

## Water-Data Report 2010

**01399565 ROCKAWAY CREEK AT ROCKAWAY ROAD, AT MOUNTAINVILLE, NJ**

RARITAN RIVER BASIN

LOCATION.--Lat 40°41'24", long 74°48'40" referenced to North American Datum of 1983, Tewksbury Township, Hunterdon County, NJ, Hydrologic Unit 02030105, at bridge on Rockaway Road at Mountainville, 0.1 mi southeast of intersection with Main Street, 1.1 mi northeast of Cokesbury, and 7.6 mi upstream from South Branch Rockaway Creek.

DRAINAGE AREA.--9.07 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2009, 2010.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 8.

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 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, 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	Barometric pressure, mm Hg (00025)	Tempera-ture, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units		Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, % saturation (00301)	Specific conduc-tance, water, unfiltered, standard units (00400)	Specific conduc-tance, water, unfiltered, µS/cm at 25 °C (00095)
				per centimeter (50624)	per centimeter (61726)				
11-09-2009	1000	763	21.0	.051	.040	11.6	98	7.6	169
03-16-2010	0930	756	10.5	.067	.052	12.2	99	7.6	141
06-24-2010	0900	748	29.0	.044	.035	8.5	94	7.6	170
08-12-2010	1045	749	29.5	.046	.036	8.2	93	7.6	178

**01399565 ROCKAWAY CREEK AT ROCKAWAY ROAD, AT MOUNTAINVILLE, NJ—Continued**

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

Part 2 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, 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	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles		Dissolved solids, water, filtered, sum of constit- uents, water, milligrams per liter							Suspended solids, water, unfiltered, mg/L as CaCO <sub>3</sub>		Magne- sium, water, filtered, mg/L	
	Tempera- ture, water, °C (00010)	including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180 °C, water, filtered, (70300)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)	Sodium, water, mg/L (00930)	Ammonium, plus organic nitrogen, water, mg/L as N (00623)					Potassium, water, filtered, mg/L (00935)
11-09-2009	8.2	2.6	113	E 103	55.5	< 1	13.3	5.40	.40	13.3	13.3	13.3	1.61
03-16-2010	6.8	4.8	104	E 88	41.0	2	10.2	3.78	.378	10.2	10.2	10.2	1.40
06-24-2010	20.2	1.0	117	E 105	58.9	< 1	14.4	5.57	.557	14.4	14.4	14.4	1.55
08-12-2010	21.7	.8	119	107	60.5	3	14.3	6.04	.604	14.3	14.3	14.3	1.75

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

Part 3 of 6

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Date	ANC, water, unfiltered, fixed endpoint (pH 4.5)		Carbon (inorganic plus organic), Chloride, water, suspended sediment, mg/L as CaCO <sub>3</sub>		Fluoride, water, filtered, mg/L (00940)		Inorganic carbon, suspended sediment, mg/L (00688)	Silica, water, filtered, mg/L as SiO <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, mg/L as N (00623)	Ammonia, water, filtered, mg/L as N (00608)
	Sodium, water, filtered, mg/L (00930)	titration, laboratory, mg/L as CaCO <sub>3</sub> (90410)	total, mg/L (00694)	mg/L (00940)	mg/L (00950)	total, mg/L (00688)	mg/L (00955)	mg/L (00945)	mg/L (00623)	mg/L as N (00608)	
11-09-2009	8.92	34	E .09	18.7	E .04	< .06	17.1	12.0	.12	.017	
03-16-2010	9.01	27	.38	18.2	E .06	< .06	12.6	12.0	.46	E .009	
06-24-2010	8.86	36	.23	19.1	E .08	< .06	16.0	12.1	E .09	< .010	
08-12-2010	8.40	38	.19	18.8	.10	< .06	17.1	11.9	.11	.021	

**01399565 ROCKAWAY CREEK AT ROCKAWAY ROAD, AT MOUNTAINVILLE, NJ—Continued**

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

Part 4 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, 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	Nitrate plus nitrite, water, filtered,	Orthophos- phate, water, filtered,	Particulate nitrogen, suspended in water,	Phosphorus, water, filtered,	Phosphorus, water, unfiltered,	Total nitrogen, water, filtered,	Total nitrogen, water, unfiltered,	Barium, water, unfiltered,	Beryllium, water, unfiltered,
	mg/L as N (00631)	mg/L as P (00671)	mg/L (49570)	mg/L as P (00666)	mg/L as P (00665)	mg/L (00602)	mg/L (00600)	µg/L (01007)	µg/L (01012)
11-09-2009	1.29	E .008	< .03	E .005	.012	1.4	< 1.4	--	--
03-16-2010	.88	.011	.04	.012	.019	1.3	1.4	16.1	< .04
06-24-2010	1.30	--	E .03	.014	.018	E 1.4	E 1.4	--	--
08-12-2010	1.23	--	< .03	.015	.023	1.3	< 1.4	17.6	< .04

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

Part 5 of 6

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Date	Chromium, water, unfiltered, recover- able, unfiltered,	Copper, water, unfiltered, recover- able, unfiltered,	Iron, water, unfiltered, recover- able, unfiltered,	Lead, water, unfiltered, recover- able, unfiltered,	Manganese, water, unfiltered, recover- able, unfiltered,	Mercury, water, unfiltered, recover- able, unfiltered,	Nickel, water, unfiltered, recover- able, unfiltered,	Silver, water, unfiltered, recover- able, unfiltered,	Zinc, water, unfiltered, recover- able, unfiltered,
	µg/L (01027)	µg/L (01034)	µg/L (01042)	µg/L (01045)	µg/L (01051)	µg/L (01055)	µg/L (71900)	µg/L (01067)	µg/L (01092)
11-09-2009	--	--	--	--	--	--	--	--	--
03-16-2010	< .04	E .38	E .74	198	.22	9.3	< .010	.40	< .02
06-24-2010	--	--	--	--	--	--	--	--	--
08-12-2010	< .04	< .42	< 1.4	80	E .05	12.0	< .010	E .22	< .02

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

Part 6 of 6

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Date	Arsenic, water, filtered, unfiltered,	Arsenic, water, unfiltered,	Boron, water, unfiltered, recoverable, micrograms per liter	Selenium, water, unfiltered,	Organic carbon, suspended sediment, total, mg/L	Organic carbon, water, filtered, mg/L
	µg/L (01000)	µg/L (01002)	per liter (01022)	µg/L (01147)	(00689)	(00681)
11-09-2009	--	--	--	--	< .12	1.8
03-16-2010	.14	.29	< 14	.22	.37	1.8
06-24-2010	--	--	--	--	.22	1.5
08-12-2010	.17	.32	< 14	.22	.19	1.3

## 01399565 ROCKAWAY CREEK AT ROCKAWAY ROAD, AT MOUNTAINVILLE, NJ—Continued

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

Part 1 of 5

[&lt;, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Moisture content, bed sediment smaller than 2 millimeter		Carbon (inorganic plus organic), bed sediment, total, dry weight, grams per kilogram		Phosphorus, bed sediment, total, dry weight, kilograms per phosphorus		Cadmium, bed sediment, recoverable, per e, dry weight, milligrams per kilogram	Chromium, bed sediment, recoverable, per e, dry weight, milligrams per kilogram	Cobalt, bed sediment, recoverable, per e, dry weight, milligrams per kilogram	Copper, bed sediment, recoverable, per e, dry weight, milligrams per kilogram
		pH, bed sediment, standard	e, dry weight, percent (49282)	units (70310)	(00693)	(00686)	(00668)	(01028)	(01029)	(01038)	(01043)
08-12-2010	1015	25	7.40	1.5	<.2	250	.100	12	8.1	9	

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

Part 2 of 5

[&lt;, less than; E, estimated; M, presence verified but not quantified]

Date	p-Cresol, bed sediment smaller than 2 millimeter									
	Iron, bed sediment, total recoverable	Lead, bed sediment, total recoverable	Manganese, bed sediment, recoverable	Mercury, bed sediment, recoverable	Nickel, bed sediment, recoverable	Zinc, bed sediment, recoverable	Arsenic, bed sediment, recoverable	Selenium, bed sediment, recoverable	(native water), field, weight, microgram	PCBs, bed sediment, recoverable
	per milligrams	per milligrams	per milligrams	per milligrams	per milligrams	per milligrams	per milligrams	s per kilogram	s per kilogram	
	per kilogram (01170)	per kilogram (01052)	per kilogram (01053)	per kilogram (71921)	per kilogram (01068)	per kilogram (01093)	per kilogram (64847)	per kilogram (64848)	s per kilogram (49451)	s per kilogram (39519)
08-12-2010	16,000	4.3	250	<.007	6.7	41	1.9	.2	< 50	< 5.00

## 01399565 ROCKAWAY CREEK AT ROCKAWAY ROAD, AT MOUNTAINVILLE, NJ—Continued

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

Part 3 of 5

[&lt;, less than; E, estimated; M, presence verified but not quantified]

	1,2-Dimethylbenzene, bed sediment smaller than 2 millimeter	1,6-Dimethylbenzene, bed sediment smaller than 2 millimeter	1-Methyl-9H-fluorene, bed sediment smaller than 2 millimeter	1-Methylphenanthrene, bed sediment smaller than 2 millimeter	1-Methylpyrrole, bed sediment smaller than 2 millimeter	2,3,6-Trimethylbenzene, bed sediment smaller than 2 millimeter	2,6-Dimethylbenzene, bed sediment smaller than 2 millimeter	2-Ethylbenzene, bed sediment smaller than 2 millimeter	2-Methylanthracene, bed sediment smaller than 2 millimeter	4-H-Cyclopenta[def]phenanthrene, bed sediment smaller than 2 millimeter
Date	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49403)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49404)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49398)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49410)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49388)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49388)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49405)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49406)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49948)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49435)
08-12-2010	M	E 1	E 2	E 15	E 18	E 1	E 3	< 50	E 9	E 17

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

Part 4 of 5

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	9H-Fluorene, bed sediment smaller than 2 millimeter	Acenaphthalene, bed sediment smaller than 2 millimeter	Acenaphthylene, bed sediment smaller than 2 millimeter	Anthracene, bed sediment smaller than 2 millimeter	Benzo[a]anthracene, bed sediment smaller than 2 millimeter	Benzo[a]pyrene, bed sediment smaller than 2 millimeter	Benzo[b]fluoranthene, bed sediment smaller than 2 millimeter	Benzo[ghi]perylene, bed sediment smaller than 2 millimeter	Benzo[k]fluoranthene, bed sediment smaller than 2 millimeter	Chrysene, bed sediment smaller than 2 millimeter
Date	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49399)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49429)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49428)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49434)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49436)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49389)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49458)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49408)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49397)	s, wet sieved (native water), field, recoverable e, dry weight, microgram s per kilogram (49450)
08-12-2010	E 5	E 3	E 15	E 24	86	100	E 150	E 28	E 55	85

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

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Indeno[1,2-3-									
Dibenzo[a,h]anthracene, bed sediment smaller than 2 millimeter		Fluoranthene, bed sediment smaller than 2 millimeter		cd]pyrene, Isophorone, bed sediment smaller than 2 millimeter		Naphthalene, bed sediment smaller than 2 millimeter		Phenanthrene, bed sediment smaller than 2 millimeter	
s, wet sieved (native water), field, recoverabl e, dry weight, microgram		s, wet sieved (native water), field, recoverabl e, dry weight, microgram		s, wet sieved (native water), field, recoverabl e, dry weight, microgram		s, wet sieved (native water), field, recoverabl e, dry weight, microgram		s, wet sieved (native water), field, recoverabl e, dry weight, microgram	
(49461)		(49466)		(49390)		(49400)		(49402)	
Date		kilogram		kilogram		kilogram		kilogram	
08-12-2010		E 12		190		E 35		< 50	