



Water-Data Report 2010

01400860 STONY BROOK TRIBUTARY 3 AT RILEYVILLE, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°25'06", long 74°47'14" referenced to North American Datum of 1983, Hopewell Township, Mercer County, NJ, Hydrologic Unit 02030105, at bridge on Rileyville Road, 0.5 mi southwest of Rileyville, 2.4 mi northeast of Hopewell, and 3.8 mi upstream of mouth.

DRAINAGE AREA.--1.28 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 2005-10.

GAGE.--Reference point only.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Date	Discharge, in ft³/s
Nov 12, 2009	0.45
Feb 4, 2010	0.89
May 5, 2010	1.13
Aug 24, 2010	0.008

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2005 to current year.

REMARKS.--Cooperative Network Site Descriptor: Background, NJ Department of Environmental Protection Watershed Management Area 10.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 1 of 7

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter (61726)	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)
11-12-2009	1050	Surface water	Regular	754	13.0	.201	.154	.45	7.8
02-04-2010	1120	QC sample - Artificial	Field Blank	--	--	--	--	--	--
02-04-2010	1210	Surface water	Regular	756	2.0	.072	.054	.89	13.0
05-05-2010	1230	Surface water	Regular	750	27.0	.327	.252	1.1	8.1
08-24-2010	1050	Surface water	Regular	751	21.0	.253	.197	.01	3.8

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 7

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Date	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, milligrams per liter (70301)	Hardness, water, mg/L as CaCO ₃ (00900)	Suspended solids, water, unfiltered, mg/L (00530)
11-12-2009	67	7.0	158	8.7	3.6	111	E 110	62.7	1
02-04-2010	--	--	--	--	--	--	--	--	--
02-04-2010	89	7.0	144	.2	6.1	102	E 95	48.6	< 1
05-05-2010	81	7.0	133	15.6	6.1	109	E 89	48.3	3
08-24-2010	41	7.1	175	18.9	22	105	E 100	57.0	39

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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Date	Calcium, water, filtered, mg/L (00915)	Magne- sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint (pH 4.5)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)
					titration, laboratory, mg/L as CaCO ₃ (90410)					
11-12-2009	13.8	6.85	.94	6.85	52	.21	11.2	E .05	< .06	27.1
02-04-2010	--	--	--	--	--	--	--	--	--	--
02-04-2010	10.5	5.43	.57	6.00	36	.20	12.3	< .08	< .06	22.1
05-05-2010	10.7	5.25	.91	7.17	42	.38	10.8	E .07	< .06	21.0
08-24-2010	12.7	6.12	1.32	6.83	46	2.18	14.2	E .05	< .06	16.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 7

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Date	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen,	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Orthophos- phate, water, filtered, mg/L as P (00671)	Particulate nitrogen, suspended in water, mg/L (49570)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)
		water, filtered, mg/L as N (00623)							
11-12-2009	11.4	.25	.016	< .04	E .006	E .02	.010	.014	< .29
02-04-2010	--	--	--	--	--	--	--	--	--
02-04-2010	15.8	E .09	.022	.18	E .006	< .03	E .007	.010	E .27
05-05-2010	7.99	.36	.024	.10	--	E .03	.018	.029	.46
08-24-2010	13.6	.38	.037	.17	--	.23	.020	.099	.55

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 5 of 7

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Date	Total nitrogen, water, unfiltered, mg/L (00600)	Barium, water, unfiltered, recoverable, μg/L (01007)	Beryllium, water, unfiltered, recoverable, μg/L (01012)	Cadmium, water, unfiltered, μg/L (01027)	Chromium, water, unfiltered, recoverable, μg/L (01034)	Copper, water, filtered, μg/L (01040)	Copper, water, unfiltered, recoverable, μg/L (01042)	Iron, water, unfiltered, recoverable, μg/L (01045)	Lead, water, filtered, μg/L (01049)	Lead, water, unfiltered, recoverable, μg/L (01051)
11-12-2009	< .31	--	--	--	--	--	--	--	--	--
02-04-2010	--	--	--	--	--	< 1.0	--	--	< .03	--
02-04-2010	< .31	12.1	< .04	< .04	.49	--	2.3	250	--	.45
05-05-2010	E .49	--	--	--	--	--	--	--	--	--
08-24-2010	.79	23.2	.05	.06	1.9	--	4.5	1,570	--	3.09

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Date	Manganese, water, unfiltered, recoverable, μg/L (01055)	Mercury, water, filtered, μg/L (71890)	Mercury, water, unfiltered, recoverable, μg/L (71900)	Nickel, water, filtered, μg/L (01065)	Nickel, water, unfiltered, recoverable, μg/L (01067)	Silver, water, unfiltered, recoverable, μg/L (01077)	Zinc, water, filtered, μg/L (01090)	Zinc, water, unfiltered, recoverable, μg/L (01092)	Arsenic, water, filtered, μg/L (01000)	Arsenic, water, unfiltered, μg/L (01002)
11-12-2009	--	--	--	--	--	--	--	--	--	--
02-04-2010	--	< .010	--	< .12	--	--	< 2.8	--	.07	--
02-04-2010	26.6	--	< .010	--	.70	< .02	--	3.7	E .36	.32
05-05-2010	--	--	--	--	--	--	--	--	--	--
08-24-2010	486	--	E .009	--	2.1	< .02	--	12.8	.63	1.1

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Date	Boron, water, unfiltered, recover- able, μg/L (01022)	Selenium, water, unfiltered, μg/L (01147)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
11-12-2009	--	--	.21	5.0
02-04-2010	--	--	--	--
02-04-2010	16	.11	.20	1.9
05-05-2010	--	--	.38	7.6
08-24-2010	35	.18	2.17	6.0