



Water-Data Report 2010

**0140940950 BLUE ANCHOR BROOK AT ELM, NJ**

MULLICA RIVER BASIN

LOCATION.--Lat 39°41'17", long 74°50'05" referenced to North American Datum of 1983, Winslow Township, Camden County, NJ, 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 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Occasional low-flow and miscellaneous measurements, water years 1991 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 16, 2009	3.55
Feb 22, 2010	6.21
Mar 10, 2010	7.61
May 10, 2010	5.25
Jun 21, 2010	4.85
Aug 10, 2010	2.10

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**WATER-QUALITY RECORDS**

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

REMARKS.--Cooperative Network Site Descriptor: Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

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; μg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	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 <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)
11-16-2009	1130	760	16.0	.340	.273	3.5	9.1	88	6.6
02-22-2010	1010	757	3.5	.128	.102	6.2	14.1	106	6.2
05-10-2010	1120	766	15.5	.427	.346	5.2	9.5	94	7.0
08-10-2010	1100	758	33.0	.221	.177	2.1	7.0	90	6.9

**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)
11-16-2009	86	13.7	4.4	61	E 46	13.6	2	3.02	1.48
02-22-2010	140	3.6	4.5	87	E 71	16.6	5	3.83	1.71
05-10-2010	104	14.5	3.7	71	55	17.3	1	3.95	1.80
08-10-2010	94	28.5	2.3	71	E 45	9.77	3	1.44	1.50

## 0140940950 BLUE ANCHOR BROOK AT ELM, NJ—Continued

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

Part 3 of 5

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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)							
11-16-2009	1.79	8.65	10	1.12	14.2	< .08	< .06	3.8	4.87	.47
02-22-2010	1.83	17.7	9	.62	27.1	< .08	< .06	1.7	7.69	.17
05-10-2010	1.86	11.7	16	.67	18.1	< .08	< .06	1.9	6.02	.37
08-10-2010	1.63	10.6	11	.80	17.8	E .06	< .06	.8	3.44	.45

**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)	Iron, water, filtered, μg/L (01046)
	11-16-2009	.172	.32	E .004	.15	.020	.045	.78	.94
02-22-2010	.016	.85	E .004	.09	E .005	.021	1.0	1.1	--
05-10-2010	.059	.11	--	.05	.020	.035	.49	.54	--
08-10-2010	.060	< .04	--	.09	.014	.032	< .49	< .57	911

## 0140940950 BLUE ANCHOR BROOK AT ELM, NJ—Continued

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

Part 5 of 5

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Date	<b>Organic carbon, suspended sediment, total, mg/L (00689)</b>	<b>Organic carbon, water, filtered, mg/L (00681)</b>
<b>11-16-2009</b>	1.12	5.6
<b>02-22-2010</b>	.62	2.7
<b>05-10-2010</b>	.67	6.6
<b>08-10-2010</b>	.80	4.2