

01410865 SQUANKUM BRANCH AT MALAGA ROAD, NEAR WILLIAMSTOWN, NJ

LOCATION.--Lat 39°40'04", long 74°57'38", Gloucester County, Hydrologic Unit 02040302, at bridge on Malaga Road, 1.2 mi upstream from Hedges Branch, 2.0 mi southeast of Williamstown, and 2.1 mi southwest of New Brooklyn.

DRAINAGE AREA.--3.02 mi².

PERIOD OF RECORD.--Water years 1974-1978, 2003 to current year.

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 15.

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 unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV 07...	0930	3.7	0.857	0.673	759	7.3	64	6.0	92	8.0	9.5	20	4.82
FEB 13...	0930	3.2	0.211	0.159	760	10.4	76	5.5	190	-4.5	2.3	26	5.68
MAY 01...	0930	0.9	0.292	0.222	759	7.5	70	6.0	140	15.0	12.1	25	5.79
AUG 12...	1000	1.6	0.403	0.310	759	5.1	54	6.3	151	27.0	17.7	31	8.17

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 unfltrd fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV 07...	2.01	1.08	8.38	13	6.21	<0.17	4.6	11.2	49	80	<1	0.56	<0.030
FEB 13...	2.89	1.44	22.3	E8	38.3	<0.17	6.0	9.3	--	107	7	0.23	<0.030
MAY 01...	2.54	1.44	15.0	11	21.6	<0.17	5.0	10.3	74	88	1	0.28	<0.030
AUG 12...	2.51	1.94	15.1	17	22.3	<0.17	7.1	9.5	82	96	<1	0.41	0.056

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

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV 07...	<0.030	0.64	0.005	0.036	0.06	0.030	0.040	1.2	1.3	0.6	<0.1	0.6	17.7
FEB 13...	0.034	1.70	<0.003	0.023	--	0.008	0.020	1.9	2.4	0.9	<0.1	0.9	4.9
MAY 01...	<0.030	1.27	<0.003	0.022	0.04	0.012	0.017	1.6	1.6	0.1	<0.1	<0.1	6.4
AUG 12...	0.054	1.24	0.005	0.028	0.05	0.025	0.040	1.6	1.7	0.5	<0.1	0.5	8.2

01410865 SQUANKUM BRANCH AT MALAGA ROAD, NEAR WILLIAMSTOWN, NJ—Continued

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

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro- phyll a fluoro- metric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV 07...	<1.0	--	27
FEB 13...	<1.0	--	23
MAY 01...	<1.0	1.60	27
AUG 12...	E1.9	0.200	30

Remark codes used in this table:

< -- Less than

E -- Estimated value

WATER-COLUMN TRACE-ELEMENT ANALYSES

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

Date	Time	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover -able, ug/L (01007)	Beryll- ium, water, unfltrd recover -able, ug/L (01012)	Boron, water, unfltrd recover -able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chrom- ium, water, unfltrd recover -able, ug/L (01034)	Copper, water, unfltrd recover -able, ug/L (01042)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan- ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, unfltrd recover -able, ug/L (71900)	Nickel, water, unfltrd recover -able, ug/L (01067)
AUG 12...	1000	<2	75.2	0.06	24	0.07	<0.8	1.9	380	1.43	36.1	0.11	2.43

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

Date	Selen- ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover -able, ug/L (01077)	Zinc, water, unfltrd recover -able, ug/L (01092)
AUG 12...	0.8	<0.16	22

Remark codes used in this table:

< -- Less than

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

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

Date	Time	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	Benzene water unfltrd ug/L (34030)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Chloro- benzene water unfltrd ug/L (34301)
FEB 13...	0930	0.4	<0.1	<0.1	0.2	<0.1	<0.2	<0.1	<0.1	<0.1	0.1	<0.1	<0.1

01410865 SQUANKUM BRANCH AT MALAGA ROAD, NEAR WILLIAMSTOWN, NJ—Continued

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

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	Di-bromochloromethane water unfltrd ug/L (32105)	Di-chloro-di-fluoromethane wat unfltrd ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethylbenzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta+ para-Xylene, water, unfltrd ug/L (85795)	o-Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB 13...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	10.5

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 chloride, water, unfltrd ug/L (39175)
FEB 13...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2

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

WATER-COLUMN PESTICIDE ANALYSES

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

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

Date	Time	2,6-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 01...	0930	<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)	Desulf-inyl fipronil, 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-fipronil 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)	Malathion, 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 01...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	E.002	<0.006	<0.007

01410865 SQUANKUM BRANCH AT MALAGA ROAD, NEAR WILLIAMSTOWN, NJ—Continued

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 01...	<0.022	0.03	0.007	<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	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				
09...	1030	110	<100	20	06...	1110	2,900	1,200	1,700
16...	1055	100	100	40					
23...	1055	--	700	1,300					
30...	1100	180	<100	70					

Remark codes used in this table:

< -- Less than

01411035 HOSPITALITY BRANCH AT BLUE BELL ROAD, NEAR CECIL, NJ

LOCATION.--Lat 39°38'36", long 74°58'39", Gloucester County, Hydrologic Unit 02040302, at bridge on Blue Bell Road, 1.2 mi upstream of Timber Lakes and 2.0 mi west of Cecil.

DRAINAGE AREA.--4.51 mi².

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

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV 25...	1140	1.9	0.9	0.307	0.235	763	9.2	77	4.9	84	17.0	7.5	21
MAR 05...	1100	11	1.2	0.350	0.267	750	11.1	84	4.2	73	12.0	3.2	16
MAY 13...	1130	5.8	2.9	0.893	0.711	748	7.4	73	5.5	60	15.0	14.0	15
AUG 12...	1130	6.0	17	1.09	0.866	762	5.2	59	5.8	62	28.0	21.6	18

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 unfltrd 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 25...	4.45	2.51	1.54	3.54	2	6.27	<0.17	8.0	15.5	48	62	5	0.26
MAR 05...	3.42	1.85	1.67	3.67	--	7.08	<0.17	5.1	13.5	--	56	<1	0.26
MAY 13...	3.39	1.70	1.89	4.17	6	7.58	<0.17	4.6	6.3	36	70	4	0.59
AUG 12...	4.04	1.92	1.86	4.04	9	7.26	<0.17	7.8	3.5	39	64	7	0.79

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 25...	<0.030	<0.030	1.14	<0.003	<0.020	0.04	0.012	0.016	1.4	1.4	0.2	<0.1	0.2
MAR 05...	<0.030	0.044	0.77	0.004	<0.020	0.03	0.010	0.005	1.0	1.1	0.2	<0.1	0.2
MAY 13...	0.097	0.095	0.56	0.004	<0.020	0.08	0.013	0.032	1.2	1.2	1.2	<0.1	1.2
AUG 12...	0.165	0.198	0.37	0.006	<0.020	0.17	0.014	0.038	1.2	1.3	2.8	<0.1	2.8

01411035 HOSPITALITY BRANCH AT BLUE BELL ROAD, NEAR CECIL, 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)	Chlorophyll a fluorometric method, corrctd ug/L (32209)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
NOV 25...	7.1	<1.0	--	19	--
MAR 05...	7.5	<1.0	--	E12	--
MAY 13...	13.8	<1.0	2.40	14	--
AUG 12...	17.8	<1.0	1.40	13	1,530

Remark codes used in this table:

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

WATER-COLUMN BACTERIA ANALYSES

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

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

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUL 09...	1020	630	1,300	600	AUG 06...	1100	280	800	500
JUL 16...	1045	460	200	130					
JUL 23...	1045	--	1,100	1,400					
JUL 30...	1050	170	200	130					

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ

LOCATION.--Lat 39°30'50", long 74°46'46", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322 in Weymouth, 0.5 mi upstream from Deep Run, and 20.9 mi upstream from mouth.

DRAINAGE AREA.--154 mi².

PERIOD OF RECORD.--Water years 1975 to current year.

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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)	Specific conductance, wat unfltrd 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	158	5.3	0.246	0.188	747	9.9	88	4.5	70	12.0	9.5	11
FEB 25...	1100	514	2.3	0.447	0.339	767	12.9	90	3.7	102	6.0	0.9	11
MAY 14...	1040	208	2.7	0.647	0.506	755	9.0	88	5.1	62	19.5	14.2	10
AUG 19...	1040	208	4.0	1.01	0.798	766	7.5	84	5.3	61	30.0	21.2	11

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 unfltrd 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...	2.28	1.37	1.17	5.11	<2	7.64	<0.17	7.0	11.3	--	51	9	0.24
FEB 25...	2.28	1.40	1.24	8.14	--	15.2	<0.17	4.7	9.3	--	67	3	0.33
MAY 14...	2.16	1.18	1.23	6.06	3	10.0	<0.17	4.7	5.6	34	59	9	0.40
AUG 19...	2.20	1.23	1.31	5.72	3	10.0	<0.17	7.8	3.7	36	73	7	0.66

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 total, mg/L (00694)	Inorganic carbon, suspnd total, mg/L (00688)	Organic carbon, suspnd total, mg/L (00689)
NOV 06...	<0.030	<0.030	0.36	<0.003	0.022	0.05	0.009	0.026	0.60	0.65	1.2	<0.1	1.2
FEB 25...	0.046	0.057	0.37	0.003	<0.020	0.06	0.008	0.019	0.69	0.76	1.4	<0.1	1.4
MAY 14...	0.037	0.052	0.32	<0.003	<0.020	0.08	0.007	0.025	0.72	0.80	1.2	<0.1	1.2
AUG 19...	0.049	0.060	0.21	0.004	0.025	0.11	0.018	0.040	0.87	0.98	1.6	<0.1	1.6

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, 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)	Chlorophyll a fluorometric method, corrcd ug/L (32209)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
NOV 06...	7.3	E1.9	--	28	--
FEB 25...	9.8	<1.0	--	19	--
MAY 14...	11.5	<1.0	1.90	27	--
AUG 19...	18.0	<1.0	1.50	26	1,070

Remark codes used in this table:

< -- Less than

E -- Estimated value

WATER-COLUMN BACTERIA ANALYSES

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

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

Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)	Date	Time	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
JUN					JUL				
12...	1020	50	30	20	07...	1105	113	83	113
19...	1045	65	93	117	10...	1037	791	590	736
26...	1040	15	10	50					

01411196 BABCOCK CREEK NEAR MAYS LANDING, NJ

LOCATION.--Lat 39°28'08", long 74°41'33", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322, 1.1 mi east from intersection of U.S. Route 50, 2.2 mi northeast of Mays Landing, and 2.8 mi upstream from Watering Race Branch.

DRAINAGE AREA.--16.3 mi².

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

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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)	Specific conductance, wat unfltrd 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...	0930	34	8.9	0.349	0.275	748	8.5	78	4.8	45	11.5	10.5	9
FEB 25...	0950	74	2.0	0.609	0.460	767	12.0	84	3.1	150	5.0	1.2	12
MAY 14...	0950	15	0.8	0.424	0.327	755	8.5	79	4.0	82	16.5	11.8	8
AUG 19...	0950	9.7	1.0	0.483	0.379	766	7.7	79	4.2	57	27.0	16.8	7

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 unfltrd fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
NOV 06...	1.93	1.09	0.73	2.94	E2	4.97	<0.17	4.3	6.3	35	7	0.23	<0.030
FEB 25...	2.37	1.54	0.77	12.2	--	23.3	<0.17	4.6	12.1	82	3	0.43	0.037
MAY 14...	1.58	1.05	0.86	6.52	--	12.8	<0.17	5.2	7.3	53	4	0.22	<0.030
AUG 19...	1.20	0.927	0.68	4.22	<2	9.22	<0.17	9.0	3.9	49	2	0.35	0.040

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

Date	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV 06...	<0.030	0.30	<0.003	--	0.06	0.015	0.028	0.53	0.59	1.1	<0.1	1.1	10.1
FEB 25...	0.043	0.23	<0.003	0.020	0.06	0.007	0.015	0.67	0.73	0.8	<0.1	0.8	15.0
MAY 14...	<0.030	0.43	<0.003	<0.020	<0.02	0.004	0.007	0.65	--	<0.1	<0.1	<0.1	8.7
AUG 19...	0.047	0.53	<0.003	<0.020	0.03	0.014	0.016	0.88	0.91	0.3	<0.1	0.3	9.8

01411196 BABCOCK CREEK NEAR MAYS LANDING, 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 06...	E2.1	--	E6.4
FEB 25...	E1.2	--	18
MAY 14...	2.7	2.40	<13
AUG 19...	<1.0	0.400	12

Remark codes used in this table:

< -- Less than

E -- Estimated value

WATER-COLUMN BACTERIA ANALYSES

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

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

Date	Time	Entero- cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, ECbroth water, MPN/ 100 mL (31615)	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					JUL				
12...	0952	40	55	100	07...	1040	45	67	110
19...	1025	67	330	310	10...	1025	982	1,400	1,440
26...	1015	25	5	13					