



Water-Data Report 2010

01378560 COLES BROOK AT HACKENSACK, NJ

HACKENSACK RIVER BASIN

LOCATION.--Lat 40°54'40", long 74°02'25" referenced to North American Datum of 1983, Hackensack City, Bergen County, NJ, Hydrologic Unit 02030103, at bridge on Main Street in Hackensack, 0.8 mi upstream from mouth, and 1.9 mi northwest of Teaneck.

DRAINAGE AREA.--7.00 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1965-72. Miscellaneous measurements, water years 1998 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Date	Discharge, in ft³/s
Nov 12, 2009	2.75
Feb 4, 2010	3.59
May 11, 2010	3.46
Aug 23, 2010	75.6

01378560 COLES BROOK AT HACKENSACK, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1965, 1967, 1998 to current year.

REMARKS.--Cooperative Network Site Descriptor: Urban Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 5.

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.

WATER-QUALITY DATA

WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 1 of 5

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; <, less than; E, estimated]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter		Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
				(50624)	(61726)				
11-12-2009	1050	765	7.5	.097	.074	2.8	9.3	82	7.5
02-04-2010	1230	768	.0	.068	.048	3.6	14.1	105	7.5
05-11-2010	1100	768	14.0	.093	.069	3.5	9.5	87	7.7
08-23-2010	1000	757	20.0	.213	.165	76	7.2	83	6.9

WATER-QUALITY DATA

WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 5

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Date	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids, water, filtered, dried at 180 °C, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, 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)	Magnesium, water, filtered, mg/L (00925)
02-04-2010	2,490	2.6	4.1	1,360	E 1,290	250	5	76.7	14.1
05-11-2010	835	11.4	4.3	500	451	241	3	73.5	13.9
08-23-2010	125	22.1	27	75	E 61	29.6	35	9.14	1.65

01378560 COLES BROOK AT HACKENSACK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 5

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Date	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint (pH 4.5)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	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)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)
			titration, laboratory, mg/L as CaCO ₃ (90410)							
11-12-2009	2.90	60.5	170	.23	142	E .06	< .06	16.2	24.5	.32
02-04-2010	2.51	349	154	.25	710	E .06	< .06	11.8	28.2	.30
05-11-2010	2.31	68.3	154	.62	158	.12	< .06	14.1	23.0	.36
08-23-2010	2.00	8.13	26	3.02	13.2	E .05	E .03	2.9	6.04	.46

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 5

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Date	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Orthophos- phate, water, filtered, mg/L as P (00671)	Particulate nitrogen, suspended in water, mg/L (49570)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)	Total nitrogen, water, unfiltered, mg/L (00600)	Organic carbon, suspended sediment, total, mg/L (00689)
		11-12-2009	.052	.80	.027	E .03	.030	.050	1.1
02-04-2010	.226	1.35	E .006	.04	E .007	.026	1.7	1.7	.25
05-11-2010	.102	1.27	--	.10	.017	.057	1.6	1.7	.61
08-23-2010	.112	.54	--	.29	.088	.184	1.0	1.3	2.98

01378560 COLES BROOK AT HACKENSACK, NJ—Continued

**WATER-QUALITY DATA
WATER YEAR OCTOBER
2009 TO SEPTEMBER
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Part 5 of 5

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Date	Organic carbon, water, filtered, mg/L (00681)
11-12-2009	3.1
02-04-2010	2.7
05-11-2010	3.2
08-23-2010	4.8