



Water-Data Report 2007

**01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°35'33", long 75°11'10" referenced to North American Datum of 1983, Pohatcong Township, Warren County, NJ, Hydrologic Unit 02040105, at bridge on Riegelsville-Milford Road (County Route 627) in Riegelsville, 0.2 mi north of Mount Joy, and 0.2 mi upstream from mouth.

DRAINAGE AREA.--156 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1940-55, 1973, 1977 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Date	Discharge, in ft <sup>3</sup> /s
Nov 15, 2006	559
Feb 12, 2007	166
May 8, 2007	346
Aug 7, 2007	151

**01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued****WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1962, 1976 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia-plus-organic nitrogen (00623), filtered nitrite-plus-nitrate nitrogen (00631), and total particulate nitrogen (49570). Cooperative Network Site Descriptor: Watershed Integrator and Statewide Status Site, New Jersey Department of Environmental Protection Watershed Management Area 1.

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 2006 TO SEPTEMBER 2007**

Part 1 of 5

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

Date	Time	Sample type	Turbidity	UV	UV	Barometric pressure, mm Hg	Dissolved oxygen, mg/L	Dissolved oxygen, percent of saturation	pH, water, unfltrd field, std units	Specific conductance, µS/cm	Temperature, air, deg C
			white light, det ang 90+/-30	absorbance, 254 nm, wat flt	absorbance, 280 nm, wat flt				(00025)		
		Instantaneous discharge, cfs (00061)	NTRU (63676)								
Nov 15...	1050	Environmental	559	4.2	.086	.066	756	11.0	103	8.1	356 14.5
Feb 12...	1020	Environmental	166	1.5	.035	.027	768	15.5	109	8.2	469 .2
May 08...	0900	Environmental	346	3.7	.050	.038	766	10.8	102	8.0	399 14.0
Aug 07...	0929	Field Blank	--	--	--	--	--	--	--	--	--
07...	1040	Environmental	151	3.6	.082	.063	755	9.1	104	8.2	413 26.0

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 5

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

Date	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, mg/L (00915)	Magnesium water, mg/L (00925)	Potassium water, mg/L (00935)	Sodium water, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, mg/L (00940)	Fluoride, water, mg/L (00950)	Silica, water, mg/L (00955)	Sulfate, water, mg/L (00945)	Residue water, sum of constituents, mg/L (70301)	Residue water, on evap. at 180degC wat flt mg/L (70300)
Nov 15...	12.0	120	26.6	11.9	1.55	22.7	86	44.5	E.08	9.1	13.4	189	200
Feb 12...	.9	170	35.9	18.5	1.97	25.0	126	50.8	.10	9.5	19.1	251	255
May 08...	12.9	130	29.7	14.0	1.39	23.2	106	45.9	E.08	5.0	16.1	207	206
Aug 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	22.0	140	31.5	15.8	2.08	25.3	112	46.9	E.07	7.8	15.6	221	229

## 01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 5

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

Date	Residue total non- filter- able, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L (00623)	Ammonia water, fltrd, mg/L (00608)	Nitrate + nitrite water fltrd, mg/L (00631)	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- phosphate, water, fltrd, mg/L (00671)	Phos- phorus, water, fltrd, mg/L (00666)	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)
Nov 15...	8	.23	.028	1.57	.05	1.8	1.9	.015	.022	.034	.6	<.1	.6
Feb 12...	1	.15	.021	3.34	<.02	3.5	--	E.007	E.007	.013	.3	<.1	.3
May 08...	2	.18	E.006	1.87	.06	2.1	2.1	.014	E.007	.015	.4	<.1	.4
Aug 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	9	.24	.032	2.06	.06	2.3	2.4	.019	.024	.030	.4	<.1	.4

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 5

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

Date	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd recover -able, µg/L (01002)	Barium, water, unfltrd recover -able, µg/L (01007)	Beryll- ium, water, unfltrd recover -able, µg/L (01012)	Boron, water, unfltrd recover -able, µg/L (01020)	Boron, water, unfltrd recover -able, µg/L (01022)	Cadmium water, unfltrd recover -able, µg/L (01027)	Chrom- ium, water, unfltrd recover -able, µg/L (01034)	Copper, water, unfltrd recover -able, µg/L (01040)	Copper, water, unfltrd recover -able, µg/L (01042)	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)
Nov 15...	2.5	--	--	--	--	16	--	--	--	--	--	--	--
Feb 12...	1.3	.25	.41	19.7	<.06	18	22	E.01	E.33	--	3.5	71	--
May 08...	1.7	--	--	--	--	15	--	--	--	--	--	--	--
Aug 07...	--	<.12	--	--	--	--	--	--	--	<.40	--	--	<.12
07...	2.5	.79	.75	19.7	<.06	21	18	.02	E.34	--	1.3	126	--

## 01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 5 of 5

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

Date	Mangan-									
	Lead, water, unfiltrd recover -able, µg/L (01051)	ese, water, unfiltrd recover -able, µg/L (01055)	Mercury Mercury water, unfiltrd recover -able, µg/L (71890)	Mercury water, unfiltrd recover -able, µg/L (71900)	Nickel, water, unfiltrd recover -able, µg/L (01065)	Nickel, water, unfiltrd recover -able, µg/L (01067)	Selen- ium, water, unfiltrd recover -able, µg/L (01147)	Silver, water, unfiltrd recover -able, µg/L (01077)	Zinc, water, unfiltrd recover -able, µg/L (01090)	Zinc, water, unfiltrd recover -able, µg/L (01092)
Nov										
15...	--	--	--	--	--	--	--	--	--	--
Feb										
12...	.15	8.0	--	<.010	--	.75	.29	<.02	--	2
May										
08...	--	--	--	--	--	--	--	--	--	--
Aug										
07...	--	--	E.006	--	<.06	--	--	--	<.60	--
07...	.29	13.6	--	<.010	--	.34	.22	<.02	--	E2.0

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 7

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

Date	2,6-Di- ethyl- aniline	2Chloro- -2',6'- diethyl	CIAT,	2-Ethyl- -6- methyl-	3,4-Di- chloro- aniline	3,5-Di- chloro- aniline	4- Chloro- 2methyl- phenol,	Aceto- chlor,	Ala- chlor,	alpha- Endo- sulfan,	Atra- zine,	Azin- phos- methyl				
	1-Naph- thol, water, filtrd 0.7u GF	water, filtrd 0.7u GF	acet- anilide	water, filtrd, wat flt	water, filtrd, fltrd, µg/L (49295)	water, filtrd, fltrd, µg/L (82660)	water, filtrd, fltrd, µg/L (61618)	water, filtrd, fltrd, µg/L (04040)	water, filtrd, fltrd, µg/L (61620)	water, filtrd, fltrd, µg/L (61625)	water, filtrd, fltrd, µg/L (61627)	water, filtrd, fltrd, µg/L (61633)	water, filtrd, fltrd, µg/L (49260)	water, filtrd, fltrd, µg/L (46342)	water, filtrd, fltrd, µg/L (34362)	water, filtrd, fltrd, µg/L (39632)
May																
08...	<.09	<.006	<.006	E.031	<.010	E.006	<.012	<.005	E.007	E.006	<.011	.029	<.04			

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 7

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

Date	Azin- phos- methyl, water, filtrd 0.7u GF	Ben- flur- alin,	Car- aryl,	Carbo- furan,	Chlor- pyrifos	Chlor- pyrifos	cis- Per- methrin	cis- Propi- conazole,	Cyana- zine,	Cyflu- thrin,	Cyhalo- thrin,	Cyper- methrin	DCPA, water, filtrd 0.7u 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 (61595)	µg/L (61586)	µg/L (82682)
May													
08...	<.080	<.010	E.009	<.020	<.06	<.005	<.010	<.013	<.018	<.053	<.014	<.046	<.003

## 01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 7

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

Date	Desulf- inyl- fipro- nil, water, fltrd,  μg/L (62170)	Diazi- non, water, fltrd,  μg/L (39572)	Dicro- tophos, water, fltrd,  μg/L (38454)	Diel- drin, water, fltrd,  μg/L (39381)	Dimeth- oate, water, 0.7u GF  μg/L (82662)	Disulf- oton sulfone water, fltrd,  μg/L (61640)	Disul- foton, water, fltrd,  μg/L (82677)	Endo- sulfan water, fltrd,  μg/L (61590)	EPTC, water, fltrd,  μg/L (82668)	Ethion monoxon water, fltrd,  μg/L (61644)	Ethion, water, fltrd,  μg/L (82346)	Etho- prop, water, fltrd,  μg/L (82672)	Fenami- phos sulfone water, fltrd,  μg/L (61645)
May 08...	E.006	<.005	<.08	<.009	<.006	<.01	<.02	<.022	<.002	<.02	<.016	<.012	<.053

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 7

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

Date	Fenami- phos sulf- oxide, water, fltrd,  μg/L (61646)	Desulf- inyl- fipro- nil Fenami- phos, water, fltrd,  μg/L (61591)	Fipro- nil sulfide Fenami- phos, amide, wat flt  μg/L (62169)	Fipro- nil sulfone water, fltrd,  μg/L (62167)	Fipro- nil sulfone water, fltrd,  μg/L (62168)	Fonofos water, fltrd,  μg/L (62166)	Hexa- zinone, water, fltrd,  μg/L (04095)	Ipro- dione, water, fltrd,  μg/L (04025)	Isofen- phos, water, fltrd,  μg/L (61593)	Mala- xon, water, fltrd,  μg/L (61594)	Mala- xon, water, fltrd,  μg/L (61652)	Meta- laxyl, water, fltrd,  μg/L (39532)	
May 08...	<.04	<.03	<.029	<.013	<.024	E.006	<.006	<.026	<.026	<.011	<.039	<.016	<.007

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 5 of 7

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

Date	Methi- althon water, fltrd,  μg/L (61598)	Methyl para- thion, water, fltrd,  μg/L (61664)	Methyl para- thion, Metola- chlor, water, fltrd,  μg/L (82667)	Metri- buzin, water, fltrd,  μg/L (39415)	Moli- nate, water, fltrd,  μg/L (82630)	Myclo- butanil water, fltrd,  μg/L (82671)	Oxy- fluor- fen, water, fltrd,  μg/L (61599)	Pendi- meth- alin, water, fltrd,  μg/L (61600)	Phorate water, fltrd,  μg/L (82683)	Phorate water, fltrd,  μg/L (61666)	Phosmet water, fltrd,  μg/L (82664)	Phosmet water, fltrd,  μg/L (61668)	
May 08...	<.009	<.02	<.008	.028	<.012	<.003	<.033	<.017	<.020	<.03	<.020	<.05	<.008

**01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 6 of 7

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

Date	Prometon, water, fltrd, μg/L (04037)	Prometryn, water, fltrd, μg/L (04036)	Propyzamide, water, 0.7u GF μg/L (82676)	Propanil, water, fltrd, 0.7u GF μg/L (82679)	Propargite, water, fltrd μg/L (82685)	Simazine, water, fltrd, 0.7u GF μg/L (04035)	Tebuthiuron, water, fltrd, 0.7u GF μg/L (82670)	Tefluthrin, water, fltrd, 0.7u GF μg/L (61606)	Terbufos, oxon sulfone, water, fltrd, 0.7u GF μg/L (61674)	Terbu-fos, water, fltrd, 0.7u GF μg/L (82675)	Terbutyl-azine, water, fltrd, 0.7u GF μg/L (04022)	Thiobencarb, water, fltrd, 0.7u GF μg/L (82681)	trans- Propiconazole, water, fltrd, μg/L (79847)
<b>May 08...</b>	.01	<.006	<.004	<.011	<.02	E.005	<.02	<.003	<.04	<.01	<.01	<.010	<.03

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO  
SEPTEMBER 2007**

Part 7 of 7

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

Date	Tri- flur- alin, water, filtrd, 0.7u GF μg/L (61610)	Di- chlor- vos, water, filtrd, 0.7u GF μg/L (82661)	Tri- flur- alin, water, filtrd, 0.7u GF μg/L (38775)
<b>May 08...</b>	<.035	<.009	<.01