



Water-Data Report 2006

**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 2005 TO SEPTEMBER 2006**

Date	Discharge, in ft <sup>3</sup> /s
Nov 15, 2005	217
Jan 4, 2006	819
Apr 13, 2006	158
May 3, 2006	187
May 25, 2006	175
Jun 27, 2006	419
Aug 1, 2006	133
Sep 12, 2006	88.0

**01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued****WATER-QUALITY RECORDS**

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

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia plus organic nitrogen (00623), filtered nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). Bacteria samples were collected synoptically over a 30-day period during the summer.

COOPERATIVE NETWORK SITE DESCRIPTOR: Watershed Integrator, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 1.

COOPERATION.--Samples were collected in cooperation with the NJDEP. Bacteria samples were provided by the local county health department under the direction of the NJDEP through the County Environmental Health Act. Determinations of filtered ammonia, filtered orthophosphorus, BOD, total suspended residue, ammonia+organic nitrogen in bed sediment, phosphorous in bed sediment, fecal coliform, E. coli, and enterococcus bacteria were performed by the NJ Department of Health and Senior Services.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 4

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

Date	Time	Turbdty white light, det ang 90+/-30	UV absorb- ance, 254 nm, wat flt	UV absorb- ance, 280 nm, wat flt	Baro- metric pres- sure, mm Hg	Dis- solved oxygen, mg/L	Dis- solved oxygen, percent of sat- uration	pH, water, unfltrd field, std units	Specif. conduc- tance, wat unf uS/cm	Temper- ature, air, deg C	Temper- ature, water, deg C	Hard- ness, water, mg/L as CaCO <sub>3</sub>
		Instan- taneous dis- charge, cfs (00061)	NTRU (63676)	/cm (50624)	/cm (61726)	(00025)	(00300)	(00400)	25 degC (00095)	(00020)	(00010)	
Nov 15...	1200	217	1.3	.107	.083	761	12.4	109	8.5	495	11.5	9.5
Feb 06...	1200	726	2.9	.113	.084	747	12.9	103	7.9	413	2.0	4.7
May 03...	1150	187	3.4	.096	.074	750	11.2	113	8.4	476	19.0	15.0
Aug 01...	1000	133	2.8	.117	.088	754	9.8	112	8.1	501	32.0	21.5

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 2 of 4

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

Date	Calcium water, filtrd, mg/L (00915)	Magnes- ium, water, filtrd, mg/L (00925)	Potas- sium, water, filtrd, mg/L (00935)	Sodium, water, filtrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO <sub>3</sub> (90410)	Chlor- ide, water, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Silica, water, filtrd, mg/L (00955)	Sulfate water, filtrd, mg/L (00945)	Residue water, filtrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, filtrd, mg/L as N (00623)
Nov 15...	53.2	23.1	1.64	19.0	180	33.5	E.07	7.7	22.6	274	291	<1	.23
Feb 06...	38.4	16.5	1.28	17.2	148	30.9	E.09	6.1	17.5	221	225	1	.25
May 03...	49.6	22.3	1.18	18.0	184	34.8	.11	4.0	17.8	261	264	8	.30
Aug 01...	52.2	23.3	1.42	18.4	204	32.9	E.06	8.2	16.0	280	293	5	.41

## 01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 3 of 4

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

Date	Ammonia water, filtrd, mg/L (00608)	Nitrite + nitrate water, mg/L (00631)	Particulate nitrogen, water, mg/L (49570)	Total nitrogen, water, filtrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Ortho-phosphate, water, filtrd, mg/L (00671)	Phosphorus, water, filtrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, filtrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
Nov 15...	.037	1.14	.05	1.4	1.4	.013	.019	.026	.3	<.1	.3	5.5	<1.0
Feb 06...	.018	.90	.06	1.1	1.2	.019	.016	.033	.7	<.1	.7	3.1	<1.0
May 03...	.026	.70	.06	1.0	1.1	.019	.023	.043	.6	<.1	.6	2.8	<1.0
Aug 01...	<.010	1.00	.08	1.4	1.5	.043	.051	.063	1.0	<.1	1.0	3.2	<1.0

**WATER-QUALITY  
DATA  
WATER YEAR  
OCTOBER 2005 TO  
SEPTEMBER 2006**

Part 4 of 4

[Remark codes:  
<, less than;  
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Date	Boron, water, filtrd, ug/L (01020)
Nov 15...	16
Feb 06...	10
May 03...	13
Aug 01...	15

## 01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 4

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

Date	Time	Ammonia			Inor-			Chrom-					
		pH bed sedimnt std	+ org-N, bed sed total, mg/kg (00626)	Phos- phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor- ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic bed sedimnt recover -able, ug/g (64847)	Cadmium bed sedimnt recover -able, ug/g (01028)	ium, bed sedimnt recover -able, ug/g (01029)	Cobalt bed sedimnt recover -able, ug/g (01038)	Copper, bed sedimnt recover -able, ug/g (01043)	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover -able, ug/g (01052)
Aug 01...	1000	7.52	830	1,700	17	11	3.7	.070	9.0	3.8	7	13,000	7.2

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 2 of 4

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

Date	Mangan- ese, bed sedimnt recover -able, ug/g (01053)	Mercury bed sedimnt recover -able, ug/g (71921)	Nickel, bed sedimnt recover -able, ug/g (01068)	Sele- nium, bed sedimnt recover -able, ug/g (64848)	Zinc, bed sedimnt recover -able, ug/g (01093)	1,2-Di- methyl- naphth- alene, <2 mm, ug/kg (49403)	1,6-Di- methyl- naphth- alene, <2 mm, ug/kg (49404)	1Methyl -9H- fluor- ene, <2 mm, ug/kg (49398)	1- Methyl- phenan- threne, <2 mm, ug/kg (49410)	1- Methyl- pyrene, wsv nat ug/kg (49388)	236Tri- methyl- naphth- alene, <2 mm, ug/kg (49405)	2,6-Di- methyl- naphth- alene, <2 mm, ug/kg (49406)	2-Ethyl naphth- alene bed sed bed sed
Aug 01...	630	<.007	8.3	.3	67	<52	E6	E8	E28	E38	E7	E35	<52

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 3 of 4

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

Date	2- Methyl- anthra- cene, bed sed <2 mm, bs <2mm ug/kg (49435)	4H-Cyc- lopenta- ene, bed sed <2 mm, wsv nat ug/kg (49411)	9H- Fluor- ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace- naphth- ylene, bed sed field, wsv nat ug/kg (49429)	Ace- naphth- ylene, bed sed field, wsv nat ug/kg (49428)	Anthra- cene, bed sed <2 mm, wsv nat ug/kg (49434)	Benzo- [a]- anthra- cene, bed sed field, wsv nat ug/kg (49436)	Benzo- [a]- pyrene, bed sed field, wsv nat ug/kg (49389)	Benzo- [b]- anthene, bed sed field, wsv nat ug/kg (49458)	Benzo- [ghi]- peryl- ene, bed sed field, wsv nat ug/kg (49408)	Benzo- [k]- anthene, bed sed field, wsv nat ug/kg (49397)	Chry- sene, bed sed field, wsv nat ug/kg (49450)	Dibenzo- [a,h]- anthra- cene, bed sed field, wsv nat ug/kg (49461)
Aug 01...	E23	E33	E16	E4	53	54	170	170	240	110	88	180	E45

## 01446400 PEQUEST RIVER AT BELVIDERE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 4 of 4

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

Date	Fluor-anthene <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,- 3-cd]- bed sed pyrene, bed sed wsv nat bed	Iso-phorone bed sed <2 mm wsv nat field, ug/kg (49390)	Naphth-alene, bed sed <2 mm wsv nat wsv nat bed	p-Cresol, PCBs, sedimnt ug/kg (49400)	Phenan-threne, <2 mm, wsv nat field, ug/kg (39519)	Phenan-threne, <2 mm, bed sed wsv nat field, ug/kg (49451)	Pyrene, bed sed wsv nat field, ug/kg (49409)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment, fallidia dst wat percent <.004mm (80157)	
Aug 01...	340	E130	<52	E3	E2.90	<52	150	<52	300	3	.9

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

[Remark codes: &lt;, less than.]

Date	Time	Enterococci m-E Temper- ature, water, deg C (00010)	E coli, m-TEC MF, water, col/ 100 mL (31649)	Fecal coliform, ECbroth MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth MF, water, MPN/ 100 mL (31615)
Aug 10...	1000	18.3	540	100	110
17...	1000	18.7	170	70	230
24...	1010	18.8	410	20	110
31...	1015	17.1	790	<10	800
Sep 07...	1020	16.0	200	<10	220