



Water-Data Report 2009

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 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1974, 1977 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Date	Discharge, in ft³/s
Nov 6, 2008	151
Mar 12, 2009	194
Mar 23, 2009	114
May 13, 2009	213
Aug 27, 2009	157

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 and Watershed Reconnaissance, NJ Department of Environmental Protection Watershed Management Area 1. The sample on Sep 1 was for the Watershed Reconnaissance. The accuracy of continuous water-quality data is routinely verified through inspections for fouling and calibration drift. The New Jersey Water Science Center requires that either constant or prorated adjustments be made to the continuous water-quality record when the difference between a sensor's response and a known value exceeds the following criteria: Water Temperature, 0.2 degrees Celsius (+ or -); Specific Conductance, the greater of 5 microsiemens/cm (+ or -) or 3% of the measured value; Dissolved Oxygen, the greater of 0.3 mg/L (+ or -) or 5% of the measured value; pH, 0.3 units (+ or -). If the difference between a sensor's response and a known value is within specified criteria, the data are considered to be reliable and are not adjusted. Data from the following period(s) were adjusted - SPECIFIC CONDUCTANCE: Aug 27-Sep 1, 2009; and Sep 1-8, 2009. [Unpublished records of dissolved oxygen, pH, specific conductance, and water temperature, during non-base-flow conditions, for the period Aug 27-Sep 1, 2009 are available at the U.S. Geological Survey office in West Trenton, NJ, and website <http://nwis.waterdata.usgs.gov/>].

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. Determination of chlorophyll-a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 3

[Remark codes: <, less than; E, estimated.]

Date	Time	Baro- metric pres- sure, mm Hg (00025)	Temper- ature, air, deg C (00020)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Instan- taneous dis- charge, ft ³ /s (00061)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm @ 25 degC (00095)	Temper- ature, water, deg C (00010)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Dis- solved solids dried @ 180degC wat flt mg/L (70300)
Nov 06...	1115	746	23.0	.152	.116	151	11.5	107	8.3	503	12.2	2.4	291
Mar 12...	0900	766	1.0	.106	.079	194	14.3	111	8.2	497	5.0	2.3	291
May 13...	0930	765	18.0	.136	.103	213	10.8	102	8.2	493	12.7	6.3	282
Aug 27...	1000	756	20.0	.176	.134	157	9.1	99	8.2	509	19.5	3.6	289
Sep 01...	1030	--	--	--	--	--	11.1	112	8.3	509	15.9	--	--

01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 3

[Remark codes: <, less than; E, estimated.]

Date	Dis- solved solids, sum of consti- tuents, mg/L (70301)	Hard- ness, water, mg/L as CaCO3 (00900)	Sus- pended solids, water, unfltrd mg/L (00530)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Total carbon, suspnd sedimnt total, mg/L (00694)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Silica, water, fltrd, mg/L as SiO2 (00955)
Nov 06...	E283	220	5	51.8	22.4	1.89	19.9	188	.3	34.9	E.08	<.04	9.0
Mar 12...	E269	200	6	47.1	19.5	1.23	22.0	180	1.0	41.5	E.07	<.04	4.6
May 13...	E268	210	12	47.9	21.0	1.16	20.6	183	1.3	39.5	E.06	<.04	6.7
Aug 27...	E277	220	4	50.8	22.4	1.60	19.8	195	.2	36.8	E.09	<.04	10.5
Sep 01...	--	--	4	--	--	--	--	196	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 3

[Remark codes: <, less than; E, estimated.]

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfltrd mg/L as P (00665)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Chloro- phyll a fluoro- metric method, uncorr, µg/L (32217)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
Nov 06...	26.3	.32	.029	.90	.030	.02	.034	.046	1.2	1.2	--	.33	4.4
Mar 12...	21.1	.28	<.010	.81	E.005	.15	.009	.021	1.1	1.2	--	.97	3.2
May 13...	18.3	.30	.022	.67	.025	.13	.032	.054	.96	1.1	--	1.27	3.7
Aug 27...	14.7	.31	<.010	.78	.044	.02	.045	.059	1.1	1.1	2.1	.24	4.4
Sep 01...	--	--	--	.73	--	--	--	.053	--	--	1.8	--	4.7

01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

HOURLY WATER-QUALITY-MONITOR VALUES
SEPTEMBER 1, 2009 TO SEPTEMBER 8, 2009

