

01394500 RAHWAY RIVER NEAR SPRINGFIELD

LOCATION.--Lat 40°41'15", long 74°18'42", Union County, Hydrologic Unit 02030104, downstream from bridge on eastbound U.S. Highway 22, 100 ft downstream from Pope Brook, and 1.5 mi south of Springfield.

DRAINAGE AREA.--25.5 mi².

PERIOD OF RECORD.--Water years 1978 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. 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.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 7.

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)
NOV 09...	1030	18	1.3	.092	.071	772	8.0	67	7.7	694	2.0	7.7	220
FEB 09...	1030	26	2.5	.075	.054	760	12.0	96	7.7	1,180	5.0	5.6	220
MAY 11...	1015	11	3.5	.072	.055	760	5.4	53	7.6	791	10.0	14.7	250
AUG 10...	1015	7.2	4.1	.072	.055	760	5.2	60	7.8	695	25.0	21.6	240
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 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 09...	66.5	13.7	2.79	44.6	132	116	.2	17.6	31.4	378	431	4	.17
FEB 09...	66.3	13.7	2.53	143	101	274	.1	12.3	28.6	607	628	--	.23
MAY 11...	75.3	14.8	2.46	59.2	122	144	.1	14.4	33.0	423	486	--	.53
AUG 10...	72.1	13.6	2.12	45.2	127	116	.2	14.9	37.1	383	425	3	.37
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)	Organic carbon, water, fltrd, mg/L (00681)
NOV 09...	.015	1.27	.009	.03	1.4	1.5	.031	.034	.062	.3	<.1	.3	2.7
FEB 09...	<.040	1.26	--	.06	1.5	1.6	.007	.012	.048	.4	<.1	.4	2.3
MAY 11...	.199	1.28	--	.13	1.8	1.9	.029	.041	.085	.8	<.1	.8	2.3
AUG 10...	.060	1.13	--	.09	1.5	1.6	.076	.094	.141	.7	<.1	.7	2.6

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

Date	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Boron, water, fltrd, ug/L (01020)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
NOV 09...	<1.0	79	--	--
FEB 09...	--	65	2	.14
MAY 11...	E1.5	76	4	.12
AUG 10...	E1.1	82	--	--

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	Instan- taneous dis- charge, cfs (00061)	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 08...	1014	7.2	450	800	1,300
15...	1045	6.7	260	100	210
22...	1045	5.7	440	400	1,100
29...	1050	6.7	530	3,200	9,000
JUL 06...	1100	19	7,100	21,000	>16,000

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