



Water-Data Report 2006

**01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°13'02", long 74°46'07" referenced to North American Datum of 1983, Trenton City, Mercer County, NJ, Hydrologic Unit 02040105, at bridge on Peace Street in Trenton, 900 ft upstream of mouth, 0.3 mi northwest of Trent House, and 0.7 mi southeast of Trenton Filtration Plant.

DRAINAGE AREA.--91.4 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1963, 1967, 1998 to current year.

GAGE.--Staff gage.

REMARKS.--Flow includes some sewage effluent.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 9, 2005	88.8
Feb 22, 2006	132
Jun 1, 2006	53.7
Aug 3, 2006	49.6

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ—Continued

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1963, 1976-78, 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 11.

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	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)
Nov 09...	1200	89	3.5	.117	.092	765	9.6	90	6.5	323	17.0	12.9	89
Feb 22...	1430	132	5.1	.095	.071	762	13.5	106	7.1	406	5.0	5.0	85
Jun 01...	1150	54	3.7	.108	.080	761	8.1	93	7.2	419	28.5	21.8	110
Aug 03...	1300	50	3.0	.120	.089	758	7.7	97	6.9	416	32.0	26.8	110

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

Part 2 of 4

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

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat fltrd mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
Nov 09...	24.4	6.95	3.59	22.0	44	43.1	.29	9.3	26.6	177	193	4	.41
Feb 22...	22.6	7.02	3.53	37.7	36	71.5	.10	7.9	24.8	213	221	2	.42
Jun 01...	29.9	8.19	4.64	31.5	52	58.7	.28	6.8	27.4	228	245	4	.88
Aug 03...	30.0	8.59	5.33	32.6	53	57.3	.28	9.2	27.6	234	233	3	.67

## 01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, 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, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Particulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
Nov 09...	.069	3.09	.07	3.5	3.6	.250	.25	.35	.7	<.1	.7	5.5	E1.4
Feb 22...	.066	3.40	.15	3.8	4.0	.172	.20	.27	1.1	<.1	1.1	2.7	<1.0
Jun 01...	.080	6.20	.09	7.1	7.2	.648	.68	.77	.6	<.1	.6	3.8	E1.2
Aug 03...	.054	6.50	.08	7.2	7.2	.735	.77	.81	.6	<.1	.6	4.0	E1.6

**WATER-QUALITY  
DATA**

**WATER YEAR  
OCTOBER 2005 TO  
SEPTEMBER 2006**

Part 4 of 4

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

Date	Boron, water, fltrd, ug/L (01020)
Nov 09...	52
Feb 22...	42
Jun 01...	73
Aug 03...	79

## 01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, 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	pH bed sedimnt std units (70310)	Ammonia + org-N, bed sed total, mg/kg as N (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)	Chrom- 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 03...	1300	7.36	220	3,000	4.7	.6	3.5	.370	17	4.8	41	15,000	150

**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, bed sed <2 mm, ug/kg (49403)	1,6-Di- methyl- naphth- alene, bed sed <2 mm, ug/kg (49404)	1Methyl -9H- fluor- ene, bed sed <2 mm, ug/kg (49398)	1- Methyl- phenan- threne, bed sed <2 mm, ug/kg (49410)	1- Methyl- pyrene, bed sed <2 mm, ug/kg (49388)	236Tri- methyl- naphth- alene, bed sed <2 mm, ug/kg (49405)	2,6-Di- methyl- naphth- alene, bed sed <2 mm, ug/kg (49406)	2-Ethyl naphth- alene bed sed <2 mm, wsv nat ug/kg (49948)
Aug 03...	320	.088	13	.2	190	E9	E17	E24	110	110	E17	E26	E14

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

Part 3 of 4

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Date	2- Methyl- anthra- cene, bed sed <2 mm, ug/kg (49435)	4H-Cyc- lopenta- -[def]- phenan- threne, bs <2mm ug/kg (49411)	9H- Fluor- ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace- naphth- ene, bed sed <2 mm, wsv nat ug/kg (49429)	Ace- naphth- ylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthra- cene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo- [a]- anthra- cene, bed sed <2 mm, ug/kg (49436)	Benzo- [a]- pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo- [b]- fluor- anthene bed sed <2 mm, ug/kg (49458)	Benzo- [ghi]- peryl- ene, bed sed <2 mm, ug/kg (49408)	Benzo- [k]- fluor- anthene bed sed <2 mm, ug/kg (49397)	Chry- sene, bed sed <2 mm, wsv nat field, ug/kg (49450)	Dibenzo -[a,h]- anthra- cene, bed sed <2 mm, ug/kg (49461)
Aug 03...	68	170	90	71	99	260	900	960	1,600	620	630	1,000	E210

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**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 4 of 4

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

Date	Fluor-anthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,3-cd]-pyrene, bed sed <2 mm ug/kg (49390)	Iso-phorone bed sed <2 mm, field, ug/kg (49400)	Naphthalene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p-Cresol, bed sed <2 mm, wsv nat field, ug/kg (49451)	Phenanthrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Phenanthrene, thri-dine, bed sed <2 mm, wsv nat field, ug/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment, falidia dst wat percent <.004mm (80157)
Aug 03...	2,200	E540	<51	E40	111	<51	1,100	E33	1,800	.2	.1

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

[Remark codes: <, less than.]

Date	Time	Temperature, water, deg C (00010)	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, ECbroth water, MPN/ 100 mL (31615)
May 03...	1016	13.5	150	420	3,000
10...	1105	16.5	130	910	<20
17...	1323	17.5	500	610	1,700
24...	0953	16.0	110	290	800
30...	1010	21.4	120	<10	800