



Water-Data Report 2010

01407988 MARSH BOG BROOK NEAR SHACKS CORNER, NJ

MANASQUAN RIVER BASIN

LOCATION.--Lat 40°12'52", long 74°10'54" referenced to North American Datum of 1983, Howell Township, Monmouth County, NJ, Hydrologic Unit 02040301, at bridge on Cranberry Road, 1.1 mi southeast of Shacks Corner, 1.6 mi northwest of Farmingdale, 2.7 mi east of Ardena, and 4.9 mi upstream from mouth.

DRAINAGE AREA.--2.05 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-74, 2009-10.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 12.

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, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 1 of 7

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Tempera-ture, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter (61726)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)
12-07-2009	1000	Surface water	Regular	769	8.0	.485	.388	11.0	84
03-02-2010	0930	Surface water	Regular	763	5.5	.258	.203	12.4	90
06-01-2010	0930	Surface water	Regular	757	27.5	.820	.635	7.2	79
08-03-2010	0859	QC sample - Artificial	Splitter Blank	--	--	--	--	--	--
08-03-2010	0900	QC sample - Artificial	Field Blank	--	--	--	--	--	--
08-03-2010	0930	Surface water	Regular	764	26.5	.132	.106	6.4	72

01407988 MARSH BOG BROOK NEAR SHACKS CORNER, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 7

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Date	pH, water, unfiltered, field, standard units (00400)	Specific conduc- tance, water, unfiltered, µS/cm at 25 °C (00095)	Tempera- ture, water, °C (00010)	Turbidity, water, unfiltered, broad band light source		Dissolved solids, water, filtered, sum of constit- uents, milligrams per liter (70301)	Hardness, water, mg/L as CaCO ₃ (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
				multiple angles including 90+/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)				
12-07-2009	6.3	86	3.7	6.5	70	E 50	16.3	8	4.83
03-02-2010	6.3	133	2.0	7.5	87	E 72	18.5	6	5.54
06-01-2010	6.3	121	19.2	43	110	E 68	21.9	28	6.63
08-03-2010	--	--	--	--	--	--	--	--	--
08-03-2010	--	--	--	--	--	--	--	--	--
08-03-2010	6.5	127	20.0	87	110	83	37.5	18	12.8

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 7

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Date	Magne- sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint		Carbon (inorganic (pH 4.5))	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)
				titration, laboratory, mg/L as CaCO ₃ (90410)	suspended sediment, total, mg/L (00694)						
12-07-2009	1.03	1.57	7.12	2.8	.67	12.4	< .08	< .06	9.7	11.0	
03-02-2010	1.13	1.56	13.6	E 5	.58	25.3	< .08	< .06	7.1	13.7	
06-01-2010	1.30	2.31	10.6	11	2.22	19.3	E .07	< .06	10.4	10.9	
08-03-2010	--	--	--	--	--	--	--	--	--	--	
08-03-2010	--	--	--	--	--	--	--	--	--	--	
08-03-2010	1.38	2.14	5.88	14	2.31	15.4	.15	E .06	17.3	17.5	

01407988 MARSH BOG BROOK NEAR SHACKS CORNER, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 7

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Date	Ammonia		Nitrate		Orthophosphate			Particulate			Total		Total	
	plus organic nitrogen, water, filtered,	Ammonia, water, filtered,	plus nitrite, water, filtered,	mg/L as N (00623)	mg/L as N (00608)	mg/L as N (00631)	mg/L as P (00671)	mg/L as P (49570)	mg/L as P (00666)	Phosphorus, suspended in water, filtered, mg/L	Phosphorus, water, unfiltered, mg/L	Phosphorus, water, unfiltered, mg/L (00665)	nitrogen, water, filtered, mg/L (00602)	nitrogen, water, unfiltered, mg/L (00600)
12-07-2009	.85	.054	.11	E .008		.03		.021		.037		.95		.99
03-02-2010	.21	.026	.13	E .009		< .03		.009		.027		.34		< .38
06-01-2010	.70	.181	.05	--		.12		.019		.091		.76		.88
08-03-2010	--	--	--	--		--		--		--		--		--
08-03-2010	--	--	--	--		--		--		--		--		--
08-03-2010	.42	.166	.06	--		.12		.009		.102		.48		.60

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 5 of 7

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Date	Barium, water, unfiltered, recoverable, µg/L (01007)		Beryllium, water, unfiltered, recoverable, µg/L (01012)		Chromium, water, unfiltered, recoverable, µg/L (01027)		Copper, water, unfiltered, recoverable, µg/L (01040)		Iron, water, unfiltered, recoverable, µg/L (01042)		Lead, water, unfiltered, recoverable, µg/L (01045)		Iron, water, unfiltered, recoverable, µg/L (01049)		Lead, water, unfiltered, recoverable, µg/L (01051)	
	µg/L (01007)	µg/L (01012)	µg/L (01027)	µg/L (01034)	µg/L (01040)	µg/L (01042)	µg/L (01046)	µg/L (01042)	µg/L (01046)	µg/L (01046)	µg/L (01045)	µg/L (01045)	µg/L (01049)	µg/L (01049)	µg/L (01051)	
12-07-2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03-02-2010	18.9	.09	.11	1.6	--	E 1.1	--	--		1,770	--	--		.74		
06-01-2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
08-03-2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
08-03-2010	--	--	--	--	--	< 1.0	--	--	--	--	--	< .03	--	--	--	
08-03-2010	47.9	E .03	.08	.99	--	E .94		982		8,740	--			.58		

01407988 MARSH BOG BROOK NEAR SHACKS CORNER, NJ—Continued

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Part 6 of 7

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Date	Manganese, water, unfiltered, recoverable, µg/L (01055)	Mercury, water, unfiltered, recoverable, µg/L (71890)	Mercury, water, unfiltered, recoverable, µg/L (71900)	Nickel, water, unfiltered, recoverable, µg/L (01065)	Nickel, water, unfiltered, recoverable, µg/L (01067)	Silver, water, unfiltered, recoverable, µg/L (01077)	Zinc, water, unfiltered, recoverable, µg/L (01090)	Zinc, water, unfiltered, recoverable, µg/L (01092)	Arsenic, water, unfiltered, filtered, µg/L (01000)	Arsenic, water, unfiltered, µg/L (01002)
12-07-2009	--	--	--	--	--	--	--	--	--	--
03-02-2010	25.2	--	<.010	--	2.5	<.02	--	21.0	.28	.43
06-01-2010	--	--	--	--	--	--	--	--	--	--
08-03-2010	--	--	--	<.12	--	--	--	--	--	--
08-03-2010	--	<.010	--	.21	--	--	<2.8	--	<.04	--
08-03-2010	72.5	--	<.010	--	E 1.7	<.02	--	8.3	.24	.66

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Part 7 of 7

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Date	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Selenium, water, unfiltered, µg/L (01147)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
12-07-2009	--	--	.66	7.7
03-02-2010	16	E .09	.57	5.3
06-01-2010	--	--	2.22	14.8
08-03-2010	--	--	--	--
08-03-2010	--	--	--	--
08-03-2010	20	E .09	2.25	4.3