



Water-Data Report 2009

01399545 LAMINGTON RIVER AT LAMINGTON, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°39'38", long 74°43'45" referenced to North American Datum of 1983, Somerset County, NJ, Hydrologic Unit 02030105, at bridge on County Route 523 in Lamington, 0.4 mi downstream from Cold Brook, and 3.8 mi south of Potterstown.

DRAINAGE AREA.--53.6 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976-82, 2009.

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. 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 2008 TO SEPTEMBER 2009**

Part 1 of 5

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

Date	Time	Medium name	Sample type	Baro-metric pressure, mm Hg (00025)	Temper-ature, air, deg C (00020)	UV absorb-ance, 254 nm, wat flt (50624)	UV absorb-ance, 280 nm, wat flt (61726)	Dis-solved oxygen, mg/L (00300)
Nov								
18...	0900	Surface water	Replicate	760	2.5	.233	.181	11.6
18...	0900	QC sample - Surface water	Replicate	--	--	--	--	--
18...	0901	QC sample - Surface water	Replicate	--	--	--	--	--
Feb								
10...	0900	Surface water	Replicate	768	4.0	.078	.061	11.8
10...	0900	QC sample - Surface water	Replicate	--	--	--	--	--
10...	0901	QC sample - Surface water	Replicate	--	--	--	--	--
Jun								
03...	1000	Surface water	Replicate	757	21.0	.114	.088	9.0
03...	1000	QC sample - Surface water	Replicate	--	--	--	--	--
03...	1001	QC sample - Surface water	Replicate	--	--	--	--	--
Aug								
19...	1000	Surface water	Regular	755	28.0	.207	.160	8.9

01399545 LAMINGTON RIVER AT LAMINGTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 5

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

Date	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std (00400)	Specif-ic conduc-tance, wat unf 25 degC (00095)	Temper-ature, water, deg C (00010)	Turbdty white light, det ang 90+/-30 corctd	Dis-solved solids @ 180degC wat flt	Dis-solved solids, sum of constituents, mg/L	Hard-ness, water, mg/L as CaCO3	Sus-pended solids, water, unfltrd	Calci-um, water, fltrd, mg/L	Magnes-iun, water, fltrd, mg/L	Potas-sium, water, fltrd, mg/L	Sodium, water, fltrd, mg/L
	(00301)	(00400)	(00095)	(00010)	(63676)	(70300)	(70301)	(00900)	(00530)	(00915)	(00925)	(00935)	(00930)
Nov													
18...	90	7.8	277	4.7	2.1	159	E149	70	1	16.8	6.89	2.49	22.9
18...	--	--	--	--	--	130	E139	68	<10	16.0	6.80	2.50	25.0
18...	--	--	--	--	--	110	141	71	<10	17.0	7.00	2.50	26.0
Feb													
10...	82	7.7	341	.5	2.6	177	E176	75	1	17.9	7.24	1.74	32.4
10...	--	--	--	--	--	180	174	85	<10	20.0	8.40	2.10	36.0
10...	--	--	--	--	--	180	176	85	<10	20.0	8.40	2.00	37.0
Jun													
03...	93	7.9	311	17.0	2.5	220	E169	92	5	22.6	8.73	1.29	23.6
03...	--	--	--	--	--	190	161	88	<10	21.0	8.70	1.30	23.0
03...	--	--	--	--	--	190	161	88	<10	21.0	8.70	1.30	23.0
Aug													
19...	102	8.0	333	22.3	1.9	214	E180	94	1	23.4	8.53	1.89	25.7

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 5

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

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Total carbon, suspnd sedimnt total, mg/L (00694)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Inor-ganic carbon, suspnd sedimnt total, mg/L	Silica, water, fltrd, mg/L as SiO2 (00688)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd	Ammonia water, fltrd, mg/L as N (00625)	Nitrate + nitrite water, fltrd, mg/L as N (00608)	Ortho-phosphate, water, fltrd, mg/L as P (00631)	Partic-u-late nitro-gen, susp, water, mg/L (49570)
	(90410)	(00694)	(00940)	(00950)	(00688)	(00945)	(00623)	(00625)	(00608)	(00631)	(00671)	(49570)	
Nov													
18...	50	.2	43.8	E.06	<.04	12.9	10.9	.35	--	<.010	.41	.014	.03
18...	48	--	48.0	.07	--	--	10.0	E.24	E.64	<.050	E.430	<.010	--
18...	48	--	48.0	.07	--	--	10.0	E.23	E.63	<.050	.430	<.010	--
Feb													
10...	43	.3	60.8	<.08	<.04	12.1	12.1	.19	--	E.002	1.28	E.008	.04
10...	43	--	63.0	.07	--	--	12.0	E.17	1.6	<.050	1.40	<.010	--
10...	44	--	64.0	.07	--	--	12.0	E.33	1.6	<.050	1.40	<.010	--
Jun													
03...	64	.4	46.0	E.04	<.04	13.4	11.3	.27	--	.020	.88	.030	.06
03...	64	--	53.0	.07	--	--	11.0	<.10	E.18	<.050	.950	<.010	--
03...	63	--	54.0	.07	--	--	11.0	<.10	E.26	<.050	.950	<.010	--
Aug													
19...	69	.2	53.0	E.06	<.04	15.8	7.55	.27	--	<.010	.61	.026	.03

01399545 LAMINGTON RIVER AT LAMINGTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 5

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

Date	Phos- phorus, water, filtrd, mg/L (00666)	Phos- phorus, water, unfiltrd mg/L (00665)	Total nitro- gen, water, filtrd, mg/L (00602)	Total nitro- gen, water, unfiltrd mg/L (00600)	Barium, recover- able, μg/L (01007)	ium, water, unfiltrd recover- able, μg/L (01012)	Chrom- ium, water, unfiltrd recover- able, μg/L (01027)	Cadmium water, unfiltrd recover- able, μg/L (01034)	Copper, water, unfiltrd recover- able, μg/L (01042)	Iron, water, unfiltrd recover- able, μg/L (01045)	Lead, water, unfiltrd recover- able, μg/L (01051)	Mangan- ese, water, unfiltrd recover- able, μg/L (01055)	Mercury water, unfiltrd recover- able, μg/L (71900)
Nov													
18...	.021	.034	.77	.80	--	--	--	--	--	--	--	--	--
18...	<.050	<.050	E.67	E1.1	--	--	--	--	--	--	--	--	--
18...	<.050	<.050	E.66	E1.1	--	--	--	--	--	--	--	--	--
Feb													
10...	.009	.014	1.5	1.5	23.6	E.01	<.06	<.40	<4.0	187	.19	23.4	<.010
10...	<.050	<.050	E1.6	3.0	--	--	--	--	--	--	--	--	--
10...	<.050	<.050	E1.7	3.0	--	--	--	--	--	--	--	--	--
Jun													
03...	.022	.034	1.2	1.2	--	--	--	--	--	--	--	--	--
03...	<.050	<.050	--	E1.1	--	--	--	--	--	--	--	--	--
03...	<.050	<.050	--	E1.2	--	--	--	--	--	--	--	--	--
Aug													
19...	.033	.043	.88	.91	12.1	.03	<.06	.45	<4.0	348	.47	17.9	<.010

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 5

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

Date	Nickel, water, unfiltrd recover- able, μg/L (01067)	Silver, water, unfiltrd recover- able, μg/L (01077)	Zinc, water, unfiltrd recover- able, μg/L (01092)	Arsenic water, filtrd, μg/L (01000)	Arsenic water, unfiltrd μg/L (01002)	Boron, water, filtrd, μg/L (01020)	Boron, water, unfiltrd recover- able, μg/L (01022)	Selen- ium, water, unfiltrd μg/L (01147)	Organic carbon, suspnd water, total, mg/L (00689)	Organic carbon, sedimnt water, fltrd, mg/L (00681)
Nov										
18...	--	--	--	--	--	--	--	--	.22	5.7
18...	--	--	--	--	--	20	--	--	--	6.3
18...	--	--	--	--	--	20	--	--	--	6.2
Feb										
10...	.35	E.04	2.1	.16	E.18	--	15	.14	.26	2.3
10...	--	--	--	--	--	20	--	--	--	2.7
10...	--	--	--	--	--	20	--	--	--	2.7
Jun										
03...	--	--	--	--	--	--	--	--	.45	3.0
03...	--	--	--	--	--	20	--	--	--	4.2
03...	--	--	--	--	--	20	--	--	--	3.8
Aug										
19...	.52	<.06	2.3	.41	.88	--	E8	.13	.20	4.4

01399545 LAMINGTON RIVER AT LAMINGTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 7

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

Date	1-Naph-thol, water, 0.7µ GF	ethyl-aniline water, 0.7µ GF	2,6-Di-ethyl-aniline water, 0.7µ GF	2-Chloro-diethyl water, 0.7µ GF	CIAT, water, 0.7µ GF	2- 6-chloro-aniline water, 0.7µ GF	3,4-Di-chloro-aniline water, 0.7µ GF	3,5-Di-chloro-aniline water, 0.7µ GF	4-Chloro-phenol, water, 0.7µ GF	Aceto-chlor, water, 0.7µ GF	Ala-chlor, water, 0.7µ GF	alpha-sulfan, water, 0.7µ GF	Atra-zine, water, 0.7µ GF	Azin-phos-methyl oxon, water, 0.7µ GF
	µg/L (49295)	µg/L (82660)	µg/L (61618)	µg/L (04040)	µg/L (61620)	µg/L (61625)	µg/L (61627)	µg/L (61633)	µg/L (49260)	µg/L (46342)	µg/L (34362)	µg/L (39632)	µg/L (61635)	
Jun 03...	<.04	<.006	<.010	E.037	<.010	<.004	<.004	<.005	E.009	<.008	<.006	.044	<.04	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 7

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

Date	Azin-phos-methyl, water, 0.7µ GF	Ben-flur-alin, water, 0.7µ GF	Car-baryl, water, 0.7µ GF	Carbo-furan, water, 0.7µ GF	Chlor-pyrifos oxon, water, 0.7µ GF	Chlor-pyrifos water, 0.7µ GF	Chlor-pyrifos water, 0.7µ GF	cis-Per-methrin	cis-Propi-conazole, water, 0.7µ GF	Cyana-zine, water, 0.7µ GF	Cyflu-thrin, water, 0.7µ GF	Cyper-methrin, water, 0.7µ GF	DCPA, water, 0.7µ GF	Desulf-inyl-fipro-nil, water, 0.7µ GF
	µg/L (82686)	µg/L (82673)	µg/L (82680)	µg/L (82674)	µg/L (61636)	µg/L (38933)	µg/L (82687)	µg/L (79846)	µg/L (04041)	µg/L (61585)	µg/L (61586)	µg/L (82682)	µg/L (62169)	
Jun 03...	<.120	<.014	E.006	<.060	<.05	<.010	<.014	<.006	<.040	<.016	<.020	<.006	<.029	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 7

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

Date	Desulf-inyl-fipro-nil, water, 0.7µ GF	Diazi-non, water, 0.7µ GF	Di-chlor-vos, water, 0.7µ GF	Dicro-tophos, water, 0.7µ GF	Diel-drin, water, 0.7µ GF	Dimeth-oate, water, 0.7µ GF	Disulf-oton, water, 0.7µ GF	Disul-foton, water, 0.7µ GF	Endo-sulfan, water, 0.7µ GF	EPTC, water, 0.7µ GF	Ethion-monoxon water, 0.7µ GF	Ethion, water, 0.7µ GF	Etho-prop, water, 0.7µ GF	
	µg/L (62170)	µg/L (39572)	µg/L (38775)	µg/L (38454)	µg/L (39381)	µg/L (82662)	µg/L (61640)	µg/L (82677)	µg/L (61590)	µg/L (82668)	µg/L (61644)	µg/L (82346)	µg/L (82672)	
Jun 03...	E.005	<.013	<.02	<.08	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.012	<.016	

01399545 LAMINGTON RIVER AT LAMINGTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 7

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

Date	Fenami-															
	Fenami-phos	sulfone	oxide,	Fenami-phos,	nil	Fipro-sulfide	nil	Fipro-sulfone	nil	Fonofos	Hexazinone,	Ipro-dione,	Isofen-phos,	Cyhalothrin,	Mala-oxon,	Mala-thion,
Date	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	(04095)	(04025)	μg/L	μg/L	μg/L	μg/L	μg/L
	(61645)	(61646)	(61591)	(61591)	(62167)	(62168)	(62168)	(62166)	(62166)	(04095)	(04025)	(61593)	(61594)	(61595)	(61652)	(39532)
Jun 03...	<.053	<.08	<.03	E.006	E.005	E.006	<.010	<.008	<.008	<.014	<.006	<.010	<.080	<.020		

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 7

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

Date	Methyl														
	Meta-laxyl,	Methid-athion,	Methyl-oxon,	Methyl-para-thion,	para-oxon,	Metola-chlor,	Metola-chlor,	Metri-buzin,	Moli-nate,	Myclo-butanol	Oxy-fluor-fen,	Pendi-meth-alin,	Phorate	Phorate	Phosmet
Date	μg/L	μg/L	μg/L	μg/L	μg/L	0.7μ GF	0.7μ GF	μg/L	μg/L	μg/L	μg/L	0.7μ GF	μg/L	μg/L	μg/L
	(61596)	(61598)	(61664)	(61664)	(82667)	(82667)	(39415)	(82630)	(82671)	(61599)	(61600)	(82683)	(61666)	(82664)	(61668)
Jun 03...	<.007	<.006	<.01	<.008	E.016	<.016	<.002	<.002	<.010	<.006	<.012	<.03	<.020	<.05	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 6 of 7

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

Date	Ter-													
	Phosmet	Prome-ton,	Prome-tryn,	Promel-	Propanil,	Propar-gite,	Propy-zamide,	Tebu-simazine,	Thiuron-	Teflu-thrin,	bufos-oxon	Terbu-fos,	Terbu-thiazine,	Thio-bencarb
Date	μg/L	μg/L	μg/L	μg/L	μg/L	0.7μ GF	0.7μ GF	μg/L	μg/L	0.7μ GF	μg/L	0.7μ GF	μg/L	0.7μ GF
	(61601)	(04037)	(04036)	(82679)	(82685)	(82676)	(82676)	(04035)	(82670)	(61606)	(61674)	(82675)	(04022)	(82681)
Jun 03...	<.200	.02	<.006	<.014	<.02	<.004	E.008	<.02	<.010	<.04	<.02	<.01	<.016	

01399545 LAMINGTON RIVER AT LAMINGTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO
SEPTEMBER 2009

Part 7 of 7

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

Date	trans- Propri- con- azole, water, filtrd, µg/L (79847)	Tri- flur- alin, water, filtrd, filtrd, µg/L (61610)	0.7µ GF µg/L (82661)
Jun 03...	<.02	<.035	<.012

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Mois- ture, bed sed	Inor- ganic	Phos- phorus	Chrom-	Mangan-
pH	Total carbon,	Cadmium	ium,	ese, bed
<2 mm, bed	bed	bed	Cobalt	Mercury
wsv nat	sedimnt	sedimnt	sedimnt	bed sedimnt
fld dry	std	total, mg/kg	recover	recover
Date	percent (49282)	units (70310)	as P (00693)	total, mg/kg (00686)
			µg/g (00668)	µg/g (01028)
				µg/g (01029)
				µg/g (01038)
				µg/g (01043)
				µg/g (01170)
				µg/g (01052)
				µg/g (01053)
				µg/g (71921)
Aug 19...	25	7.03	2.1	<.2
	M	.060	13	5.9
			8	16,000
			5.6	180
				<.007

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Nickel, bed	Zinc, bed	Arsenic bed	Sele- nium, bed	p- Cresol, bed sed	1,2-Di- methyl- naphth-	1,6-Di- methyl- naphth-	1Methyl- -9H- fluor- ene,	1- Methyl- phenan- threne,	1- Methyl- pyrene,	236Tri- methyl- naphth-	2,6-Di- methyl- naphth-
sedimnt	sedimnt	sedimnt	sedimnt	<2 mm, wsv nat	PCBs, bed	PCBs, bed sed	PCBs, bed sed	PCBs, bed sed	PCBs, bed sed	PCBs, bed sed	PCBs, bed sed
recover -able,	recover -able,	recover -able,	recover -able,	field,	sedimnt	<2 mm, bed sed	<2 mm, bed sed	<2 mm, bed sed	<2 mm, bed sed	<2 mm, bed sed	<2 mm, bed sed
Date	µg/g (01068)	µg/g (01093)	µg/g (64847)	µg/g (64848)	µg/kg (49451)	µg/kg (39519)	µg/kg (49403)	µg/kg (49404)	µg/kg (49398)	µg/kg (49410)	µg/kg (49388)
Aug 19...	8.6	29	2.0	.2	<50	<5.00	<50	<50	<50	E11	<50

01399545 LAMINGTON RIVER AT LAMINGTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	2-Ethyl naphth- alene <2 mm wsv nat	2-Methyl- anthra- cene, bed sed <2 mm bed sed bs <2mm	4H-Cyc- lopenta - [def]- phenan- bed sed threne, <2 mm,	9H- Fluor- ene, bed sed wsv nat	Ace- naphth- ene, bed sed wsv nat	Ace- naphth- ylene, bed sed wsv nat	Anthra- bed sed <2 mm, wsv nat	Benzo- [a]- cene, bed sed field,	Benzo- [a]- anthra- pyrene, bed sed <2 mm, wsv nat	Benzo- [b]- fluor- ene, bed sed <2 mm, bed sed	Benzo- [ghi]- peryl- ene, bed sed <2 mm, bed sed	Benzo- [k]- fluor- anthene, bed sed <2 mm, wsv nat	Chry- sene, bed sed <2 mm, field, wsv nat
	µg/kg (49948)	µg/kg (49435)	µg/kg (49411)	µg/kg (49399)	µg/kg (49429)	µg/kg (49428)	µg/kg (49434)	µg/kg (49436)	µg/kg (49389)	µg/kg (49458)	µg/kg (49408)	µg/kg (49397)	µg/kg (49450)
Aug 19...	<50	E8	E18	E10	E3	<50	E21	E62	E56	E77	E27	E27	E59

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Dibenzo -[a,h]- anthene anthra- bed sed cene, <2 mm bed sed <2 mm, field,	Fluor- anthene bed sed wsv nat	Indeno- [1,2,- 3-cd]- pyrene, bed sed bed sed	Iso- phorone bed sed wsv nat	Naphth- alene, bed sed wsv nat	Phenan- threne, bed sed <2 mm, wsv nat	Phenan- threne, bed sed <2 mm, wsv nat	Pyrene, bed sed <2 mm, wsv nat	Bed sediment dry svd sve dia percent <0.0625
	µg/kg (49461)	µg/kg (49466)	µg/kg (49390)	µg/kg (49400)	µg/kg (49402)	µg/kg (49409)	µg/kg (49393)	µg/kg (49387)	mm (80164)
Aug 19...	<50	E120	E29	<50	<50	E71	<50	E110	3.0