

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ

LOCATION.--Lat 40°32'48", long 74°41'47", Somerset County, Hydrologic Unit 02030105, at bridge on Studdiford Drive at South Branch, 0.8 mi upstream from mouth, and 2.7 mi southeast of Readington.

DRAINAGE AREA.--265 mi².

PERIOD OF RECORD.--Water years 1976-83, 1998 to current year.

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

COOPERATION.--Concentrations of ammonia in samples collected during November to December and August to September; orthophosphate in every sampling period except February to March; and nitrite, biochemical oxygen demand, total suspended residue, fecal coliform, E. coli, and enterococcus bacteria were determined by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services.

COOPERATIVE NETWORK SITE DESCRIPTOR.-- Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	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, mg/L as CaCO3 (00900)	
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)
Date		Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Orthophosphate, water, fltrd, mg/L as P (00671)	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)	
NOV 03...	1020	128	1.5	.075	.059	765	10.1	94	7.6	331	11.5	12.5	120	
FEB 16...	1120	1,310	23	.101	.078	752	12.9	100	7.1	244	15.5	4.0	61	
JUN 01...	0940	175	5.4	.064	.050	764	8.2	89	8.1	333	16.5	19.6	110	
AUG 23...	1030	106	2.1	.064	.048	760	7.9	95	8.0	286	28.0	24.5	95	
NOV 03...		28.1	11.1	2.48	18.5	82	36.2	E.1	7.3	179	173	5	.23	
FEB 16...		15.3	5.46	1.70	19.4	37	35.1	E.1	8.5	126	135	--	.41	
JUN 01...		25.4	12.0	2.14	21.3	78	40.2	E.1	1.3	171	186	--	.29	
AUG 23...		23.3	8.84	2.00	18.6	65	34.6	E.1	5.6	152	168	1	.30	
NOV 03...		.015	1.46	.006	.05	1.7	1.7	.044	.049	.057	.3	<.1	.3	
FEB 16...		E.037	1.34	--	.17	1.8	1.9	.021	.031	.083	1.4	<.1	1.4	
JUN 01...		<.040	1.05	--	.06	1.3	1.4	.023	.033	.047	.5	<.1	.4	
AUG 23...		.040	.63	--	.04	.93	.97	.049	.063	.073	.3	<.1	.3	

RARITAN RIVER BASIN

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Boron, water, fltrd, ug/L (01020)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 03...	2.4	E1.4	38	--	--
FEB 16...	2.7	--	16	31	110
JUN 01...	2.4	<1.0	32	7	3.3
AUG 23...	2.6	<1.0	26	--	--

Remark codes used in this table:

< -- Less than.

E -- Estimated.

WATER-COLUMN BACTERIA ANALYSES

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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 01...	1100	20	100	70
08...	1035	80	<100	80
15...	1055	150	100	110
22...	1055	90	200	20
29...	1035	150	200	130

Remark codes used in this table:

< -- Less than.