



Water-Data Report 2010

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 mi².

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 2009 TO SEPTEMBER 2010

Date	Discharge, in ft ³ /s
Nov 4, 2009	363
Feb 24, 2010	616
Jun 17, 2010	203
Aug 12, 2010	94.5

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WATER-QUALITY RECORDS

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

REMARKS.--Cooperative Network Site Descriptor: Watershed Integrator, NJ 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 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, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter		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)
				Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter (61726)				
11-04-2009	0900	764	9.0	.094	.073	363	11.8	101	7.8
02-24-2010	1100	751	10.5	.078	.061	616	14.0	107	7.7
06-17-2010	1130	752	22.5	.068	.052	203	9.8	106	8.2
08-12-2010	1220	754	--	.044	.034	94	8.8	101	8.2

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 (70300)	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)
02-24-2010	569	3.8	16	303	E 294	108	5	24.8	11.1
06-17-2010	431	19.1	7.3	243	236	157	7	34.9	17.0
08-12-2010	498	22.3	3.1	266	E 265	199	1	40.7	23.7

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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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	2.00	31.7	96	1.00	60.3	E .06	< .06	9.1	14.0	.26
02-24-2010	1.84	61.2	76	1.66	121	E .06	< .06	7.5	13.7	.30
06-17-2010	1.71	25.6	117	1.10	51.0	.15	< .06	9.7	15.4	.22
08-12-2010	2.19	24.1	146	.36	49.2	E .06	< .06	7.5	17.8	.17

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	1.52	.019	.10	.023	.042	1.8
02-24-2010	.105	1.68	.016	.15	.017	.061	2.0	2.1	1.65
06-17-2010	.023	2.24	--	.12	.030	.051	2.5	2.6	1.10
08-12-2010	.015	2.74	--	.04	.020	.029	2.9	3.0	.36

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, 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	3.1
02-24-2010	2.5
06-17-2010	2.2
08-12-2010	1.7