



Water-Data Report 2010

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°38'05", long 74°41'12" referenced to North American Datum of 1983, Bedminster Township, Somerset County, NJ, Hydrologic Unit 02030105, on downstream left wingwall of bridge on Walsh Road at Burnt Mills, 0.2 mi upstream from mouth, and 4.4 mi southwest of Far Hills.

DRAINAGE AREA.--100 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1964, 1973, 1975-78, 1981 to current year. Annual maximum, water years 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 74 ft above NAVD of 1988, from topographic map.

REMARKS.--Peak stages at this gage maybe affected by backwater from the North Branch Raritan River. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 16.28 ft, Sep 16, 1999.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height, 90.0 ft (from high-water mark, elevation above NGVD of 1929), Jul 7, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.91 ft, Mar 14 at 0045.

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

Date	Discharge, in ft³/s
Nov 4, 2009	115
Feb 3, 2010	167
May 11, 2010	133
Aug 11, 2010	108

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1976 to current year.

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

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, per centimeter (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, per centimeter (61726)	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)
11-04-2009	1100	769	11.5	.173	.134	115	13.0	112	7.8
02-03-2010	0910	760	3.0	.051	.039	167	14.8	101	7.0
05-11-2010	1230	768	15.0	.106	.083	133	12.7	117	8.3
08-11-2010	1120	756	31.0	.038	.028	108	9.8	122	8.3

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, 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)	
			Dissolved solids, water, filtered, dried at 180 °C, mg/L (70300)						
11-04-2009	278	8.7	3.2	183	E 156	86.4	1	21.6	7.88
02-03-2010	327	.1	3.6	190	E 175	82.5	3	21.4	7.02
05-11-2010	285	11.9	3.0	172	E 156	83.4	2	21.0	7.51
08-11-2010	208	26.2	2.5	109	107	64.8	3	15.8	6.17

01399780 LAMINGTON RIVER AT BURNT MILLS, 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)	titration, laboratory, mg/L as CaCO ₃ (90410)						
11-04-2009	2.37	20.0	61	.13	35.7	E .06	< .06	15.0	13.2	.27
02-03-2010	1.48	26.4	51	.18	52.0	E .05	< .06	13.8	15.9	.12
05-11-2010	1.29	20.6	59	.30	40.7	.11	< .06	12.7	12.3	.16
08-11-2010	1.35	12.0	50	.55	23.2	.09	< .06	4.4	12.8	.19

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)
		11-04-2009	.017	.89	.042	< .03	.048	.056	1.2
02-03-2010	.020	1.54	.021	E .03	.021	.030	1.7	E 1.7	.18
05-11-2010	E .009	.98	--	E .02	.039	.048	1.1	E 1.2	.29
08-11-2010	.018	.27	--	.04	.039	.052	.46	.49	.55

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ—Continued**WATER-QUALITY DATA
WATER YEAR OCTOBER
2009 TO SEPTEMBER
2010**

Part 5 of 5

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Date	Organic carbon, water, filtered, mg/L (00681)
11-04-2009	4.2
02-03-2010	1.5
05-11-2010	2.6
08-11-2010	2.1