19.7	18.3	18.9	24.3	22.9	23.6	24.0	22.7	23.5	19.9	19.2	19.4
25	21.0	19.7	20.6	24.6	23.3	23.9	23.8	22.5	23.1	19.6	19.0	19.3
26	22.7	20.9	21.6	24.5	23.1	23.8	23.9	22.4	23.1	19.5	19.2	19.3
27	23.9	22.4	23.1	25.0	23.5	24.3	24.2	22.6	23.4	19.8	19.1	19.4
28	23.7	22.7	23.2	25.9	24.3	25.1	---	---	---	19.7	18.9	19.5
29	23.3	22.4	22.9	25.5	24.5	25.0	---	---	---	18.9	18.1	18.4
30	23.4	22.7	23.1	25.0	23.9	24.4	---	---	---	18.1	17.2	17.6
31	---	---	---	24.6	23.3	23.8	---	---	---	---	---	---
MONTH	23.9	15.0	18.8	26.4	21.8	23.8	25.6	22.4	23.9	22.6	17.2	20.1
YEAR	26.4	0.1	11.9									

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

TEMPERATURE FROM RIGHT INTAKE, IN 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	18.9	17.8	18.2	8.7	7.6	8.1	4.2	4.0	4.1	4.4	3.6	4.0
2	20.1	18.1	19.4	8.2	7.4	7.8	4.0	3.5	3.7	4.2	3.6	4.0
3	20.7	19.3	20.3	7.8	7.0	7.4	3.7	2.8	3.1	3.6	1.7	2.8
4	20.6	19.9	20.2	7.7	6.6	7.2	2.8	1.8	2.1	1.7	1.2	1.4
5	21.4	19.8	20.6	7.6	6.7	7.2	1.9	1.2	1.6	1.7	1.3	1.5
6	20.4	19.5	19.9	8.4	7.6	8.0	1.8	1.3	1.6	1.9	1.5	1.7
7	20.2	18.4	19.4	8.8	8.1	8.6	2.0	1.6	1.8	1.8	1.0	1.4
8	19.2	17.2	18.2	8.5	7.8	8.0	2.1	1.7	1.9	1.5	0.8	1.1
9	17.8	17.0	17.2	8.3	7.9	8.1	2.1	1.5	1.9	2.6	1.5	2.0
10	17.0	16.0	16.6	9.8	8.3	9.3	---	---	---	2.9	2.4	2.6
11	16.1	15.5	15.9	11.7	9.8	11.1	---	---	---	2.7	1.4	2.0
12	15.9	15.5	15.7	12.7	11.7	12.3	---	---	---	1.4	1.0	1.1
13	15.9	15.3	15.7	12.7	11.5	12.3	---	---	---	1.2	0.8	1.0
14	15.3	13.8	14.9	11.5	10.3	10.7	3.3	2.5	2.9	1.1	0.8	1.0
15	13.8	13.0	13.4	10.3	9.6	10	3.8	3.3	3.6	1.1	0.7	0.9
16	---	---	---	10.1	9.4	9.7	3.8	3.1	3.7	0.8	0.4	0.6
17	12.7	12.3	12.5	9.4	7.9	8.5	3.1	1.5	2.1	1.0	0.4	0.7
18	12.6	12.1	12.3	7.9	7.2	7.4	1.5	1.0	1.2	0.7	0.1	0.3
19	12.2	11.7	11.9	7.2	6.5	6.7	1.9	1.0	1.3	0.4	0.2	0.2
20	12.1	11.4	11.7	6.6	6.2	6.4	3.3	1.9	2.6	0.4	0.1	0.2
21	12.0	11.3	11.7	6.9	6.4	6.6	3.9	3.3	3.6	0.3	0.1	0.2
22	11.8	11.0	11.3	7.6	6.9	7.3	3.6	3.3	3.4	0.4	0.1	0.2
23	11.5	10.5	11.1	7.5	6.7	7.2	3.6	3.5	3.5	0.4	0.1	0.2
24	11.1	10.3	10.8	6.7	6.1	6.3	3.5	3.0	3.2	0.4	0.1	0.2
25	10.5	10.1	10.3	6.5	5.9	6.2	3.1	2.0	2.6	0.5	0.2	0.3
26	11.2	10.2	10.6	6.7	6.4	6.6	2.0	1.7	1.8	0.3	0.2	0.2
27	11.5	11.0	11.3	6.7	5.6	6.2	2.3	1.9	2.1	0.3	0.1	0.2
28	11.3	10.8	11.1	5.6	4.2	4.9	2.4	2.1	2.2	0.4	0.1	0.2
29	11.1	10.0	10.3	4.2	3.8	3.9	2.6	2.2	2.4	0.3	0.2	0.2
30	10.0	8.8	9.4	4.3	3.7	4.0	2.8	2.3	2.6	0.4	0.1	0.2
31	9.4	8.1	8.8	---	---	---	3.7	2.8	3.2	0.3	0.2	0.3
MONTH	21.4	8.1	14.4	12.7	3.7	7.8	4.2	1.0	2.6	4.4	0.1	1.1
		FEBRUARY			MARCH			APRIL			MAY	
1	0.5	0.3	0.4	0.9	0.6	0.8	8.5	6.4	7.0	17.1	15.1	16.1
2	1.0	0.5	0.8	1.3	0.9	1.1	9.2	6.1	7.3	18.1	16.4	17.3
3	2.4	1.0	1.7	1.4	0.8	1.1	10.0	8.5	9.1	18.4	17.1	17.9
4	3.5	2.4	3.1	1.1	0.4	0.7	9.8	8.2	9.1	17.8	15.9	16.4
5	3.4	2.7	3.1	1.4	0.9	1.2	8.2	7.0	7.5	16.0	14.3	14.8
6	2.7	1.5	1.9	1.4	0.5	1.1	7.8	6.6	7.1	14.6	13.6	14.0
7	1.7	0.9	1.2	0.9	0.1	0.5	7.7	5.9	7.2	15.8	13.5	14.5
8	1.1	0.6	0.9	1.8	0.7	1.2	5.9	4.9	5.2	16.6	15.7	16.1
9	1.2	0.6	0.8	2.6	1.6	2.1	5.3	4.9	5.1	16.6	16.1	16.3
10	1.4	0.8	1.2	2.2	1.6	1.9	6.5	5.1	5.8	16.6	15.3	16.0
11	1.6	0.9	1.2	1.8	1.1	1.5	6.9	6.3	6.7	16.6	15.9	16.2
12	1.3	0.4	1.0	2.7	1.7	2.1	8.8	6.5	7.4	16.4	16.1	16.2
13	1.0	0.3	0.6	3.2	2.7	3.0	11.5	8.8	9.8	16.1	15.4	15.6
14	0.9	0.2	0.5	3.4	2.6	3.0	12.4	9.9	11.0	15.5	14.9	15.1
15	0.7	0.3	0.4	4.3	3.0	3.7	14.6	10.9	12.4	---	---	---
16	0.5	0.2	0.3	5.7	4.1	4.9	16.8	13.8	15.1	15.6	15.2	15.3
17	0.2	0.1	0.2	7.2	5.6	6.5	16.4	12.3	14.3	15.7	15.0	15.2
18	0.2	0.2	0.2	8.0	7.1	7.5	12.3	9.9	10.7	15.9	14.9	15.3
19	0.2	0.2	0.2	7.8	6.8	7.2	11.3	9.6	10.4	16.9	15.2	16.0
20	0.3	0.2	0.2	6.9	5.4	6.0	13.1	11.1	12.1	18.1	16.0	17.1
21	0.4	0.1	0.2	---	---	---	13.5	12.0	12.8	17.9	17.0	17.5
22	0.9	0.2	0.4	---	---	---	13.7	12.3	13.0	17.1	15.9	16.6
23	1.3	0.9	1.2	---	---	---	13.3	12.4	12.8	15.9	14.7	15.2
24	1.0	0.5	0.7	---	---	---	12.6	11.3	12.1	14.7	14.1	14.4
25	0.8	0.2	0.5	---	---	---	13.7	11.1	12.4	14.2	14.0	14.1
26	0.4	0.1	0.2	11.6	10.1	10.9	13.6	12.6	13.1	14.4	14.0	14.2
27	0.6	0.1	0.3	12.2	10.1	11.2	14.2	12.7	13.5	---	---	---
28	0.9	0.3	0.6	12.4	10.6	11.5	16.0	13.1	14.6	---	---	---
29	---	---	---	13.0	11.7	12.2	16.4	14.7	15.6	---	---	---
30	---	---	---	12.9	10.3	11.8	16.6	14.9	15.9	---	---	---
31	---	---	---	10.3	8.3	8.9	---	---	---	---	---	---
MONTH	3.5	0.1	0.9	13.0	0.1	4.8	16.8	4.9	10.5	18.4	13.5	15.7

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

TEMPERATURE FROM RIGHT INTAKE, IN 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	---	---	---	23.8	22.6	23.2	23.6	23.0	23.4	22.7	21.5	22.3
2	---	---	---	24.0	22.6	23.3	24.0	23.0	23.5	21.5	19.3	20.4
3	---	---	---	23.7	22.9	23.3	24.8	23.9	24.3	19.3	18.5	18.7
4	---	---	---	24.4	22.6	23.5	25.2	24.5	24.8	19.1	18.4	18.7
5	---	---	---	25.3	23.5	24.3	25.1	23.8	24.6	20.6	19.0	19.8
6	16.0	15.0	15.4	26.3	25.0	25.6	24.2	23.8	24.0	21.0	19.8	20.5
7	16.0	15.8	16.0	26.7	25.9	26.3	23.9	23.5	23.7	20.8	19.7	20.3
8	16.1	15.8	15.9	26.7	26.3	26.5	23.6	23.3	23.4	20.8	20.3	20.5
9	16.6	15.9	16.2	26.5	25.0	25.9	23.5	23.1	23.3	21.1	20.5	20.7
10	17.9	16.5	17.1	25.0	22.9	24.0	23.9	23.0	23.4	21.3	20.4	20.8
11	18.5	17.8	18.1	22.9	22.2	22.5	24.0	23.6	23.8	21.3	20.3	20.7
12	19.5	18.5	18.9	23.0	21.8	22.4	24.4	23.6	24.0	21.3	20.1	20.6
13	19.5	18.7	19.2	23.8	22.8	23.3	25.0	23.9	24.5	20.6	20.1	20.3
14	19.1	18.2	18.7	23.7	23.0	23.4	---	---	---	21.2	20.0	20.6
15	19.6	18.8	19.2	24.2	22.9	23.4	25.2	24.4	24.8	22.1	21.1	21.5
16	19.5	19.1	19.3	24.6	23.3	23.8	24.9	24.3	24.6	22.4	21.6	22.0
17	19.1	18.2	18.6	25.1	23.4	24.2	24.7	24.1	24.4	21.6	20.7	21.1
18	18.6	18.1	18.2	24.4	23.4	24.0	24.1	23.4	23.8	20.8	19.7	20.2
19	18.6	18.2	18.4	24.7	22.9	23.7	24.0	22.7	23.4	20.6	19.6	20.1
20	18.6	18.4	18.5	24.8	22.8	23.8	24.4	22.9	23.8	21.6	20.6	21.2
21	18.4	17.2	17.9	24.5	23.2	23.7	25.1	23.8	24.4	21.5	20.7	21.1
22	17.2	16.7	16.8	24.2	23.2	23.6	25.6	24.9	25.3	20.7	19.8	20.2
23	18.3	16.6	17.2	23.5	22.8	23.2	25.8	24.8	25.3	20.2	19.7	19.9
24	19.7	18.3	18.9	24.3	22.9	23.6	25.0	23.5	24.5	20.1	19.5	19.8
25	21.0	19.7	20.6	24.6	23.4	23.9	24.3	23.0	23.5	19.6	19.0	19.3
26	22.7	20.9	21.6	24.5	23.1	23.8	24.1	22.6	23.2	19.5	19.1	19.3
27	24.0	22.5	23.1	25.0	23.5	24.3	24.5	22.8	23.6	19.8	19.1	19.4
28	23.8	22.8	23.3	25.8	24.3	25.0	---	---	---	20.3	19.6	20.0
29	23.4	22.4	22.9	25.5	24.5	25.1	---	---	---	19.8	18.6	19.4
30	23.4	22.7	23.1	25.1	24.1	24.5	---	---	---	18.6	17.2	17.8
31	---	---	---	24.5	23.4	23.9	---	---	---	---	---	---
MONTH	24.0	15.0	18.9	26.7	21.8	24.0	25.8	22.6	24.1	22.7	17.2	20.2
YEAR	26.7	0.1	12.0									

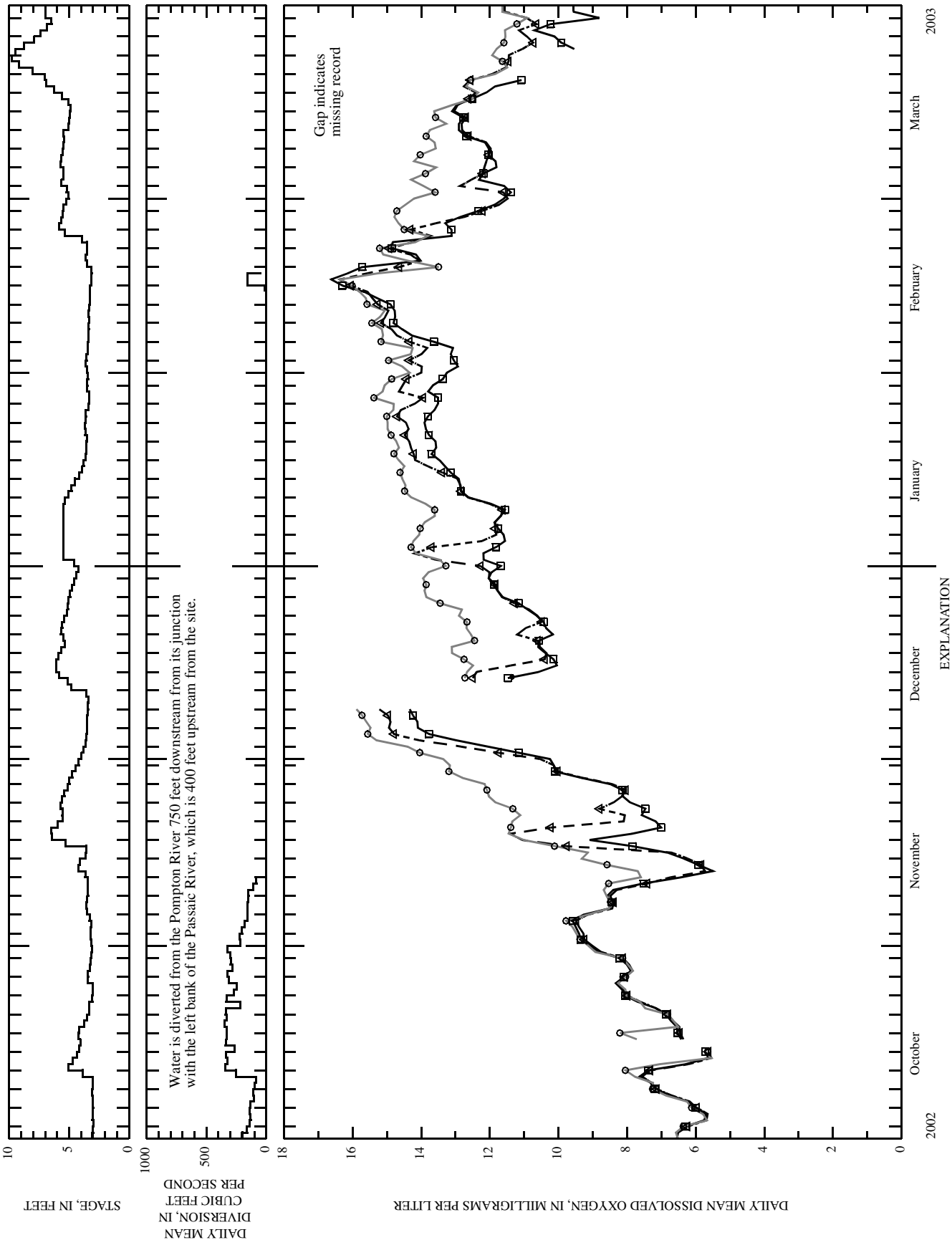


Figure 33. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2003.

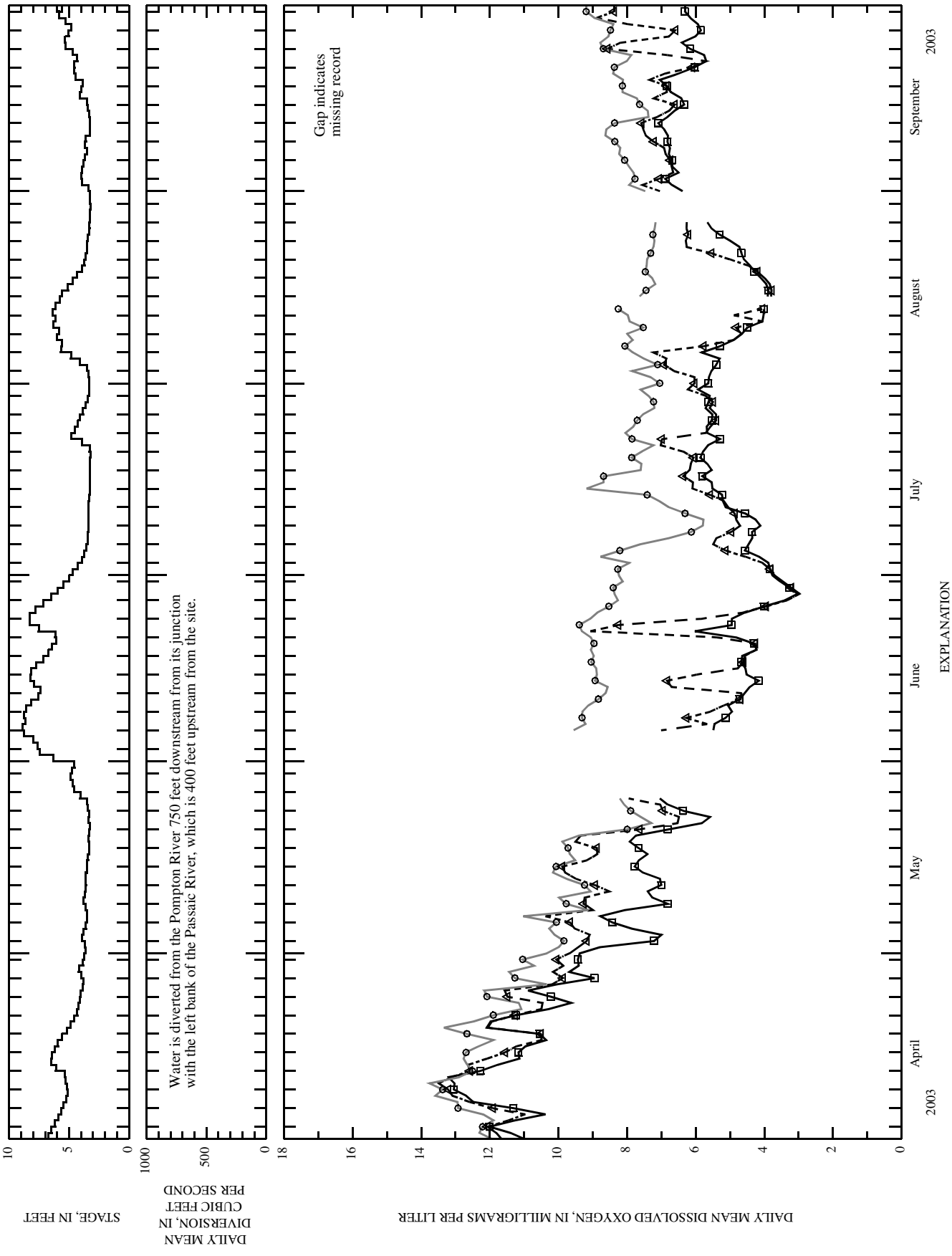


Figure 33. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2003--continued.

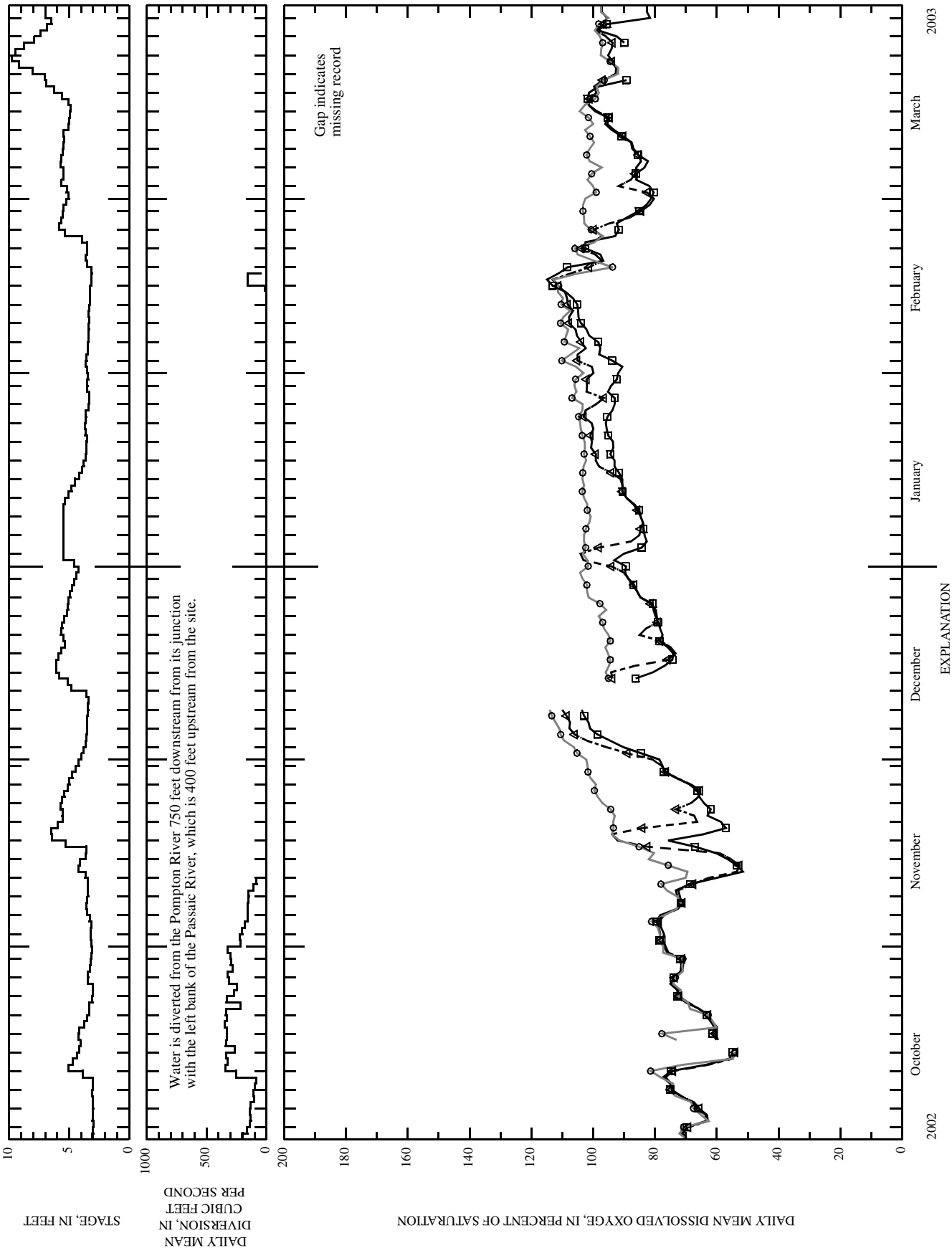


Figure 33. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2003--continued.

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

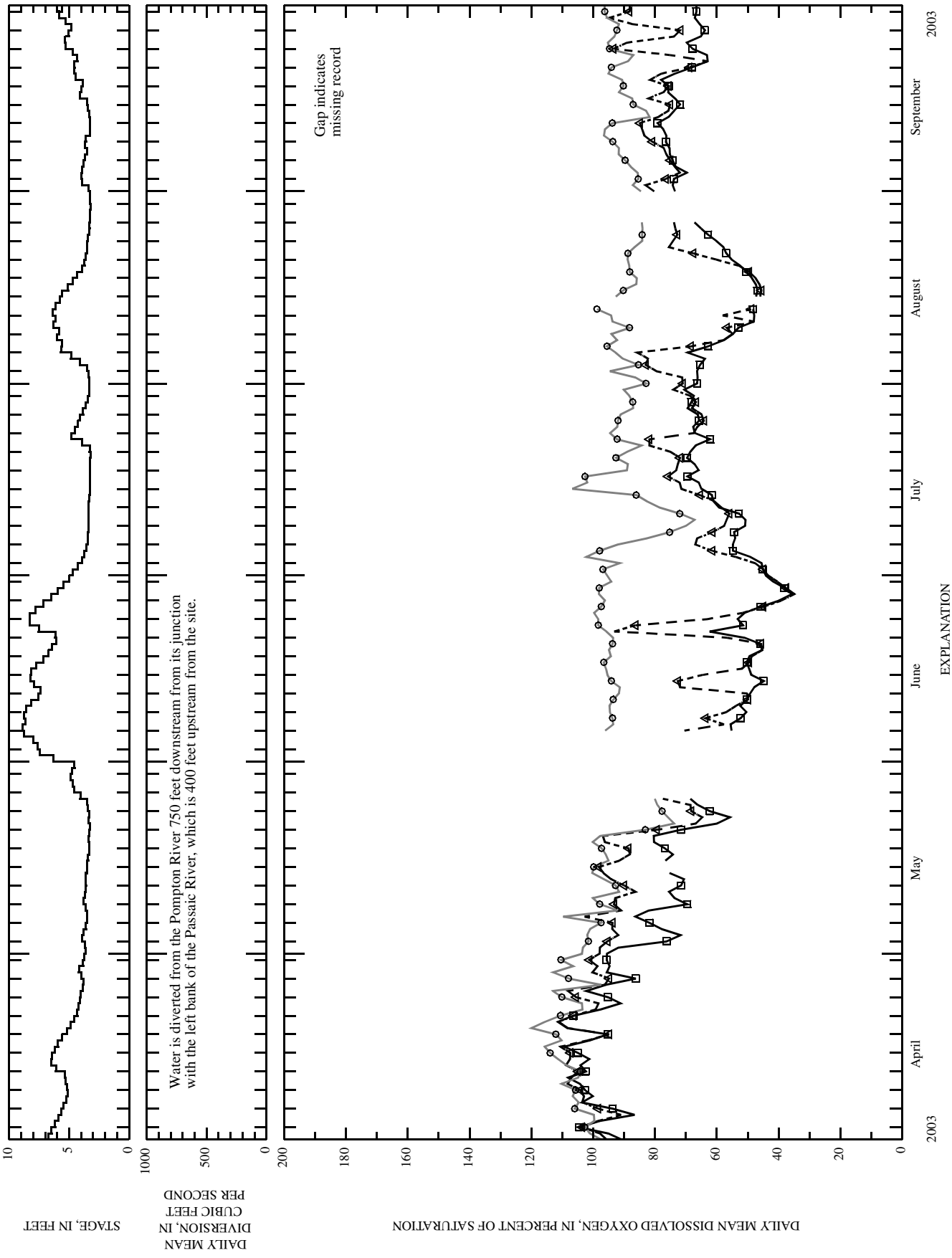


Figure 33. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2003--continued.

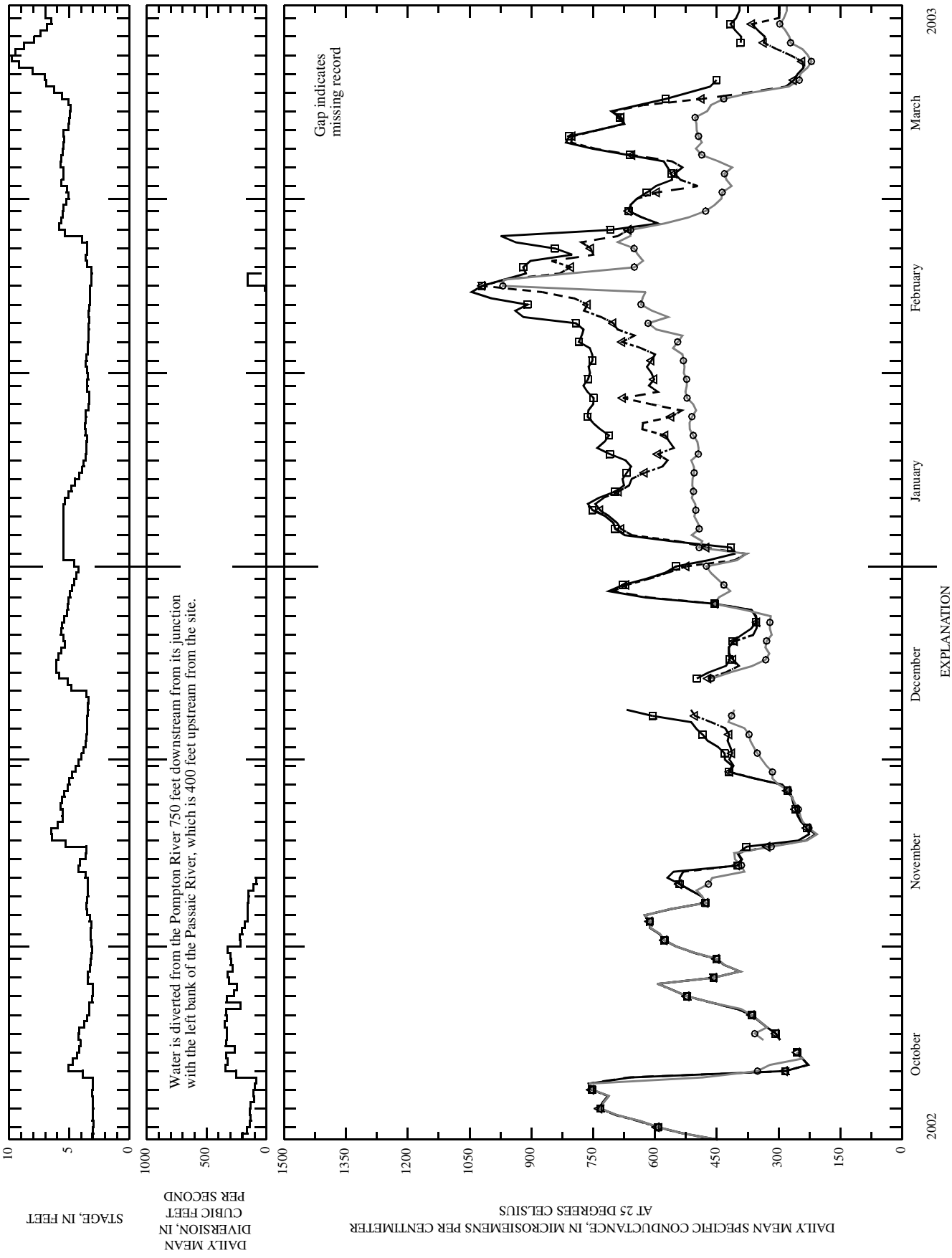


Figure 33. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2003--continued.

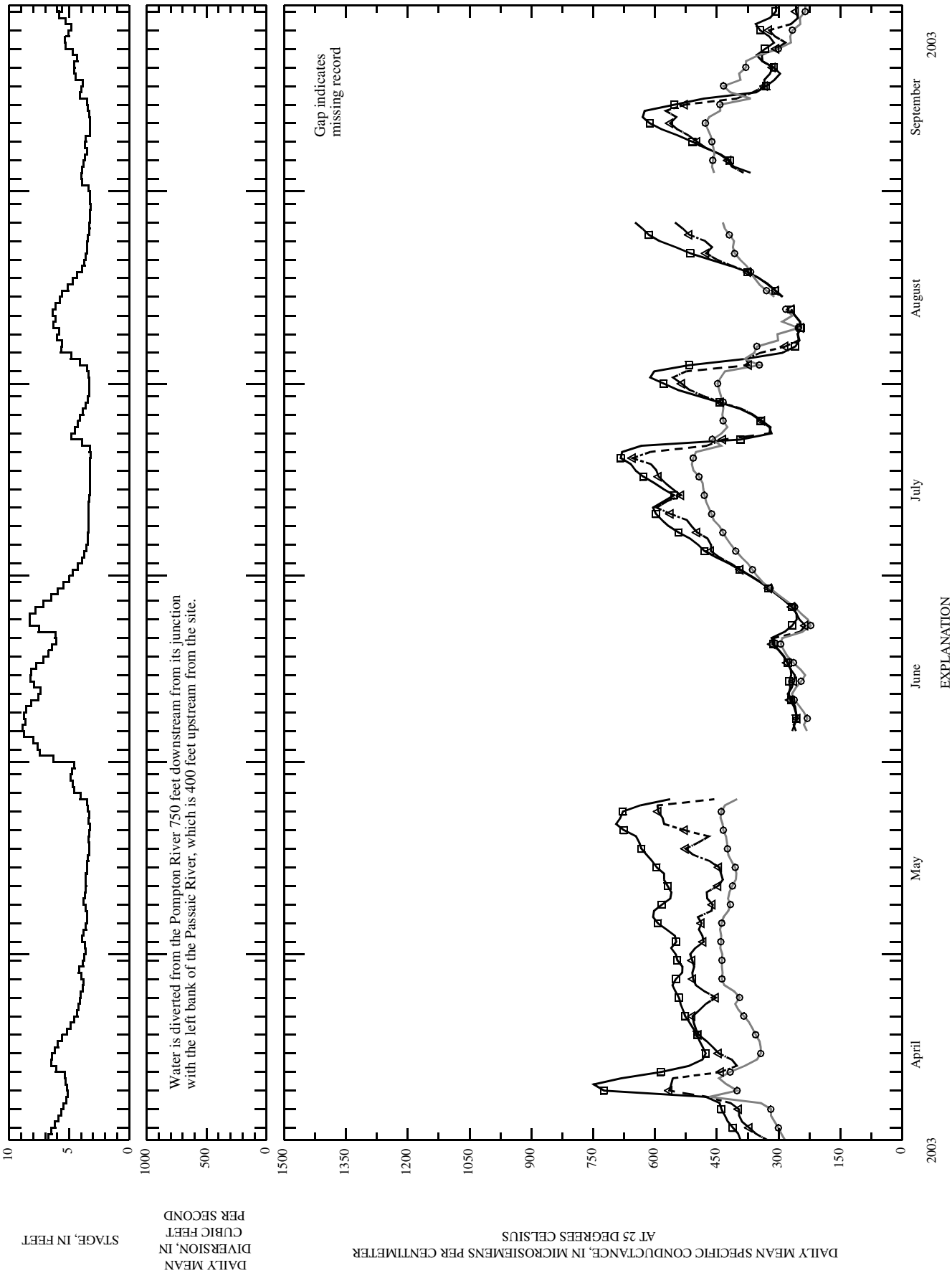


Figure 33. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2003--continued.

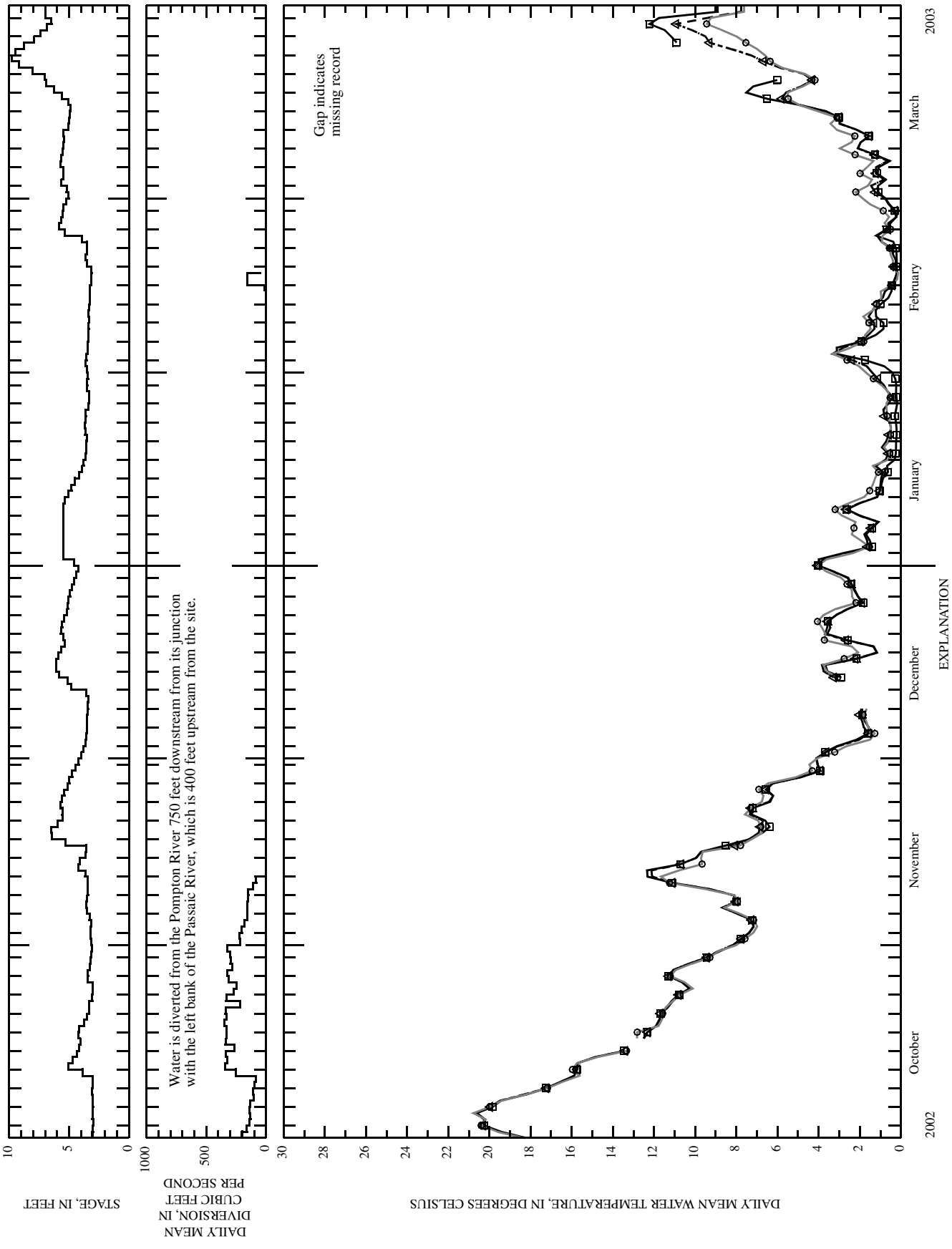


Figure 33. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2003--continued.

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

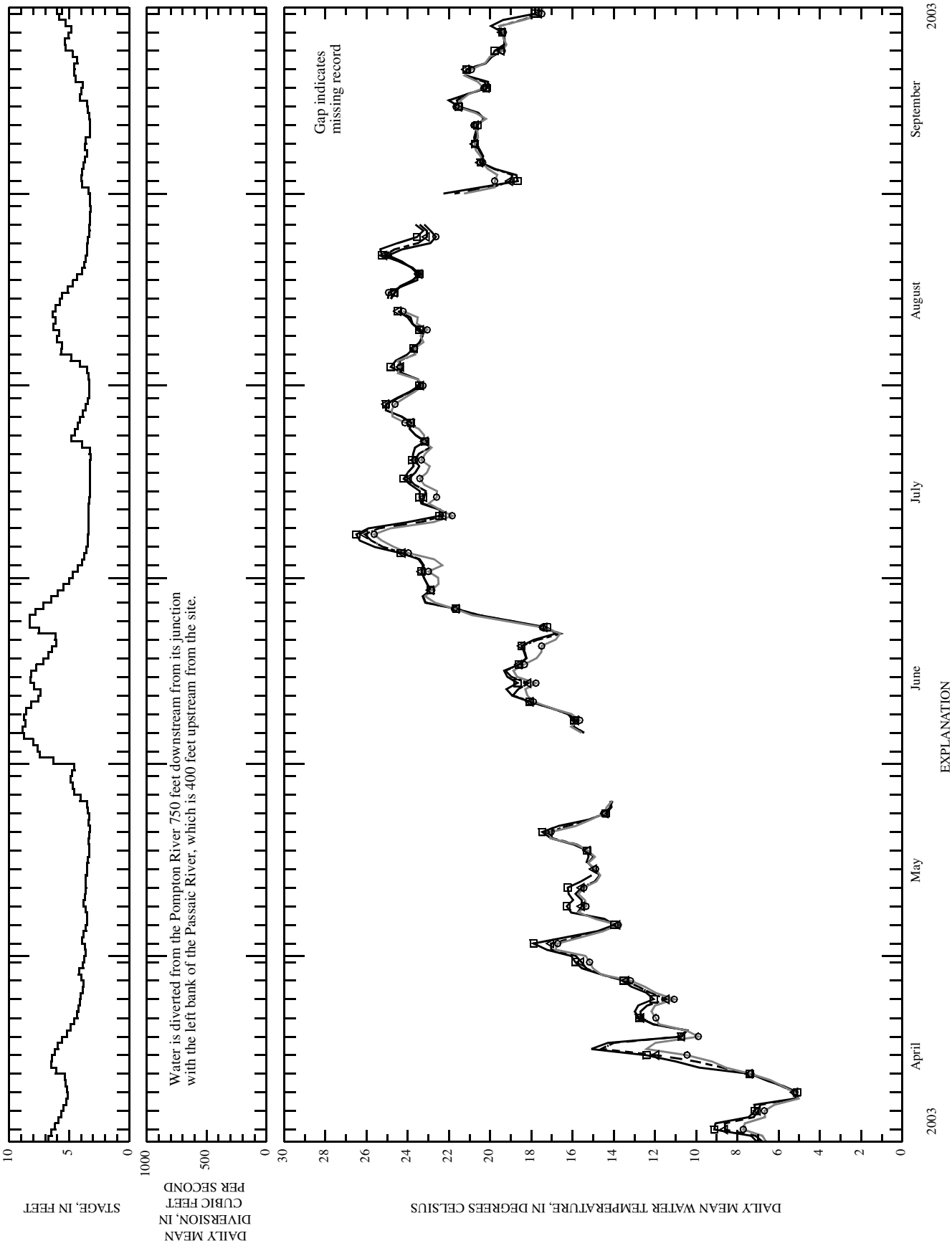
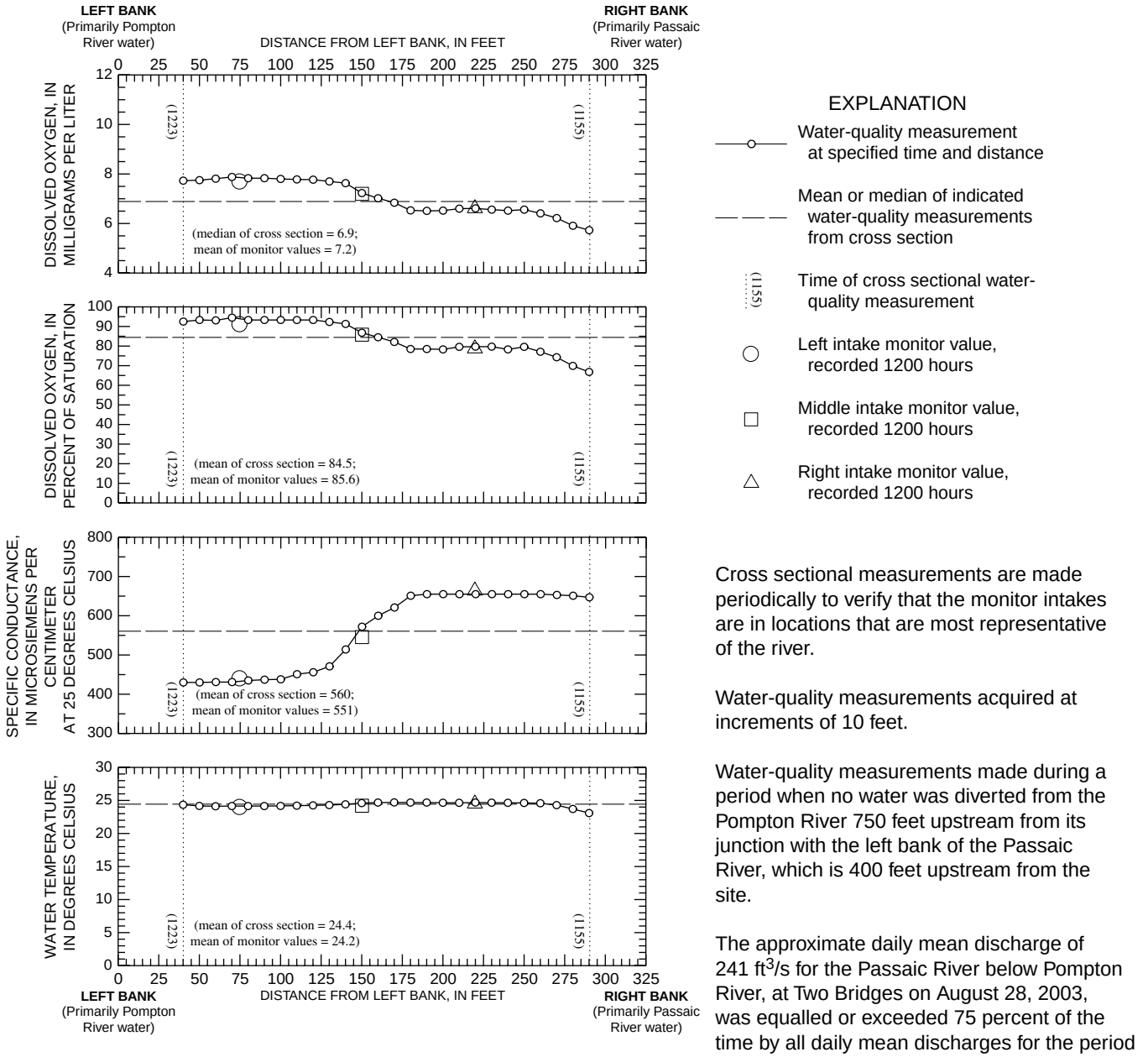


Figure 33. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River, at Two Bridges, water year 2003--continued.



EXPLANATION

- Water-quality measurement at specified time and distance
- Mean or median of indicated water-quality measurements from cross section
- (1155) Time of cross sectional water-quality measurement
- Left intake monitor value, recorded 1200 hours
- Middle intake monitor value, recorded 1200 hours
- Right intake monitor value, recorded 1200 hours

Cross sectional measurements are made periodically to verify that the monitor intakes are in locations that are most representative of the river.

Water-quality measurements acquired at increments of 10 feet.

Water-quality measurements made during a period when no water was diverted from the Pompton River 750 feet upstream from its junction with the left bank of the Passaic River, which is 400 feet upstream from the site.

The approximate daily mean discharge of 241 ft^3/s for the Passaic River below Pompton River, at Two Bridges on August 28, 2003, was equalled or exceeded 75 percent of the time by all daily mean discharges for the period of record at Passaic River below Pompton River, at Two Bridges.

Figure 34. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River, at Two Bridges, August 21, 2003.

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ

LOCATION.--Lat 40°53'05", long 74°13'34", Passaic County, Hydrologic Unit 02030103, 0.6 mi downstream from Beatties Dam in Little Falls, and 1.0 mi upstream from Peckman River.

DRAINAGE AREA.--762 mi^2.

PERIOD OF RECORD.--Water years 1963-96, 1998 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to November 1986.
WATER TEMPERATURE: Water years 1963 to 1980 (once daily), September 1980 to November 1986.
DISSOLVED OXYGEN: October 1970 to September 1980 (once daily).
SUSPENDED-SEDIMENT DISCHARGE: August 1963 to July 1965.

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

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 4.

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...	1000	682	3.5	0.178	0.136	771	11.7	84	7.6	456	4.5	2.0	110
FEB													
06...	1000	489	3.3	0.081	0.061	770	12.9	93	7.7	701	-5.0	1.9	150
MAY													
07...	1000	637	5.5	0.149	0.112	759	8.9	86	7.6	547	17.8	13.6	120
AUG													
12...	0900	2,950	9.2	0.314	0.242	766	7.0	83	7.2	266	23.1	24.1	71

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...	28.0	8.94	2.55	39.5	62	73.9	<0.17	12.1	25.9	237	250	8	0.44
FEB													
06...	38.7	12.2	3.76	69.6	76	131	<0.17	10.9	29.3	360	380	3	0.42
MAY													
07...	32.4	10.3	3.04	53.4	72	101	<0.17	7.6	21.1	281	309	5	0.42
AUG													
12...	19.0	5.64	2.15	25.7	48	42.9	<0.17	10.2	11.1	149	179	15	0.54

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...	0.126	0.141	1.87	0.015	0.227	0.07	0.23	0.27	2.3	2.4	0.4	<0.1	0.4
FEB													
06...	0.070	0.065	3.84	0.027	0.387	0.10	0.38	0.41	4.3	4.4	0.5	<0.1	0.5
MAY													
07...	0.073	0.083	1.75	0.022	0.231	0.17	0.23	0.30	2.2	2.3	0.9	<0.1	0.9
AUG													
12...	0.051	0.057	0.60	0.014	0.178	0.15	0.14	0.23	1.1	1.3	1.2	<0.1	1.2

01389500 PASSAIC RIVER AT LITTLE FALLS, 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...	5.0	E1.4	--	82
FEB				
06...	3.0	E1.6	--	107
MAY				
07...	4.4	E1.6	25.0	86
AUG				
12...	7.4	<1.0	9.00	58

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...	1126	110	500	300	11...	1140	300	200	5,000
AUG					18...	1135	100	300	2,200
04...	1120	790	1,400	1,300	25...	1130	110	300	500

01390400 SADDLE RIVER AT OLD STONE CHURCH ROAD, AT UPPER SADDLE RIVER, NJ

LOCATION.--Lat 41°04'16", long 74°05'18", Bergen County, Hydrologic Unit 02030103, at bridge on Old Stone Church Road, 0.6 mi downstream of Penners Lake, 1.0 mi north of Upper Saddle River, and 3.7 mi southeast of Mahwah.

DRAINAGE AREA.-- 6.32 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 4.

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...	0715	0.4	0.104	0.079	747	10.9	91	8.1	560	-2.0	6.5	180	52.5
MAR													
12...	0730	1.0	0.058	0.044	757	15.1	115	8.2	909	0.5	3.5	190	57.6
MAY													
08...	0715	6.5	0.148	0.111	742	9.0	89	7.9	606	15.0	13.8	140	43.2
AUG													
06...	0900	14	0.237	0.182	752	8.7	98	7.8	321	25.4	20.6	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...	10.9	1.60	38.2	E121	78.0	<0.17	9.5	18.0	--	297	2	0.18	<0.030
MAR													
12...	11.2	1.51	104	111	199	<0.17	6.1	19.1	473	493	<1	0.14	<0.030
MAY													
08...	8.42	1.81	60.2	98	111	<0.17	5.4	13.2	308	355	10	0.32	0.036
AUG													
06...	4.55	1.87	28.5	69	52.2	<0.17	7.6	8.5	175	205	15	0.52	0.066

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...	0.077	1.52	0.003	0.039	<0.02	0.026	0.029	1.7	--	0.2	<0.1	0.2	3.2
MAR													
12...	<0.030	1.67	0.004	0.022	0.08	0.007	0.016	1.8	1.9	0.3	<0.1	0.3	2.0
MAY													
08...	0.097	1.21	0.024	<0.020	0.33	0.011	0.013	1.5	1.9	2.5	<0.1	2.5	4.3
AUG													
06...	0.102	0.91	0.016	--	0.19	0.063	0.120	1.4	1.6	2.0	<0.1	2.0	6.6

01390400 SADDLE RIVER AT OLD STONE CHURCH ROAD, AT UPPER SADDLE RIVER, 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...	E1.6	--	42
MAR			
12...	E1.2	--	34
MAY			
08...	3.3	22.6	34
AUG			
06...	E1.7	4.00	37

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											
06...	*0859*	*Field Blank*	--	--	--	--	--	--	--	--	--
06...	0900	Environmental	--	--	--	--	--	E1	35.5	<0.06	42
06...	0900	Bed material	7.26	190	5,900	3.0	<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													
06...	--	--	*<0.2*	--	--	*<0.08*	--	--	*<0.02*	--	*<0.06*	--	--
06...	<0.04	E.7	--	4.0	690	--	3.19	68.5	--	E.01	--	2.19	0.6
06...	--	--	--	--	--	--	--	--	--	--	--	--	--

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													
06...	--	*<1*	--	--	--	--	--	--	--	--	--	--	--
06...	E.11	--	11	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	<1	0.050	5.4	2.4	7	7,000	5.2	260	<0.01	5.5

01390400 SADDLE RIVER AT OLD STONE CHURCH ROAD, AT UPPER SADDLE RIVER, 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													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<1	33	<50	E10	E13	71	67	E3	E12	E7	57	190	150

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													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	110	53	1,500	820	800	860	E380	690	930	130	2,200	490	<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												
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	E11	E7	<50	1,500	E31	1,700	1.2	0.2	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)
MAR													
12...	0730	<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													
12...	<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

01390400 SADDLE RIVER AT OLD STONE CHURCH ROAD, AT UPPER SADDLE RIVER, 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)
MAR									
12...	<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-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													
08...	0715	<0.006	E.011	<0.006	<0.004	<0.005	0.021	<0.050	<0.010	<0.002	E.070	<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													
08...	<0.003	<0.004	0.011	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	0.046	E.006	<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						
08...	<0.025	E.01	0.010	<0.02	<0.034	E.002

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

01390400 SADDLE RIVER AT OLD STONE CHURCH ROAD, AT UPPER SADDLE RIVER, 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)
JUN				
30...	1006	100	<100	40
JUL				
07...	0958	6,300	1,200	>16000
JUL				
14...	1000	180	200	230
21...	1015	4,500	8,000	>16000
28...	1000	320	600	300

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

01390800 VALENTINE BROOK AT ALLENDALE, NJ

LOCATION.--Lat 41°01'53", long 74°09'09", Bergen County, Hydrologic Unit 02030103, at bridge on Forest Road, 0.5 mi upstream of mouth, 1.4 mi southwest of Allendale, and 2.3 mi northwest of Waldwick.

DRAINAGE AREA.--2.48 mi^2.

PERIOD OF RECORD.--Water years 1963, 1965, 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 4.

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													
20...	0715	2.0	0.229	0.180	744	9.6	81	7.6	740	-2.0	7.0	200	58.1
MAR													
11...	1000	2.8	0.114	0.086	761	13.8	98	7.8	1,180	-1.5	1.0	240	70.0
MAY													
07...	0715	1.4	0.108	0.081	740	8.3	76	7.7	1,040	8.0	9.9	250	72.5
AUG													
13...	1100	1.6	0.200	0.151	760	7.5	82	7.6	792	27.5	20.1	230	64.0

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													
20...	14.2	2.34	57.6	E125	133	<0.17	13.8	24.4	310	415	5	0.30	<0.030
MAR													
11...	15.5	2.31	137	125	273	<0.17	12.0	26.1	618	656	7	0.26	<0.030
MAY													
07...	17.6	2.48	98.2	154	212	<0.17	9.8	22.6	534	606	3	0.35	<0.030
AUG													
13...	16.0	2.58	80.1	129	161	<0.17	15.2	18.7	440	485	3	0.36	0.075

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													
20...	<0.030	1.15	0.009	0.029	0.09	0.029	0.044	1.5	1.6	0.6	<0.1	0.6	5.9
MAR													
11...	0.049	1.58	0.012	0.024	0.06	0.012	0.034	1.8	1.9	0.4	<0.1	0.4	3.2
MAY													
07...	<0.030	1.35	0.019	<0.020	0.04	0.010	0.029	1.7	1.7	0.3	<0.1	0.3	3.6
AUG													
13...	0.081	1.13	0.018	0.039	0.03	0.038	0.060	1.5	1.5	0.3	<0.1	0.3	5.1

01390800 VALENTINE BROOK AT ALLENDALE, 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			
20...	E1.6	--	43
MAR			
11...	<1.0	--	33
MAY			
07...	<1.0	13.2	42
AUG			
13...	<1.0	3.80	48

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...	1100	--	--	--	--	--	<2	64.5	<0.06	44	<0.04	<0.8	3.6
13...	1100	7.40	120	6,200	3.9	0.6	--	--	--	--	--	--	--

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...	290	0.49	118	<0.02	3.17	0.5	<0.16	4	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	<1	0.080	7.1	2.9	9

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...	7,300	8.8	250	<0.01	6.0	<1	51	<50	E11	E13	E34	E33	E10

01390800 VALENTINE BROOK AT ALLENDALE, 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													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	E12	<50	E24	74	E45	E27	E18	100	380	400	460	260	350

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												
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	520	88	1,100	340	<50	<50	E2	<50	570	E23	740	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)
MAR													
11...	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

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													
11...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	0.4

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									
11...	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

01390800 VALENTINE BROOK AT ALLENDALE, 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													
07...	0715	<0.006	<0.006	<0.006	<0.004	<0.005	E.004	<0.050	<0.010	<0.002	E.005	<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													
07...	<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						
07...	<0.022	E.01	E.005	<0.02	<0.034	E.002

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				
30...	1022	490	1,000	800
JUL				
07...	1016	40,800	54,000	>16000

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				
14...	1017	640	1,100	1,300
21...	1032	6,700	12,000	>16000
28...	0926	2,800	800	2,400

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

01391500 SADDLE RIVER AT LODI, NJ

LOCATION.--Lat 40°53'25", long 74°04'50", Bergen County, Hydrologic Unit 02030103, 560 ft upstream from bridge on Outwater Lane in Lodi and 3.2 mi upstream from mouth. Water-quality samples collected at bridge on Outwater Lane at high flows.

DRAINAGE AREA.--54.6 mi^2.

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

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 4.

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...	0715	91	2.8	0.171	0.132	750	8.6	75	7.5	733	3.0	8.5	190
FEB													
26...	1000	103	4.3	0.120	0.093	776	12.3	86	7.5	953	-3.2	1.2	190
MAY													
13...	0715	81	2.7	0.112	0.086	739	6.1	60	7.5	855	10.0	12.9	220
AUG													
13...	0900	129	8.8	0.192	0.145	768	7.0	80	7.7	508	25.2	22.0	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													
21...	54.5	13.6	4.60	55.4	E120	110	<0.17	12.1	28.0	--	399	12	0.83
FEB													
26...	54.8	12.6	3.51	107	117	194	<0.17	11.0	23.4	493	494	6	1.3
MAY													
13...	61.8	15.7	4.64	75.8	127	147	<0.17	10.8	23.4	439	469	12	1.4
AUG													
13...	47.0	11.2	3.62	53.8	103	102	<0.17	12.6	19.0	326	354	19	0.55

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...	0.398	0.422	4.84	0.103	0.594	0.17	0.64	0.70	5.7	5.8	1.2	<0.1	1.2
FEB													
26...	0.809	0.883	3.30	0.100	0.339	0.09	0.35	0.40	4.6	4.7	0.7	<0.1	0.7
MAY													
13...	0.692	0.810	4.67	0.222	0.606	0.13	0.60	0.68	6.1	6.2	1.1	<0.1	1.0
AUG													
13...	0.086	0.097	3.02	0.061	--	0.14	0.36	0.45	3.6	3.7	1.1	<0.1	1.1

01391500 SADDLE RIVER AT LODI, 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...	5.0	E1.7	--	80
FEB				
26...	4.0	E1.2	--	67
MAY				
13...	4.2	3.3	6.80	87
AUG				
13...	5.3	E1.1	11.2	78

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				
30...	1053	480	700	1,100
JUL				
07...	1046	300	1,100	260
JUL				
14...	1046	900	1,500	1,300
21...	1103	8,700	16,000	2,400
28...	1025	1,000	1,300	3,000