



Water-Data Report 2010

**01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ**

RARITAN RIVER BASIN

LOCATION.--Lat 40°34'51", long 74°29'57" referenced to North American Datum of 1983, Middlesex Borough, Middlesex County, NJ, Hydrologic Unit 02030105, at bridge on State Route 28, 0.3 mi upstream from Green Brook, 0.9 mi northeast of Middlesex, and 2.4 mi west of the intersection of State Route 28 and Washington Avenue in Dunellen.

DRAINAGE AREA.--23.9 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1998 to current year.

GAGE.--Staff gage.

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

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 9, 2009	10.2
Feb 2, 2010	16.3
May 6, 2010	19.6
Aug 23, 2010	31.1

## 01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ—Continued

## WATER-QUALITY RECORDS

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

REMARKS.--Cooperative Network Site Descriptor: Urban Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 9.

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 5

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; cm, centimeter; ft<sup>3</sup>/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; <, less than; E, estimated]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, organic constituents,		Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
				Absorbance, UV, 254 nm, 1 cm path length, water, filtered, per centimeter (50624)	Absorbance, UV, 280 nm, 1 cm path length, water, filtered, per centimeter (61726)				
11-09-2009	1120	770	18.5	.133	.098	10	9.1	80	7.5
02-02-2010	1030	766	3.0	.097	.070	16	13.9	100	7.2
05-06-2010	1120	754	21.5	.247	.189	20	5.8	62	7.2
08-23-2010	1140	757	22.0	.184	.136	31	5.4	63	7.4

## WATER-QUALITY DATA

## WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 5

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Date	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 <sub>3</sub> (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)
02-02-2010	710	1.5	16	417	388	185	8	55.9	11.2
05-06-2010	386	18.8	5.4	226	207	111	3	33.5	6.66
08-23-2010	310	23.1	11	180	E 161	93.5	12	27.0	6.33

## 01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 3 of 5

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; cm, centimeter; ft<sup>3</sup>/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; <, less than; E, estimated]

Date	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 <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)
			titration, laboratory, mg/L as CaCO <sub>3</sub> (90410)							
11-09-2009	2.96	33.6	124	.19	67.7	.10	< .06	16.6	30.7	.47
02-02-2010	2.32	64.2	112	.99	133	.09	< .06	14.0	32.5	.47
05-06-2010	2.50	29.5	82	.48	51.8	.11	< .06	11.3	18.1	.66
08-23-2010	2.60	20.0	59	1.71	39.4	E .06	< .06	5.3	22.2	.47

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 4 of 5

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Date	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)	Total nitrogen, water, unfiltered, mg/L (00600)	Organic carbon, suspended sediment, total, mg/L (00689)
		11-09-2009	.182	.97	.031	< .03	.042	.071	1.4
02-02-2010	.182	1.71	.012	.10	.014	.083	2.2	2.3	.99
05-06-2010	.218	.89	--	.04	.115	.168	1.6	1.6	.48
08-23-2010	.120	.65	--	.19	.132	.218	1.1	1.3	1.69

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**WATER-QUALITY DATA  
WATER YEAR OCTOBER  
2009 TO SEPTEMBER  
2010**

Part 5 of 5

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Date	Organic carbon, water, filtered, mg/L (00681)
11-09-2009	4.4
02-02-2010	3.2
05-06-2010	5.8
08-23-2010	4.9