



Water-Data Report 2010

**01446400 PEQUEST RIVER AT BELVIDERE, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°49'45", long 75°04'43" referenced to North American Datum of 1983, Belvidere Town, Warren County, NJ, Hydrologic Unit 02040105, at bridge on County Route 619 (Greenwich Street) in Belvidere, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--157 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1974, 1977 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 23, 2009	152
Feb 8, 2010	216
Jun 21, 2010	101

## 01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1962, 1976-82, 1998 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: August and September 2009.

DISSOLVED OXYGEN, PERCENT OF SATURATION: August and September 2009.

PH: August and September 2009.

SPECIFIC CONDUCTANCE: August and September 2009.

WATER TEMPERATURE: August and September 2009.

REMARKS.--Cooperative Network Site Descriptor: Watershed Integrator, NJ Department of Environmental Protection Watershed Management Area 1.

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, 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)
11-23-2009	1130	766	12.0	.142	.107	152	14.4	121	8.6
02-08-2010	1140	752	.0	.057	.043	216	15.8	111	8.3
06-21-2010	1130	751	28.0	.099	.076	101	10.8	125	8.4
08-11-2010	1045	752	29.0	.061	.048	E 51	11.3	127	8.5

## 01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

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

Part 2 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	Specific conduc- tance, water, unfiltered, μS/cm at 25 °C (00095)	Tempera- ture, 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 constit- uents, 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)	Magne- sium, water, filtered, mg/L (00925)
11-23-2009	501	7.7	3.5	293	285	226	4	51.1	24.0
02-08-2010	527	1.0	6.3	290	E 286	217	6	49.5	22.8
06-21-2010	514	22.5	3.8	282	E 289	230	9	52.2	24.1
08-11-2010	568	21.4	1.3	321	314	245	2	52.9	27.3

**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) titration, laboratory, mg/L as CaCO <sub>3</sub> (90410)	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)
11-23-2009	1.84	20.4	202	.48	36.0	.10	< .06	7.0	19.8	.28
02-08-2010	1.41	20.9	197	.58	41.4	E .06	< .06	7.7	18.0	.18
06-21-2010	1.76	21.8	199	.63	39.4	E .06	< .06	7.6	17.8	.25
08-11-2010	2.82	22.7	218	.28	45.7	.11	< .06	7.0	19.8	.23

## 01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

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

Part 4 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	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)
11-23-2009	< .010	.82	.016	.04	.017	.038	1.1	1.1	.48
02-08-2010	.041	1.25	.014	.05	.013	.030	1.4	1.5	.58
06-21-2010	.028	1.06	--	.05	.034	.049	1.3	1.4	.63
08-11-2010	.011	1.14	--	E .02	.029	.038	1.4	E 1.4	.28

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

Part 5 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	Organic carbon, water, filtered, mg/L (00681)
11-23-2009	5.0
02-08-2010	2.0
06-21-2010	2.8
08-11-2010	1.9