

## Water-Data Report 2009

**01457120 MUSCONETCONG RIVER AT ROUTE 579, AT BLOOMSBURY, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°39'20", long 75°05'20" referenced to North American Datum of 1983, Bloomsbury Borough, Hunterdon County, NJ, Hydrologic Unit 02040105, at bridge on Church Street (County Route 579) in Bloomsbury, 4.0 mi east of Alpha, and 8.3 mi upstream from mouth.

DRAINAGE AREA.--145 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--November 2008 to August 2009

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 1.

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 2008 TO SEPTEMBER 2009**

Part 1 of 5

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

Date	Time	Baro-metric pressure, mm Hg (00025)	Temper-ature, air, deg C (00020)	UV absorb-ance, 254 nm, wat flt units /cm (50624)	UV absorb-ance, 280 nm, wat flt units /cm (61726)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif-ic conduc-tance, µS/cm @ 25 degC (00095)	Turbdty white light, det ang 90+/-30 90+/-30 corrctd	Dis-solved solids dried @ 180degC wat flt NTRU (63676)	Dis-solved solids, sum of constituents, mg/L (70301)
Nov 12...	1015	767	7.0	.074	.056	11.4	95	8.0	418	7.3	2.1	231
Feb 19...	1030	739	4.0	.047	.036	12.5	95	8.2	548	4.0	1.7	291
May 06...	1015	756	14.5	.080	.062	10.0	95	8.1	460	12.9	5.2	254
Aug 18...	1015	754	30.5	.073	.056	8.2	91	8.0	444	20.0	1.4	248
												E223
												E289
												E246
												E238

## 01457120 MUSCONETCONG RIVER AT ROUTE 579, AT BLOOMSBURY, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 5

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

Date	ANC,						Inor-						
	Hard- ness, water, mg/L as CaCO <sub>3</sub> (00900)	Sus- pended solids, water, unfiltrd mg/L (00530)	Calcium water, filtrd, mg/L (00915)	Magnes- ium, water, filtrd, mg/L (00925)	Potas- sium, water, filtrd, mg/L (00935)	Sodium, water, filtrd, mg/L (00930)	wat unf fixed end pt, lab, mg/L as CaCO <sub>3</sub> (90410)	Total carbon, susnd sedimnt total, mg/L (00694)	Chlor- ide, water, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Inor- ganic carbon, susnd sedimnt total, mg/L (00688)	Silica, water, filtrd, mg/L as SiO <sub>2</sub> (00955)	Sulfate water, filtrd, mg/L (00945)
Nov 12...	130	1	30.5	14.1	1.84	29.9	99	.4	53.7	E.07	<.04	8.4	16.8
Feb 19...	150	4	33.9	15.4	1.99	51.0	102	.4	89.2	E.09	<.04	6.9	18.5
May 06...	150	13	32.7	16.1	2.02	31.8	103	1.0	64.5	E.05	<.04	9.5	17.3
Aug 18...	160	1	35.6	16.7	1.76	25.3	119	.3	52.0	E.06	<.04	10.8	14.7

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 3 of 5

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

Date	Ammonia		Nitrate	Ortho-	Partic-	Total			Beryll-	Chrom-			
	+ org-N, water, filtrd, mg/L as N (00623)	Ammonia water, filtrd, mg/L as N (00608)	nitrite water, filtrd, mg/L as N (00631)	phos- phate, water, filtrd, mg/L as P (00671)	nitro- gen, water, susps, mg/L as P (49570)	ulate water, mg/L as P (00666)	Phos- phorus, water, filtrd, mg/L as P (00665)	Phos- phorus, water, unfiltrd, mg/L as P (00602)	nitro- gen, water, filtrd, mg/L (00600)	Barium, water, unfiltrd, recover -able, μg/L (01007)	ium, water, unfiltrd, recover -able, μg/L (01012)	Cadmium water, unfiltrd, recover -able, μg/L (01027)	ium, water, unfiltrd μg/L (01034)
Nov 12...	.19	<.010	1.88	.016	.04	.020	.027	2.1	2.1	--	--	--	--
Feb 19...	.27	.042	2.39	E.008	.04	.008	.018	2.7	2.7	20.5	<.02	<.06	E.21
May 06...	.29	.025	2.32	.028	.13	.031	.051	2.6	2.7	--	--	--	--
Aug 18...	.20	<.010	2.20	.029	E.02	.035	.042	2.4	E2.4	21.3	<.02	<.06	E.36

## 01457120 MUSCONETCONG RIVER AT ROUTE 579, AT BLOOMSBURY, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 4 of 5

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

Date	Mangan-												Organic carbon, susnd sedimt total, mg/L (00689)
	Copper, water, unfltrd recover -able, μg/L (01042)	Iron, water, unfltrd recover -able, μg/L (01045)	Lead, water, unfltrd recover -able, μg/L (01051)	ese, water, unfltrd recover -able, μg/L (01055)	Mercury water, unfltrd recover -able, μg/L (71900)	Nickel, water, unfltrd recover -able, μg/L (01067)	Silver, water, unfltrd recover -able, μg/L (01077)	Zinc, water, unfltrd recover -able, μg/L (01092)	Arsenic water, filtrd, unfltrd recover -able, μg/L (01000)	Arsenic water, unfltrd recover -able, μg/L (01002)	Boron, water, unfltrd recover -able, μg/L (01022)	Selen- ium, water, unfltrd recover -able, μg/L (01147)	
Nov 12...	--	--	--	--	--	--	--	--	--	--	--	--	.35
Feb 19...	<4.0	81	.22	11.1	<.010	.54	<.06	E1.7	.34	.33	16	.17	.39
May 06...	--	--	--	--	--	--	--	--	--	--	--	--	1.05
Aug 18...	<4.0	96	.20	14.0	E.008	.36	<.06	E1.2	.71	1.3	19	.19	.28

**WATER-QUALITY  
DATA  
WATER YEAR  
OCTOBER 2008 TO  
SEPTEMBER 2009**

Part 5 of 5

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

Date	Organic carbon, water, filtrd, mg/L (00681)
Nov 12...	2.5
Feb 19...	1.9
May 06...	2.7
Aug 18...	2.2

## 01457120 MUSCONETCONG RIVER AT ROUTE 579, AT BLOOMSBURY, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 4

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

Date	Mois-	Total	Inor-	Phos-	Cadmium	Chrom-	Copper,	Iron,	Lead,	Mangan-	Mercury		
	ture, bed sed	pH	carbon, bed	ganic carbon, bed	phorus, bed	Cadmiu m, bed		bed	bed	ese, bed			
<2 mm, wsv nat	bed	bed	bed	bed	bed	bed	bed	bed	bed	bed	bed		
fld dry	std	total, units	total, g/kg	total, g/kg	mg/kg	-able, as P	-able, µg/g	-able, µg/g	-able, µg/g	-able, digest,	-able, µg/g		
	(49282)	(70310)	(00693)	(00686)	(00668)	(01028)	(01029)	(01038)	(01043)	(01170)	(01052)		
Aug 18...	25	7.59	5.9	3.3	E230	.060	12	4.2	8	16,000	7.7	280	<.007

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 4

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

Date	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-	1- Methyl- phenan-	1- Methyl- pyrene,	236Tri- methyl- naphth-	2,6-Di- methyl- naphth-	
	sedimnt	sedimnt	sedimnt	sedimnt	<2 mm, wsv nat	PCBs, field,	alene, bed	alene, bed sed	ene, bed sed	threne, bed sed	bed sed	alene, bed sed	
	recover -able, -able,	recover -able, -able,	recover -able, -able,	recover -able, -able,	wsv nat µg/g	bed µg/kg	bed µg/kg	bed µg/kg	bed µg/kg	wsv nat µg/kg	<2 mm, bed sed	<2 mm, bed sed	
	(01068)	(01093)	(64847)	(64848)	(49451)	(39519)	(49403)	(49404)	(49398)	(49410)	(49388)	(49405)	
Aug 18...	6.1	40	4.4	.2	<50	<5.00	<50	<50	<50	<50	E31	<50	<50

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 3 of 4

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

Date	2-Ethyl naphth- alene	2-Methyl- anthra- cene,	4H-Cyc- lopenta -def]-	9H- Fluor- ene,	Ace- naphth- ene,	Ace- naphth- ylene,	Anthra- cene,	Benzo- [a]- anthra- cene,	Benzo- [a]- pyrene,	Benzo- [b]- anthene	Benzo- [ghi]- peryl- ene,	Benzo- [k]- anthene	
	bed sed	bed sed	bs <2mm	wsv nat	wsv nat	bed sed	bed sed	<2 mm, bed sed	wsv nat	bed sed	bed sed	bed sed	wsv nat
	<2 mm, wsv nat	<2 mm, bed sed	bs <2mm	wsv nat	wsv nat	wsv nat	wsv nat	field,	<2 mm, wsv nat	<2 mm, bed sed	<2 mm, bed sed	<2 mm, bed sed	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 18...	<50	E17	E37	E17	E6	E48	E52	210	200	290	E100	110	220

**01457120 MUSCONETCONG RIVER AT ROUTE 579, AT BLOOMSBURY, NJ—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 4 of 4

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

Date	Dibenzo -[a,h]- anthra- cene, bed sed <2 mm,  Date μg/kg (49461)	Fluor- anthene bed sed pyrene, bed sed field,  Aug 18...	Indeno- [1,2,- 3-cd]- bed sed bed sed <2 mm μg/kg (49466)	Iso- phorone bed sed <2 mm, field,  370	Naphth- alene, bed sed wsv nat <2 mm μg/kg (49390)	Phenan- threne, bed sed wsv nat field,  E110	Phenan- threne, bed sed wsv nat field,  <50	Pyrene, bed sed <2 mm, wsv nat field,  140	Bed dry svd sve dia percent mm  μg/kg (49402)	