



Water-Data Report 2007

01401400 HEATHCOTE BROOK AT KINGSTON, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°22'10", long 74°36'58" referenced to North American Datum of 1983, South Brunswick Township, Middlesex County, NJ, Hydrologic Unit 02030105, at bridge on Mapleton Road, at abandoned railroad bridge, 0.3 mi south of Kingston, and 0.4 mi upstream from mouth.

DRAINAGE AREA.--9.00 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1971-72, 1979-84, 1989, 1991-92, 1998 to current year. Occasional low-flow measurements, water years 1979-84.

GAGE.--Reference point only.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Date	Discharge, in ft ³ /s
Nov 9, 2006	123
Nov 14, 2006	93.6
Mar 8, 2007	6.71
May 10, 2007	5.98
Sep 10, 2007	2.13

01401400 HEATHCOTE BROOK AT KINGSTON, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 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). Cooperative Network Site Descriptor: Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 10.

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. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

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

Part 1 of 4

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

Date	Time	Sample type	Turbdty	UV	UV	Baro-	Dis-	pH,	Specif-	
			white light, instan- taneous dis- charge, charge, cfs	absorb- ance, det ang 90+/-30 corrctd	absorb- ance, 254 nm, wat flt units			water, unfltrd percent of sat- uration (00301)		ic conduc- tance, wat unf µS/cm (00095)
Nov										
14...	0910	Environmental	94	26	.541	.431	755	8.6	83	6.3
14...	0910	Replicate	--	--	--	--	--	--	--	--
14...	0911	Concurrent Replicate	--	--	--	--	--	--	--	--
Mar										
08...	0900	Environmental	6.7	6.4	.065	.048	764	14.1	98	6.6
08...	0900	Replicate	--	--	--	--	--	--	--	--
08...	0901	Concurrent Replicate	--	--	--	--	--	--	--	--
May										
10...	1100	Environmental	6.0	1.5	.105	.080	759	9.2	94	6.5
Sep										
10...	0900	Environmental	2.1	1.4	.037	.030	760	8.9	96	6.2
10...	0900	Replicate	--	--	--	--	--	--	--	--
10...	0901	Concurrent Replicate	--	--	--	--	--	--	--	--

01401400 HEATHCOTE BROOK AT KINGSTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

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

Date	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)	Calcium water, mg/L (00915)	Magnes- ium, water, mg/L (00925)	Potas- sium, water, mg/L (00935)	Sodium, water, mg/L (00930)	ANC, wat unf fixed			Chlor- ide pt, lab, mg/L as CaCO ₃ (90410)	Fluor- ide, water, mg/L (00950)	Silica, water, mg/L (00955)	Sulfate water, mg/L (00945)	Residue water, filtr, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat fit mg/L (70300)
							Chlor- ide, lab, mg/L as CaCO ₃ (90410)	Fluor- ide, water, mg/L (00950)	Silica, water, mg/L (00955)						
Nov															
14...	13.4	36	8.70	3.51	2.40	9.72	22	15.3	E.10	10.1	13.8	78	106		
14...	--	37	8.70	3.80	2.80	9.40	22	15.0	.07	--	14.0	68	120		
14...	--	37	8.60	3.80	2.90	9.80	21	16.0	.09	--	14.0	69	110		
Mar															
08...	.7	120	28.7	11.9	3.13	165	27	324	E.07	13.2	27.4	602	647		
08...	--	110	27.0	11.0	3.10	150	--	340	.13	--	27.0	--	630		
08...	--	120	29.0	12.0	3.30	170	--	340	.13	--	27.0	--	640		
May															
10...	16.0	89	20.4	9.28	2.83	30.9	36	66.3	E.05	10.2	19.1	193	219		
Sep															
10...	18.6	78	17.7	8.31	2.84	20.0	26	55.9	E.05	13.8	5.04	165	181		
10...	--	79	18.0	8.20	2.90	20.0	26	50.0	<.05	--	4.8	145	230		
10...	--	79	18.0	8.20	3.00	20.0	22	50.0	<.05	--	4.8	143	200		

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

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

Date	Residue total non- filter- able, mg/L (00530)	Ammonia		Ammonia		Nitrate		Partic- ulate		Total nitro- gen, water, fltrd, mg/L (49570)	Total nitro- gen, water, unfltrd, mg/L (00602)	Ortho- phosphate, water, unfltrd mg/L (00671)	Ortho- phosphate, water, fltrd, mg/L (70507)	Phos- phorus, water, fltrd, mg/L (00666)
		+ org-N, water, mg/L as N (00623)	+ org-N, water, mg/L as N (00625)	Ammonia water, mg/L as N (00608)	Ammonia water, mg/L as N (00610)	nitrite water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, susp, mg/L as N (00613)	Total nitro- gen, water, fltrd, mg/L as N (00602)	Total nitro- gen, water, unfltrd, mg/L as P (00600)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Ortho- phosphate, water, unfltrd mg/L (00666)		
Nov														
14...	14	.55	--	.024	--	.22	--	.12	.77	.89	.019	--	.042	
14...	14	E.48	E.66	<.050	<.050	.210	<.050	--	--	--	.017	.02	<.050	
14...	15	E.52	E.63	<.050	<.050	.210	<.050	--	--	--	.017	.02	<.050	
Mar														
08...	10	.29	--	.078	--	2.75	--	.04	3.0	3.1	.010	--	<.008	
08...	<10	<.05	E.89	.063	.065	2.40	<.050	--	--	--	.019	--	<.050	
08...	<10	E.79	E.83	.064	.066	2.50	<.050	--	--	--	<.010	--	<.050	
May														
10...	1	.28	--	.015	--	2.91	--	.02	3.2	3.2	E.004	--	E.005	
Sep														
10...	1	.18	--	.028	--	5.72	--	<.02	5.9	--	E.008	--	.011	
10...	<10	E.10	E.17	<.050	<.050	5.70	<.050	--	--	--	.054	--	<.050	
10...	<10	E.10	E.19	<.050	<.050	5.70	<.050	--	--	--	.056	--	<.050	

01401400 HEATHCOTE BROOK AT KINGSTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 4

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

Date	Inor-					
	Total Phos- phorus, water, unfltrd	carbon, suspnd	carbon, sedimnt	carbon, suspnd	Organic carbon, water, fltrd,	Boron, water, fltrd,
mg/L (00665)	mg/L (00694)	mg/L (00688)	mg/L (00689)	mg/L (00681)	µg/L (01020)	
Nov						
14...	.086	.9	<.1	.9	10.8	29
14...	.085	--	--	--	14.0	30
14...	.082	--	--	--	13.0	30
Mar						
08...	.016	.3	<.1	.3	2.2	22
08...	<.050	--	--	--	1.6	20
08...	.053	--	--	--	1.9	20
May						
10...	.013	.2	<.1	.2	2.9	25
Sep						
10...	.028	.1	<.1	.1	.9	14
10...	<.050	--	--	--	1.2	20
10...	<.050	--	--	--	1.1	20