

MULLICA RIVER BASIN

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ

LOCATION.--Lat 39°44'25", long 74°43'36", Burlington County, Hydrologic Unit 02040301, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi upstream from Wesickaman Creek.

DRAINAGE AREA.--26.7 mi².

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

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)
NOV 26...	1020	71	1.1	0.727	0.590	767	11.6	94	3.7	84	7.5	6.5
MAR 11...	1040	127	0.7	0.463	0.346	762	12.5	94	4.1	73	1.5	3.3
MAY 08...	1050	37	1.3	0.296	0.222	757	9.4	96	4.4	57	18.0	15.6
AUG 11...	1150	57	8.8	0.705	0.558	758	6.8	80	4.0	47	24.5	23.0

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 as CaCO ₃ (90410)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (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 26...	1.76	0.995	0.85	3.53	--	5.62	<0.17	4.0	15.3	49	3	0.27	<0.030
MAR 11...	1.22	0.698	0.74	3.50	--	6.96	<0.17	3.0	9.6	42	<1	0.27	<0.030
MAY 08...	1.31	0.698	0.75	4.21	--	7.49	<0.17	1.8	7.2	33	2	0.17	<0.030
AUG 11...	1.20	0.626	0.87	4.06	<2	7.17	<0.17	6.8	3.6	40	14	0.41	0.085

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 nitro- gen, susp, water, fltrd, 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 sediment total, mg/L (00694)	Total carbon, suspnd sediment total, mg/L (00680)	Inorganic carbon, sediment total, mg/L (00688)	Organic carbon, sediment total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV 26...	0.044	E.04	<0.003	<0.020	0.02	E.003	0.006	--	E.34	0.3	<0.1	0.3	10.4	
MAR 11...	<0.030	0.09	<0.003	<0.020	0.02	0.004	0.005	0.36	0.39	0.1	<0.1	0.1	10.9	
MAY 08...	<0.030	0.06	<0.003	<0.020	0.04	<0.004	0.006	0.23	0.27	0.6	<0.1	0.6	6.3	
AUG 11...	0.092	0.08	<0.003	<0.020	0.34	0.005	0.017	0.49	0.83	8.5	<0.1	8.5	10.7	

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ—Continued

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

Date	BOD, water, unfltrd 5 day, 20 degC	Chloro- phyll a fluoro- metric method, corrctd	Boron, water, fltrd, ug/L	Iron, water, fltrd, ug/L
	mg/L (00310)	ug/L (32209)	(01020)	(01046)
NOV 26...	<1.0	--	19	--
MAR 11...	<1.0	--	E9.0	--
MAY 08...	<1.0	6.40	17	--
AUG 11...	<1.0	2.80	13	1,730

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- cacci, m-E MF, water, col/	E coli, m-TEC MF, water, col/	Fecal coli- form, ECbroth MPN/	Date	Time	Entero- cacci, m-E MF, water, col/	E coli, m-TEC MF, water, col/	Fecal coli- form, ECbroth water, MPN/	
		100 mL (31649)	100 mL (31633)	100 mL (31615)			100 mL (31649)	100 mL (31633)	100 mL (31615)	
JUL 28...	1025	20	<100	<20	AUG 11...	1130	20	<100	36	
	04...	0950	10	<100		18...	0935	50	<100	20
				40		25...	0925	<10	<100	20

Remark codes used in this table:

< -- Less than

MULLICA RIVER BASIN

0140940950 BLUE ANCHOR BROOK AT ELM, NJ

LOCATION.--Lat 39°41'17", long 74°50'05", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30 at Elm, at outlet of Winslow Lake, and 1.4 mi upstream from confluence with Pump Branch.

DRAINAGE AREA.--4.86 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)
NOV 06...	1350	1.8	2.1	0.138	0.110	744	10.9	98	6.6	66	12.0	9.5
FEB 24...	1110	12	7.5	0.117	0.091	765	12.1	89	6.3	122	6.5	2.7
MAY 08...	0940	5.9	3.6	0.316	0.249	757	9.3	102	6.4	91	17.5	19.3
AUG 11...	1010	4.3	2.2	0.446	0.356	758	8.3	103	6.9	88	24.0	26.4

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 as CaCO ₃ (90410)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (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, wat flt 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...	2.66	1.37	1.29	6.28	E7	8.05	<0.17	1.4	6.5	--	40	<1	0.26
FEB 24...	2.84	1.27	1.12	15.4	6	26.5	<0.17	2.4	6.0	62	68	2	0.20
MAY 08...	3.56	1.78	1.76	9.35	12	13.6	<0.17	0.7	6.8	45	67	4	0.36
AUG 11...	2.75	1.52	1.73	11.2	13	14.5	<0.17	0.3	3.7	45	53	1	0.47

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 (00617)	Particulate nitrogen, water, susp, water, fltrd, 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, sediment total, mg/L (00694)	Inorganic carbon, suspnd sediment total, mg/L (00688)	Organic carbon, suspnd sediment total, mg/L (00689)
NOV 06...	<0.030	<0.030	0.17	<0.003	<0.020	0.09	0.012	0.024	0.42	0.51	0.5	<0.1	0.5
FEB 24...	0.036	0.031	0.66	<0.003	0.021	0.06	0.009	0.029	0.86	0.92	0.6	<0.1	0.6
MAY 08...	<0.030	0.036	0.15	0.004	<0.020	0.20	0.013	0.042	0.52	0.72	1.7	<0.1	1.7
AUG 11...	0.027	0.047	<0.05	<0.003	--	0.09	0.022	0.042	--	--	0.7	<0.1	0.7

0140940950 BLUE ANCHOR BROOK AT ELM, 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 (00310)	Chlorophyll a fluorometric method, corrcrd ug/L (32209)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
NOV 06...	3.1	2.0	--	E9.7	--
FEB 24...	2.7	E1.3	--	E6.8	--
MAY 08...	5.4	2.8	23.7	22	--
AUG 11...	8.0	E1.5	20.5	15	1,120

Remark codes used in this table:

- < -- Less than
 E -- Estimated value
 M-- Presence verified, not quantified

WATER-COLUMN BACTERIA ANALYSES

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

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

Date	Time	Enter-	Fecal	Date	Time	Enter-	E coli,	Fecal
		cocci, m-E	E coli, m-TEC			coli- form, ECbroth	m-TEC	coli- form, ECbroth
		MF, water, col/ col/	MF, water, col/			MF, water, col/	MF, water, col/	MF, water, MPN/
		100 mL (31649)	100 mL (31633)			100 mL (31649)	100 mL (31633)	100 mL (31615)

JUN 02...	1130	30	<100	80	JUN 16...	1040	<10	<100	40
09...	1030	20	200	<20	23...	1009	<10	<100	20

JUN 30...					JUN 30...	1035	10	<100	<20
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Remark codes used in this table:

- < -- Less than

MULLICA RIVER BASIN

0140941075 CEDAR BROOK AT COLUMBIA ROAD, AT HAMMONTON, NJ

LOCATION.--Lat 39°39'53", long 74°45'56", Atlantic County, Hydrologic Unit 02040301, on bridge at Columbia Road, 2.3 mi upstream of mouth, 2.7 mi northeast of Hammonton, and 3.0 mi northwest of Wescoatville.

DRAINAGE AREA.--3.57 mi².

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, 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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 14.

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

Date	Time	Tur-bidity, water, unfltrd field, NTU (61028)	UV absorb-ance, 254 nm, wat flt units /cm (50624)	UV absorb-ance, 280 nm, wat flt units /cm (61726)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, unfltrd mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)
NOV 13...	1030	11	0.407	0.327	760	4.5	42	6.4	117	10.5	12.1	34	8.64
FEB 13...	1045	4.7	0.057	0.042	762	11.1	82	6.4	529	-6.7	2.5	61	15.3
MAY 06...	1045	1.3	0.104	0.077	760	8.3	77	6.5	212	12.5	12.0	54	13.4
AUG 06...	1030	4.2	0.246	0.179	759	4.8	55	6.7	150	29.5	21.8	43	10.7

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

Date	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L as CaCO ₃ (90410)	ANC, wat unf fixed end pt, lab, mg/L (00930)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, 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 13...	3.03	3.14	6.09	E17	11.1	<0.17	4.2	12.8	--	83	6	0.34	<0.030
FEB 13...	5.59	5.89	70.3	E12	126	<0.17	5.9	27.7	--	282	9	0.27	0.064
MAY 06...	5.06	4.75	12.1	16	26.5	<0.17	4.2	23.8	113	130	3	0.23	<0.030
AUG 06...	3.93	3.25	8.97	20	17.3	<0.17	4.2	14.4	81	100	<1	0.38	0.028

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)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Partic-u-late nitro-ge-n, susp., water, fltrd, mg/L (49570)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-ge-n, water, fltrd, mg/L (00602)	Total nitro-ge-n, water, unfltrd mg/L (00600)	Total carbon, suspnd sediment total, mg/L (00694)	Total carbon, suspnd sediment total, mg/L (00688)	Inor-ganic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
NOV 13...	<0.030	0.63	<0.003	0.044	0.16	0.048	0.109	0.98	1.1	1.1	<0.1	1.1	9.9	
FEB 13...	0.060	3.98	--	0.025	0.10	E.003	0.022	4.3	4.4	1.4	<0.1	1.4	2.0	
MAY 06...	<0.030	3.12	0.005	<0.020	0.04	0.005	0.013	3.4	3.4	0.2	<0.1	0.2	3.0	
AUG 06...	<0.020	1.44	0.006	--	0.05	0.024	0.048	1.8	1.9	0.5	<0.1	0.5	6.2	

0140941075 CEDAR BROOK AT COLUMBIA ROAD, AT HAMMONTON, 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 13...	3.9	--	18
DEC 13...	2.1	--	22
MAY 06...	<1.0	2.00	28
AUG 06...	E1.9	5.40	24

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 (01055)	Mangan- ese, water, unfltrd recover -able, ug/L (71900)	Mercury water, unfltrd recover -able, ug/L (01067)	Nickel, water, unfltrd recover -able, ug/L (01067)
AUG 06...	1030	<2	69.0	<0.06	250	<0.04	E.5	12.6	590	0.76	69.4	E.01	9.51

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

Date	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover -able, ug/L (01077)	Zinc, water, unfltrd recover -able, ug/L (01092)
AUG 06...	1.7	<0.16	9

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

MULLICA RIVER BASIN

0140941075 CEDAR BROOK AT COLUMBIA ROAD, AT HAMMONTON, NJ—Continued

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

Date	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl-benzene water unfltrd ug/L (34371)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta-+ para-Xylene, water, unfltrd ug/L (85795)	^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	2.2

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 by the analyses in one or more surface-water samples are listed in the following table.

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

Date	Time	2,6-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-fluralin, water, fltrd, 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, 0.7u GF ug/L (04028)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Car-bo-furan, water, fltrd, 0.7u GF ug/L (82674)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)
MAY 06...	1045	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	E.005	E.010	<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, ug/L (82668)	Desulf-inyl 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)	Metribuzin, water, fltrd, ug/L (82630)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)
MAY 06...	<0.003	<0.004	<0.005	<0.005	<0.002	<0.009	<0.005	<0.005	<0.007	<0.027	0.027	<0.006	<0.007

0140941075 CEDAR BROOK AT COLUMBIA ROAD, AT HAMMONTON, 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 06...	<0.022	0.02	<0.005	<0.02	E.244	<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	Enter-	E coli,	Fecal	Date	Time	Enter-	E coli,	Fecal
		cocci, m-E	m-TEC	coli-form, ECbroth			cocci, m-E	m-TEC	coli-form, ECbroth
		MF, water, col/	MF, water, col/	MPN/			MF, water, col/	MF, water, col/	MPN/
		100 mL (31649)	100 mL (31633)	100 mL (31615)			100 mL (31649)	100 mL (31633)	100 mL (31615)
JUN 12...	1050	8	5	13	JUL 07...	1125	1,350	350	710
19...	1110	920	720	890	10...	1100	7,200	2,600	2,500
26...	1120	127	180	167					

MULLICA RIVER BASIN

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ

LOCATION.--Lat 39°38'02", long 74°43'04", Atlantic County, Hydrologic Unit 02040301, at bridge on Chestnut Road in Wescoatville, 1.1 mi southwest of Nesco, 1.7 mi upstream from Norton Branch, and 3.8 mi southwest of Batsto.

DRAINAGE AREA.--9.57 mi².

PERIOD OF RECORD.--Water years 1974 to current year.

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

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of 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.

REVISIONS.--WDR NJ-83-1: Drainage area.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

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

Date	Time	Instantaneous discharge, cfs (00601)	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)	Solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm (00095)	Temperature, air, deg C (25 degC (00020))	Temperature, water, deg C (00010)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)
NOV 25...	1420	18	1.5	0.162	0.124	764	9.5	81	5.7	120	18.0	8.5	32	
FEB 24...	1210	121	7.5	0.234	0.181	765	12.2	86	5.0	80	7.0	1.0	15	
JUN 05...	1210	41	5.8	0.363	0.284	758	7.3	73	5.8	102	20.7	14.9	26	
AUG 20...	1230	13	3.3	0.244	0.191	766	7.9	89	5.8	110	31.0	21.1	25	

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 as CaCO ₃ (90410)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (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 sum of constituents, mg/L (70301)	Residue water, fltrd, at 180degC wat flt mg/L (70300)	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...	7.17	3.30	4.93	7.52	6	13.2	<0.17	6.6	17.0	75	80	4	0.29	
FEB 24...	3.32	1.72	2.50	5.25	2	10.5	<0.17	2.9	9.4	44	53	2	0.32	
JUN 05...	5.99	2.71	4.37	6.69	4	11.9	<0.17	4.7	15.5	62	88	6	0.64	
AUG 20...	5.72	2.55	3.56	8.69	12	15.5	<0.17	6.3	9.0	62	77	8	0.28	

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, water, susp, 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, susnd sediment total, mg/L (00694)	Total carbon, susnd sediment total, mg/L (00688)	Inorganic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, suspnd sediment total, mg/L (00689)
NOV 25...	0.036	<0.030	2.66	<0.003	0.034	<0.02	<0.05	0.05	2.9	--	0.2	<0.1	0.2	
FEB 24...	0.048	0.046	1.56	0.005	0.054	0.07	<0.05	0.08	1.9	1.9	0.7	<0.1	0.7	
JUN 05...	0.280	0.281	1.72	0.006	0.044	0.11	0.05	0.13	2.4	2.5	1.2	<0.1	1.2	
AUG 20...	0.032	0.035	0.74	0.004	0.044	0.09	E.05	0.11	1.0	1.1	0.5	<0.1	0.5	

01409416 HAMMONTON CREEK AT WESCOATVILLE, 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, corrcrd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
NOV 25...	4.3	<1.0	--	34
FEB 24...	5.5	<1.0	--	16
JUN 05...	7.1	E1.0	6.20	26
AUG 20...	5.2	<1.0	2.90	36

Remark codes used in this table:

< -- Less than
 E -- Estimated value

WATER-COLUMN BACTERIA ANALYSES

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

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

Date	Time	Enter-	Fecal	Date	Time	Enter-	E coli,	Fecal
		cocci, m-E	E coli, m-TEC			cocci, m-E	m-TEC	coliform, MF, ECbroth
		water, col/ col/	water, col/ col/			water, col/ col/	water, col/ col/	MPN/ ECbroth water, MPN/
		100 mL (31649)	100 mL (31633)	100 mL (31615)		100 mL (31649)	100 mL (31633)	100 mL (31615)
JUN 12...	1100	147	90	113		07...	1,670	83
19...	1120	530	690	1,420		10...	9,900	6,500
26...	1140	460	300	380				9,200
					JUL			

MULLICA RIVER BASIN

01409500 BATSTO RIVER AT BATSTO, NJ

LOCATION.--Lat 39°38'30", long 74°39'01", Burlington County, Hydrologic Unit 02040301, at bridge on County Highway 542 at Batsto, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--67.8 mi².

PERIOD OF RECORD.--Water years 1925, 1956, 1962-63, 1976 to current year.

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 unf field, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)
DEC 04...	0930	99	0.7	0.171	0.125	776	11.3	80	5.2	66	-5.0	2.0	10
FEB 25...	1015	492	2.3	0.378	0.283	772	13.4	92	4.4	60	1.5	0.6	8
MAY 22...	0930	103	2.1	0.231	0.178	766	8.2	79	5.4	43	13.0	14.2	8
AUG 19...	0930	82	6.6	0.384	0.302	768	7.0	80	5.8	39	24.0	21.9	8

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 as CaCO ₃ (90410)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (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...	2.06	1.16	0.79	3.06	--	5.61	<0.17	5.7	12.5	--	30	6	0.16
FEB 25...	1.62	0.875	0.78	2.61	--	4.02	<0.17	3.4	9.7	--	40	5	0.29
MAY 22...	1.59	0.907	0.84	3.35	2	6.42	<0.17	3.2	5.0	23	43	2	0.17
AUG 19...	1.64	0.949	0.89	3.13	3	5.95	<0.17	5.7	3.0	24	42	7	0.26

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, water, 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 sediment total, mg/L (00694)	Inorganic carbon, suspnd sediment total, mg/L (00688)	Organic carbon, suspnd sediment total, mg/L (00689)
DEC 04...	<0.030	0.066	0.13	<0.003	<0.020	0.02	<0.004	E.003	0.29	0.32	0.2	<0.1	0.2
FEB 25...	0.030	0.045	0.22	<0.003	<0.020	0.06	0.004	0.013	0.51	0.57	0.8	<0.1	0.8
MAY 22...	<0.030	<0.030	0.08	<0.003	<0.020	0.07	0.004	0.011	0.26	0.33	1.2	<0.1	1.2
AUG 19...	<0.020	<0.020	0.07	<0.003	<0.020	0.10	0.004	0.014	0.32	0.42	1.9	<0.1	1.9

01409500 BATSTO RIVER AT BATSTO, 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, corrcrd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC 04...	4.7	E1.9	--	<13
FEB 25...	9.9	<1.0	--	14
MAY 22...	4.3	E1.6	1.30	<13
AUG 19...	7.6	<1.0	1.60	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	Enter-	Fecal	Date	Time	Enter-	E coli,	Fecal
		cocci, m-E	E coli, m-TEC			cocci, m-E	m-TEC	coliform, MF,
		MF, water, col/	MF, water, col/			water, col/	MF, water, col/	ECbroth water, MPN/
		100 mL (31649)	100 mL (31633)			100 mL (31649)	100 mL (31633)	100 mL (31615)

JUL 28...	1205	190	<100	170	AUG 11...	1010	10	<100	90
AUG 04...	1100	110	<100	40	18...	1115	280	300	2,400
					25...	1120	30	<100	20

Remark codes used in this table:

< -- Less than

MULLICA RIVER BASIN

01409601 INDIAN CABIN CREEK AT FIFTH AVENUE, NEAR ELWOOD, NJ

LOCATION.--Lat 39°34'15", long 74°39'51", Atlantic County, Hydrologic Unit 02040301, at bridge on Fifth Avenue, 2.8 mi east of Elwood, 3.1 mi north of Egg Harbor City, and 3.7 mi upstream of Egg Harbor City Lake.

DRAINAGE AREA.--1.89 mi².

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

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

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, 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.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 14.

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

Date	Time	Tur-bidity, water, unfltrd field, NTU (61028)	UV absorb-ance, 254 nm, wat flt units /cm (50624)	UV absorb-ance, 280 nm, wat flt units /cm (61726)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, unfltrd mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)
DEC 11...	1000	0.3	0.359	0.269	762	6.9	51	3.7	108	5.0	3.0	5	0.55
FEB 24...	1015	1.0	0.625	0.472	768	11.3	78	4.1	66	2.5	0.4	4	0.48
JUN 10...	1030	0.4	0.864	0.662	762	3.3	32	4.0	61	25.0	15.0	3	0.38
AUG 28...	1115	0.5	0.545	0.421	765	0.9	9	4.0	61	27.5	19.8	3	0.30

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

Date	Magnes-iump, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, 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, sus-pended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)
DEC 11...	0.918	0.21	2.74	4.92	<0.17	6.5	18.0	53	1	0.23	<0.030	0.037	<0.05
FEB 24...	0.589	0.52	1.80	2.89	<0.17	3.7	12.2	46	<1	0.38	<0.030	<0.030	0.08
JUN 10...	0.394	E.15	1.98	3.10	<0.17	4.0	7.8	48	3	0.34	<0.030	<0.030	<0.05
AUG 28...	0.448	E.10	2.40	4.98	<0.17	7.8	7.7	48	1	0.32	0.025	0.028	<0.05

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Partic-u-late nitro-ge-n, susp., water, mg/L (49570)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-ge-n, water, fltrd, mg/L (00602)	Total nitro-ge-n, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chloro-phyll a fluoro-metric method, corrted ug/L (32209)
DEC 11...	<0.003	0.021	<0.02	<0.004	0.004	--	--	<0.1	<0.1	<0.1	9.8	<1.0	--
FEB 24...	<0.003	<0.020	0.03	E.003	0.008	0.46	0.49	0.2	<0.1	0.2	15.1	<1.0	--
JUN 10...	<0.003	<0.020	<0.02	E.002	0.005	--	--	0.1	<0.1	0.1	18.4	<1.0	0.100
AUG 28...	<0.003	<0.020	<0.02	0.004	0.005	--	--	0.3	<0.1	0.3	11.9	<1.0	0.100

01409601 INDIAN CABIN CREEK AT FIFTH AVENUE, NEAR ELWOOD, NJ—Continued

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

Date	Alum- inum, water, fltrd, ug/L (01106)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)
DEC 11...	647	E9.1	<10
FEB 24...	--	E9.6	--
JUN 10...	--	15	--
AUG 28...	357	15	349

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 recover -able, 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 28...	1115	<2	22.7	0.10	11	0.04	<0.8	<0.6	350	1.10	5.1	<0.02	2.56

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

Date	Selen- ium, water, unfltrd recover -able, ug/L (01147)	Silver, water, unfltrd recover -able, ug/L (01077)	Zinc, water, unfltrd recover -able, ug/L (01092)
AUG 28...	0.6	<0.16	8

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)	1,1-Di- chloro- ethane, water, unfltrd ug/L (77652)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34496)	1,2-Di- chloro- benzene water, unfltrd ug/L (34501)	1,2-Di- chloro- ethane, water, unfltrd ug/L (34536)	1,2-Di- chloro- propane 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 24...	1015	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

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

Date	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Di- ethyl ether, water, unfltrd ug/L (81576)	Diiso- propyl ether, water, unfltrd ug/L (81577)	Methyl tert- pentyl ether, water, unfltrd ug/L (34371)	Ethyl- benzene water, unfltrd ug/L (50005)	meta- + para- Xylene, water, unfltrd ug/L (85795)	^o - Xylene, water, unfltrd ug/L (77135)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
FEB 24...	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.2	<0.2	<0.1	<0.1	<0.2

MULLICA RIVER BASIN

01409601 INDIAN CABIN CREEK AT FIFTH AVENUE, NEAR ELWOOD, 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 chloride, water, unfltrd ug/L (39175)
FEB 24...	<0.1	<0.2	<0.1	<0.1	<0.2	<0.1	<0.2	0.1	<0.2

Remark codes used in this table:

< -- Less than

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 ug/L (82660)	Aceto-chlor, CIAT, water, fltrd, ug/L (04040)	Ala-chlor, water, fltrd, ug/L (49260)	alpha-HCH, water, fltrd, ug/L (46342)	Atra-zine, water, fltrd, ug/L (34253)	Azin-phos-methyl, water, fltrd, ug/L (39632)	Ben-flur-alin, water, fltrd, ug/L (82686)	Butyl-ate, water, fltrd, ug/L (82673)	Car-baryl, water, fltrd, ug/L (04028)	Carbo-furan, water, fltrd, ug/L (82680)	cis-Permethrin water fltrd ug/L (82674)	
JUN 10...	1030	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.006

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

Date	DCPA, water fltrd 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, 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)	Naprop-amide, water, fltrd ug/L (82630)	
JUN 10...	<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	Pendi-meth-alin, water, fltrd, ug/L (82683)	Prome-ton, water, fltrd, ug/L (04037)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron, water, fltrd, ug/L (82670)	Terba-cil, water, fltrd, ug/L (82665)	Tri-flur-alin, water, fltrd, ug/L (82661)
JUN 10...	<0.022	<0.01	<0.005	<0.02	<0.034	<0.009

Remark codes used in this table:

< -- Less than

01409601 INDIAN CABIN CREEK AT FIFTH AVENUE, NEAR ELWOOD, 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

		Enter-	cocci,	E coli,	Fecal		Enter-	cocci,	E coli,	Fecal
Date	Time	m-E	m-TEC	MF,	form,		m-E	m-TEC	MF,	form,
		water,	MF,	water,	ECbroth		water,	MF,	water,	ECbroth
		col/	col/	water,	MPN/		col/	col/	water,	MPN/
		100 mL	100 mL	100 mL			100 mL	100 mL	100 mL	
		(31649)	(31633)	(31615)			(31649)	(31633)	(31615)	
JUN						JUL				
12...	1130	330	240	210		07...	1155	155	<3	3
19...	1140	33	65	50		10...	1142	2,500	3,400	3,400
26...	1205	<3	<3	13						

Remark codes used in this table:

< -- Less than

MULLICA RIVER BASIN

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ

LOCATION.--Lat 39°40'30", long 74°32'27", Burlington County, Hydrologic Unit 02040301, at bridge on County Highway 563 in Maxwell, 1.6 mi southeast of Washington, 1.8 mi southwest of Jenkins, and 2.2 mi upstream from confluence with Oswego River.

DRAINAGE AREA.--85.9 mi².

PERIOD OF RECORD.--Water years 1976-93, 1998 to current year.

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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)	Disolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)
NOV 25...	1140	191	1.8	0.442	0.339	764	11.0	88	4.1	61	3.0	6.0
FEB 24...	1000	577	3.0	0.407	0.310	768	12.9	88	3.7	54	6.5	0.0
JUN 05...	0940	272	3.5	0.598	0.467	758	8.1	80	4.2	42	16.5	14.5
AUG 20...	0950	77	6.8	0.413	0.331	767	7.8	85	4.0	36	27.5	19.8

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

Date	Calcium water, fltrd, mg/L (00915)	Magnesium water, fltrd, mg/L (00925)	Potassium water, fltrd, mg/L (00935)	Sodium water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
NOV 25...	0.77	0.559	0.85	2.60	4.38	<0.17	4.9	10.2	41	3	0.23	<0.030	<0.030
FEB 24...	0.63	0.419	0.59	2.25	4.21	<0.17	3.4	8.9	38	<1	0.24	<0.030	<0.030
JUN 05...	0.52	0.337	0.57	2.35	4.08	<0.17	3.6	5.5	32	8	0.23	0.031	0.033
AUG 20...	0.62	0.355	0.82	2.33	4.34	<0.17	6.1	4.3	29	15	0.17	0.044	0.056

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

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (49570)	Particulate nitro- gen, susp, water, fltrd, mg/L (00671)	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 sediment total, mg/L (00694)	Total carbon, suspnd sediment total, mg/L (00688)	Inorganic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
NOV 25...	<0.05	<0.003	<0.020	0.10	0.008	0.016	--	--	0.4	<0.1	0.4	10.0	<1.0	
FEB 24...	0.07	<0.003	0.022	0.07	0.008	0.020	0.31	0.37	0.8	<0.1	0.8	9.0	E1.4	
JUN 05...	<0.05	<0.003	<0.020	0.10	0.010	0.042	--	--	1.6	<0.1	1.6	10.5	<1.0	
AUG 20...	<0.05	<0.003	<0.020	0.18	E.003	0.067	--	--	4.4	<0.1	4.4	7.1	<1.0	

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ—Continued

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

Date	Chloro- phyll a fluoro- metric method, corrtd ug/L (32209)	Boron, water, filtrd, ug/L (01020)
NOV 25...	--	E13
FEB 24...	--	E6.1
JUN 05...	1.30	E14
AUG 20...	1.30	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	Enter-	E coli,	Fecal	Date	Time	Enter-	E coli,	Fecal
		cocci, m-E	m-TEC	coli- form, ECbroth			cocci, m-E	m-TEC	coli- form, ECbroth
		MF, water, col/	MF, water, col/	water, MPN/			MF, water, col/	MF, water, col/	water, MPN/
		100 mL (31649)	100 mL (31633)	100 mL (31615)			100 mL (31649)	100 mL (31633)	100 mL (31615)

JUL 28...	1205	190	<100	170	AUG 11...	0940	40	<100	130
AUG 04...	1035	40	<100	20	18...	1050	30	<100	40

					AUG 25...	1050	50	<100	<20
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Remark codes used in this table:

< -- Less than

MULLICA RIVER BASIN

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNNA, NJ

LOCATION.--Lat 39°37'23", long 74°26'29", Burlington County, Hydrologic Unit 02040301, at bridge on Stage Road, 0.7 mi west of Lake Absegami, 2.2 mi north of New Gretna, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--8.11 mi².

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

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

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

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)
DEC 17...	1000	19	0.7	0.330	0.256	768	9.6	73	4.7	57	0.0	4.0	4
MAR 04...	0930	26	0.8	0.311	0.244	769	11.6	82	4.5	52	1.5	1.8	4
MAY 29...	1000	18	0.8	0.348	0.274	754	7.2	70	4.3	51	20.5	13.3	3
AUG 21...	1000	15	0.8	0.267	0.212	765	5.9	63	4.5	37	29.5	18.5	3

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

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)
DEC 17...	0.58	0.732	0.50	3.18	4.47	<0.17	6.4	7.8	38	1	0.17	<0.030	0.038
MAR 04...	0.52	0.605	0.45	3.16	5.36	<0.17	5.4	7.5	33	3	0.21	<0.030	<0.030
MAY 29...	0.48	0.523	0.34	3.50	6.03	<0.17	4.8	5.1	33	1	0.16	<0.030	<0.030
AUG 21...	0.39	0.495	0.44	2.91	5.22	<0.17	7.1	3.5	31	5	0.12	<0.020	<0.020

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

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, water, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Chlorophyll a fluorometric method, corrcd ug/L (32209)	Boron, water, fltrd, ug/L (01020)
DEC 17...	<0.05	<0.003	<0.020	0.06	<0.004	E.003	0.2	<0.1	0.2	7.5	E1.8	--	E10
MAR 04...	<0.05	<0.003	<0.030	0.03	E.002	E.002	0.2	<0.1	0.2	6.3	E1.2	--	<13
MAY 29...	<0.05	<0.003	<0.020	0.03	E.003	E.003	0.4	<0.1	0.4	7.0	<1.0	1.50	11
AUG 21...	<0.05	<0.003	<0.020	<0.02	<0.004	E.003	0.3	<0.1	0.2	4.9	<1.0	0.200	14

Remark codes used in this table:

< -- Less than

E -- Estimated value

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, 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

		Enter-	cocci,	E coli,	Fecal		Enter-	cocci,	E coli,	Fecal
Date	Time	m-E	m-TEC	MF,	form,		m-E	MF,	water,	coli-
		water,	water,	water,	ECbroth		water,	water,	water,	MPN/
		col/	col/	col/	MPN/		col/	col/	col/	
		100 mL	100 mL	100 mL			100 mL	100 mL	100 mL	
		(31649)	(31633)	(31615)			(31649)	(31633)	(31615)	

JUL					AUG					
28...	1235	20	<100	170	11...	1040	<10	<100	<20	
AUG					18...	1150	<10	<100	20	
04...	1135	10	<100	20	25...	1145	<10	<100	<20	

Remark codes used in this table:

< -- Less than