



Water-Data Report 2006

**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 of mouth, and 4.4 mi southwest of Far Hills.

DRAINAGE AREA.--100 mi<sup>2</sup>.

**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.--Crest-stage gage. Datum of gage is 74 ft above NAVD of 1988, from topographic map.

REMARKS.--Radio stage 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, 12.05 ft, Jun 28 at 1215.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 16, 2005	79.3
Feb 7, 2006	273
May 11, 2006	70.0
Sep 5, 2006	175

## 01399780 LAMINGTON RIVER AT BURNT MILLS, NJ—Continued

## WATER-QUALITY RECORDS

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

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). Bacteria samples were collected synoptically over a 30-day period during the summer.

COOPERATIVE NETWORK SITE DESCRIPTOR: Watershed Integrator, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 8.

COOPERATION.--Samples collected in cooperation with the NJDEP. Bacteria samples were provided by the local county health department under the direction of the NJDEP through the County Environmental Health Act. Determinations of filtered ammonia, filtered orthophosphorus, BOD, total suspended residue, fecal coliform, E. coli, and enterococcus bacteria were performed by the NJ Department of Health and Senior Services. 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 2005 TO SEPTEMBER 2006**

Part 1 of 4

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

Date	Time	Sample type	Instan- taneous dis- charge, cfs (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf 25 degC uS/cm (00095)	Temper- ature, air, deg C (00020)
<b>Nov</b>												
16...	1020	Environmental	79	.8	.110	.085	760	11.2	106	7.8	315	19.5
<b>Feb</b>												
07...	0850	Environmental	273	3.5	.100	.076	759	13.7	100	7.1	256	3.0
<b>May</b>												
11...	0930	Environmental	70	1.8	.081	.063	759	9.2	94	7.7	302	15.0
<b>Sep</b>												
05...	0940	Environmental	175	3.9	.332	.257	760	9.2	96	7.5	226	17.5
05...	0940	<i>Split Replicate</i>	--	--	--	--	--	--	--	--	--	--
05...	0941	<i>Concurrent Replicate</i>	--	--	--	--	--	--	--	--	--	--

## 01399780 LAMINGTON RIVER AT BURNT MILLS, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 2 of 4

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

Date	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
Nov 16...	12.6	94	22.8	9.01	2.19	20.9	58	41.7	E.08	11.9	20.1	--	180
Feb 07...	2.2	67	16.3	6.41	1.41	20.6	41	38.2	<.10	11.4	13.7	138	152
May 11...	16.4	96	23.9	8.72	1.71	19.6	65	39.6	.10	5.7	16.2	160	175
Sep 05...	17.3	60	15.0	5.52	1.74	16.3	41	32.6	E.06	13.1	12.7	124	145
05...	--	65	16.0	6.20	2.10	17.0	39	34.0	.07	--	13.0	114	140
05...	--	66	16.0	6.30	2.20	18.0	38	35.0	.07	--	13.0	116	140

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 3 of 4

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

Date	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Ortho- phos- phate, water, unfltrd mg/L as P (70507)	Phos- phorus, water, fltrd, mg/L (00666)
Nov 16...	<1	.26	--	.039	--	1.19	--	.05	1.4	1.5	--	--	.054
Feb 07...	<1	.20	--	.015	--	1.11	--	<.02	1.3	--	.018	--	.015
May 11...	1	.24	--	.023	--	1.26	--	.03	1.5	1.5	.031	--	.045
Sep 05...	6	.44	--	.026	--	.54	--	.05	.98	1.0	.039	--	.051
05...	<10	E.72	E.77	<.050	<.050	.530	<.050	--	--	--	.029	.03	<.050
05...	<10	E.28	E.45	<.050	<.050	.530	<.050	--	--	--	.029	.03	<.050

## 01399780 LAMINGTON RIVER AT BURNT MILLS, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 4 of 4

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

Date	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Boron, water, fltrd, ug/L (01020)
<b>Nov</b>							
16...	.067	.2	<.1	.2	3.0	<1.0	38
<b>Feb</b>							
07...	.024	.3	<.1	.3	2.7	<1.0	19
<b>May</b>							
11...	.050	.2	<.1	.2	2.2	2.0	32
<b>Sep</b>							
05...	.085	.4	<.1	.4	6.8	E1.0	29
05...	.052	--	--	--	10.0	--	30
05...	.060	--	--	--	10.0	--	30

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

[Remark codes: &lt;, less than.]

Date	Time	Temper- ature, water, deg C (00010)	Entero- cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, ECbroth water, MPN/ 100 mL (31615)
<b>May</b>					
24...	0955	13.0	30	<10	130
31...	1015	22.2	20	10	80
<b>Jun</b>					
07...	1015	17.5	130	<10	500
14...	1015	19.5	150	110	800
21...	1010	21.7	30	10	500