

## Water-Data Report 2007

**01465854 SOUTH BRANCH RANCOCAS CREEK AT EAYRESTOWN, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 39°56'49", long 74°47'27" referenced to North American Datum of 1983, Lumberton Township, Burlington County, NJ, Hydrologic Unit 02040202, at bridge on Eayrestown-Newbolds Road, 0.1 mi north of Eayrestown, 1.3 mi southwest of Newbolds Corner, and 1.4 mi southeast of Lumberton.

DRAINAGE AREA.--66.4 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2005 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). Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 19.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, suspended residue, ammonia-plus-organic nitrogen in bed sediment, and phosphorus in bed sediment were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 5

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

Date	Time	Turbidity white light, det ang 90+/-30 corrctd	UV absorb- ance, 254 nm, wat flt units	UV absorb- ance, 280 nm, wat flt units	Baro- metric pres- sure, mm Hg	Dis- solved oxygen, mg/L (00025)	Dis- solved oxygen, percent of sat- uration (00300)	pH, water, unfltrd field, std units	Specif- ic conduc- tance, μS/cm (00400)	Temper- ature, wat unf wat air, deg C (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)
Nov 08...	0900	2.8	.607	.475	756	8.7	77	6.3	116	15.2	9.7	30	8.70	
Feb 15...	0900	6.5	.289	.223	760	14.9	102	6.6	215	-5.0	.0	28	7.51	
May 01...	0900	3.4	.835	.654	764	6.4	66	--	88	15.9	16.4	20	5.49	
Aug 15...	0930	3.8	.498	.394	760	5.2	61	6.5	108	23.5	23.1	20	5.56	

## 01465854 SOUTH BRANCH RANCOCAS CREEK AT EAYRESTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 5

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

Date	ANC, wat unf fixed						Chlor- ide, lab, mg/L as CaCO <sub>3</sub>	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. 180degC wat flt mg/L (70300)	Residue total at 180degC non- filter- able, mg/L (00530)	Ammonia	
	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	CaCO <sub>3</sub> mg/L as (90410)	mg/L (00940)	mg/L (00950)						org-N, water, fltrd, mg/L (00623)	Ammonia water, fltrd, mg/L (00608)		
Nov 08...	1.96	2.09	7.25	13	13.2	E.06	6.8	11.1	63	95	4	.44	.052		
Feb 15...	2.29	2.34	24.2	7	41.8	E.07	5.8	14.5	106	126	2	.58	.193		
May 01...	1.42	1.52	7.78	7	12.1	<.10	2.5	9.21	46	78	2	.66	.043		
Aug 15...	1.46	1.89	8.68	9	14.8	E.07	4.7	8.95	53	77	6	.57	.086		

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 5

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

Date	Nitrate + nitrite water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, water, fltrd, mg/L (49570)	Total nitro- gen, water, unfltrd mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sediment mg/L (00694)	Inor- ganic carbon, suspnd sediment mg/L (00688)	Organic carbon, suspnd sediment mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd µg/L (01002)
Nov 08...	.65	.12	1.1	1.2	.043	.075	.120	.9	<.1	.9	12.1	--	--
Feb 15...	.79	.11	1.4	1.5	.021	.036	.082	1.1	<.1	1.1	7.1	.35	.50
May 01...	.45	.06	1.1	1.2	.041	.069	.110	.7	<.1	.7	15.1	--	--
Aug 15...	.36	.07	.93	1.0	.084	.127	.190	.7	<.1	.7	8.2	.84	.85

## 01465854 SOUTH BRANCH RANCOCAS CREEK AT EAYRESTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 5

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

Date	Barium, water, unfltrd recover -able, µg/L (01007)	Beryll- ium, water, unfltrd recover -able, µg/L (01012)	Boron, water, unfltrd recover -able, µg/L (01020)	Boron, water, unfltrd recover -able, µg/L (01022)	Cadmium water, unfltrd recover -able, µg/L (01027)	Chrom- ium, water, unfltrd recover -able, µg/L (01034)	Copper, water, unfltrd recover -able, µg/L (01042)	Iron, water, unfltrd recover -able, µg/L (01046)	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Mercury, water, unfltrd recover -able, µg/L (71900)	Nickel, water, unfltrd recover -able, µg/L (01067)
Nov 08...	--	--	17	--	--	--	--	696	--	--	--	--	--
Feb 15...	36.5	.07	13	14	.12	E.48	1.2	--	595	.85	35.1	.012	1.45
May 01...	--	--	15	--	--	--	--	--	--	--	--	--	--
Aug 15...	34.2	E.05	19	16	.05	E.56	E.82	--	1,600	1.46	23.0	<.010	1.1

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO**  
**SEPTEMBER 2007**

Part 5 of 5

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

Date	Selen- ium, water, unfltrd recover -able, µg/L (01147)	Silver, water, unfltrd recover -able, µg/L (01077)	Zinc, water, unfltrd recover -able, µg/L (01092)
Nov 08...	--	--	--
Feb 15...	.14	E.01	15
May 01...	--	--	--
Aug 15...	.13	<.02	8.3

**01465854 SOUTH BRANCH RANCOCAS CREEK AT EAYRESTOWN, NJ—Continued**

## **WATER-QUALITY DATA**

### **WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 4

[Remark codes: <, less than.]

		Ammonia			Inor- ganic			Chrom-					
Date	Time	pH bed sedimnt std	+ org-N, bed total, mg/kg (70310)	Phos- phorus, bed sedimnt total, mg/kg (00626)	Total carbon, bed sedimnt total, g/kg (00668)	carbo- n, bed sedimnt total, g/kg (00693)	Arsenic bed sedimnt recover- able, ug/g (00686)	Cadmium bed sedimnt recover- able, ug/g (64847)	ium, bed sedimnt recover- able, ug/g (01028)	Cobalt bed sedimnt recover- able, ug/g (01029)	Copper, bed sedimnt recover- able, ug/g (01038)	Iron, bed sedimnt recover- able, ug/g (01043)	Lead, bed sedimnt recover- able, ug/g (01052)
Aug 15...	0930	6.70	110	540	1.5	<.2	1.0	.030	9.5	1.1	3	5.400	3.1

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 4

[Remark codes: < less than ]

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 4

[Remark codes: < less than ]

## 01465854 SOUTH BRANCH RANCOCAS CREEK AT EAYRESTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 4

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

Date	Fluor-anthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,- 3-cd]- bed sed pyrene, bed sed bed sed wsv nat ug/kg (49390)	Iso-phorone bed sed <2 mm, bed sed wsv nat wsv nat ug/kg (49400)	Naphth-alene, bed sed <2 mm wsv nat wsv nat ug/kg (49402)	p-PCBs, bed sed bed sediment ug/kg (39519)	Cresol, bed sed wsv nat field, ug/kg (49451)	Phenan-threne, bed sed wsv nat field, ug/kg (49409)	Phenan-threne, bed sed wsv nat wsv nat ug/kg (49393)	Pyrene, bed sed wsv nat field, ug/kg (49387)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment, fall dia dst wat percent <.004mm (80157)
Aug 15...	<51	<51	<51	<51	<5.00	<51	<51	<51	<51	2	1