

Water-Data Report 2009

**01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°35'41", long 75°11'23" referenced to North American Datum of 1983, Pohatcong Township, Warren County, NJ, Hydrologic Unit 02040105, on left bank of suspension bridge at Riegelsville, 600 ft upstream from Musconetcong River (flow of which is included in the records for this station since Oct. 1, 1931), and at river mile 174.8. Water-quality samples are collected from the bridge and are not affected by the flow of the Musconetcong River.

DRAINAGE AREA.--6,328 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Continuous-record gaging station, water years 1906-71. Annual maximum, water years 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 125.12 ft above NGVD of 1929.

COOPERATION.--Gage operated in cooperation with the Delaware River Joint Toll Bridge Commission.

REMARKS.--Satellite stage telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340,000 ft<sup>3</sup>/s, Aug 19, 1955, gage height, 38.85 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Maximum discharge, 86,400 ft<sup>3</sup>/s, Dec 13 at 0100, gage height, 18.65 ft.

## 01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1934, 1943, 1950, 1960-79, 1991 to June 2009 (discontinued).

REMARKS.--Cooperative Network Site Descriptor: Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 11. The samples on Mar 5 and Jun 4 included volatile organic compound and filtered pesticide assessments, respectively.

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: <, less than; E, estimated.]

Date	Time	Baro- metric pres- sure, 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)	Instan- taneous dis- charge, ft <sup>3</sup> /s (00061)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd std units (00400)	Specif- ic conduc- tance, wat unf μS/cm @ 25 degC (00095)	Temper- ature, water, deg C (00010)	Turbdty white light, 90+/-30 corrctd NTRU (63676)	Dis- solved solids dried @ 180degC wat flt mg/L (70300)
Nov 25...	1030	750	3.5	.084	.065	E6,720	12.3	92	7.9	185	3.2	.9	118
Mar 05...	1030	771	1.5	.058	.044	E8,040	13.7	98	7.8	201	1.6	2.0	110
Jun 04...	1045	758	16.0	.074	.057	E12,600	9.0	93	7.7	160	16.9	8.0	121

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

Part 2 of 5

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

Date	Dis- solved solids, sum of consti- tuents, mg/L (70301)	Hard- ness, water, mg/L as CaCO3 (00900)	Sus- pended solids, water, unfltrd mg/L (00530)	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)	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 (00688)	Silica, water, fltrd, mg/L as SiO2 (00955)
Nov 25...	101	61	1	16.1	5.11	1.24	11.0	43	E.2	17.3	<.08	<.04	4.0
Mar 05...	E105	58	2	15.1	4.84	1.15	15.8	36	.3	26.0	E.04	<.04	3.2
Jun 04...	88	53	15	14.2	4.22	1.23	10.3	36	.9	16.7	<.08	<.04	3.5

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

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

Part 3 of 5

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

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfltrd mg/L as P (00665)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Barium, water, unfltrd recover- able, µg/L (01007)	Beryll- ium, water, unfltrd recover- able, µg/L (01012)	Cadmium water, unfltrd µg/L (01027)
Nov 25...	16.7	.18	.015	.91	.050	E.01	.052	.061	1.1	E1.1	--	--	--
Mar 05...	13.6	.21	E.005	.76	.028	.05	.029	.038	.97	1.0	25.3	E.01	<.06
Jun 04...	12.9	.23	.030	.74	.060	.11	.060	.083	.97	1.1	--	--	--

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

Part 4 of 5

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

Date	Chrom- ium, water, unfltrd recover- able, µg/L (01034)	Copper, water, unfltrd recover- able, µg/L (01042)	Iron, water, unfltrd recover- able, µg/L (01045)	Lead, water, unfltrd recover- able, µg/L (01051)	Mangan- 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, fltrd, µg/L (01000)	Arsenic water, unfltrd µg/L (01002)	Boron, water, unfltrd recover- able, µg/L (01022)	Selen- ium, water, unfltrd µg/L (01147)
Nov 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar 05...	<.40	<4.0	90	.30	20.2	<.010	.64	<.06	6.6	.20	.24	E8	.12
Jun 04...	--	--	--	--	--	--	--	--	--	--	--	--	--

## 01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

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

Part 5 of 5

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

Date	Organic carbon, suspd, sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
Nov 25...	.20	2.5
Mar 05...	.29	1.9
Jun 04...	.95	2.3

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

Part 1 of 7

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

Date	1-Naphthol, water, fltrd, 0.7µ GF µg/L (49295)	2,6-Diethyl-aniline, water, fltrd, 0.7µ GF µg/L (82660)	2Chloro-2',6'-diethyl acet-anilide, wat flt µg/L (61618)	CIAT, water, fltrd, µg/L (04040)	2-Ethyl-6-methyl-aniline, wat flt µg/L (61620)	3,4-Di-chloro-aniline, water, fltrd, µg/L (61625)	3,5-Di-chloro-aniline, water, fltrd, µg/L (61627)	4-Chloro-2-methyl-phenol, wat flt µg/L (61633)	Aceto-chlor, water, fltrd, µg/L (49260)	Ala-chlor, water, fltrd, µg/L (46342)	alpha-Endo-sulfan, water, fltrd, µg/L (34362)	Atra-zine, water, fltrd, µg/L (39632)	Azin-phos-methyl oxon, water, fltrd, µg/L (61635)
Jun 04...	E.01	<.006	<.010	E.026	<.010	E.006	<.004	<.005	.012	E.007	<.006	.062	<.04

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

Part 2 of 7

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

Date	Azin-phos-methyl, water, fltrd, 0.7µ GF µg/L (82686)	Ben-flur-alin, water, fltrd, 0.7µ GF µg/L (82673)	Car-baryl, water, fltrd, 0.7µ GF µg/L (82680)	Carbo-furan, water, fltrd, 0.7µ GF µg/L (82674)	Chlor-pyrifos oxon, water, fltrd, µg/L (61636)	Chlor-pyrifos, water, fltrd, µg/L (38933)	cis-Per-methrin, water, fltrd, 0.7µ GF µg/L (82687)	cis-Propi-cona-zole, water, fltrd, µg/L (79846)	Cyana-zine, water, fltrd, µg/L (04041)	Cyflu-thrin, water, fltrd, µg/L (61585)	Cyper-methrin, water, fltrd, µg/L (61586)	DCPA, water, fltrd, 0.7µ GF µg/L (82682)	Desulf-inyl-fipro-nil amide, wat flt µg/L (62169)
Jun 04...	<.120	<.014	E.113	<.060	<.05	<.010	<.014	<.006	<.040	<.016	<.020	<.006	<.029

## 01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

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

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)	Di- chlor- vos, water, fltrd, µg/L (38775)	Dicro- tophos, water, fltrd, µg/L (38454)	Diel- drin, water, fltrd, µg/L (39381)	Dimeth- oate, water, fltrd, 0.7µ GF µg/L (82662)	Disulf- oton sulfone water, fltrd, µg/L (61640)	Disul- foton, water, fltrd, 0.7µ GF µg/L (82677)	Endo- sulfan sulfate water, fltrd, µg/L (61590)	EPTC, water, fltrd, 0.7µ GF µg/L (82668)	Ethion monoxon water, fltrd, µg/L (61644)	Ethion, water, fltrd, µg/L (82346)	Etho- prop, water, fltrd, 0.7µ GF µg/L (82672)
Jun 04...	<.012	<.005	<.02	<.08	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.012	<.016

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

Part 4 of 7

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

Date	Fenami- phos sulfone water, fltrd, µg/L (61645)	Fenami- phos oxide, water, fltrd, µg/L (61646)	Fenami- phos, water, fltrd, µg/L (61591)	Fipro- nil sulfide water, fltrd, µg/L (62167)	Fipro- nil sulfone water, fltrd, µg/L (62168)	Fipro- nil, water, fltrd, µg/L (62166)	Fonofos water, fltrd, µg/L (04095)	Hexa- zinone, water, fltrd, µg/L (04025)	Ipro- dione, water, fltrd, µg/L (61593)	Isofen- phos, water, fltrd, µg/L (61594)	lambda- Cyhalo- thrin, water, fltrd, µg/L (61595)	Mala- oxon, water, fltrd, µg/L (61652)	Mala- thion, water, fltrd, µg/L (39532)
Jun 04...	<.053	<.08	<.03	<.013	<.024	E.006	<.010	<.008	<.014	<.006	<.010	<.080	<.020

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

Part 5 of 7

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

Date	Meta- laxyl, water, fltrd, µg/L (61596)	Methid- athion, water, fltrd, µg/L (61598)	Methyl para- oxon, water, fltrd, µg/L (61664)	Methyl para- thion, water, fltrd, 0.7µ GF µg/L (82667)	Metola- chlor, water, fltrd, µg/L (39415)	Metri- buzin, water, fltrd, µg/L (82630)	Moli- nate, water, fltrd, 0.7µ GF µg/L (82671)	Myclo- butanil water, fltrd, µg/L (61599)	Oxy- fluor- fen, water, fltrd, µg/L (61600)	Pendi- meth- alin, water, fltrd, 0.7µ GF µg/L (82683)	Phorate oxon, water, fltrd, µg/L (61666)	Phorate water, fltrd, 0.7µ GF µg/L (82664)	Phosmet oxon, water, fltrd, µg/L (61668)
Jun 04...	<.007	<.006	<.01	<.008	E.021	<.016	<.002	<.010	<.006	<.012	<.03	<.020	<.05

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

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

Part 6 of 7

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

Date	Phosmet water, fltrd, µg/L (61601)	Prometon, water, fltrd, µg/L (04037)	Prometryn, water, fltrd, µg/L (04036)	Propanil, water, fltrd, 0.7µ GF µg/L (82679)	Propargite, water, fltrd, 0.7µ GF µg/L (82685)	Propyzamide, water, fltrd, 0.7µ GF µg/L (82676)	Simazine, water, fltrd, µg/L (04035)	Tebu-thiuron water, fltrd, 0.7µ GF µg/L (82670)	Teflu-thrin, water, fltrd, µg/L (61606)	Terbufos sulfone water, fltrd, µg/L (61674)	Terbutos, water, fltrd, 0.7µ GF µg/L (82675)	Terbutyl-azine, water, fltrd, µg/L (04022)	Thiocarb water, fltrd, 0.7µ GF µg/L (82681)
Jun 04...	<.200	E.01	<.006	<.014	<.02	<.004	.014	<.02	<.010	<.04	<.02	<.01	<.016

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

Part 7 of 7

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

Date	trans-Propiconazole, water, fltrd, µg/L (79847)	Tribuphos, water, fltrd, µg/L (61610)	Tri-fluralin, water, fltrd, 0.7µ GF µg/L (82661)
Jun 04...	<.02	<.035	<.012

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

Part 1 of 7

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

Date	1,2,3-Tri-chloro-propane water, unfltrd µg/L (77443)	Dibromo-chloro-propane water, unfltrd µg/L (82625)	1,2-Di-bromo-ethane, water, unfltrd µg/L (77651)	1,2-Di-chloro-ethane, water, unfltrd µg/L (32103)	1,2-Di-chloro-propane water, unfltrd µg/L (34541)	1,3-Di-chloro-propane water, unfltrd µg/L (77173)	1,4-Di-chloro-benzene water, unfltrd µg/L (34571)	3-Chloro-propene water, unfltrd µg/L (78109)	Acrylo-nitrile water, unfltrd µg/L (34215)	Bromo-methane water, unfltrd µg/L (34413)	Carbon di-sulfide water, unfltrd µg/L (77041)	cis-1,3-Di-chloro-propene water, unfltrd µg/L (34704)	Iodo-methane water, unfltrd µg/L (77424)
Mar 05...	<.12	<1.0	<.04	<.1	<.02	<.1	<.02	<.08	<.4	<.4	<.04	<.10	<.80

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

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

Part 2 of 7

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

Date	trans-1,3-Di-chloro-propene water, unfltrd µg/L (34699)	1,1,1,2-Tetra-chloro-ethane, water, unfltrd µg/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd µg/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfltrd µg/L (34516)	CFC-113 water, unfltrd µg/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd µg/L (34511)	1,1-Di-chloro-ethane, water, unfltrd µg/L (34496)	1,1-Di-chloro-ethene, water, unfltrd µg/L (34501)	1,1-Di-chloro-propene water, unfltrd µg/L (77168)	1,2,3,4-Tetra-methyl-benzene water, unfltrd µg/L (49999)	1,2,3,5-Tetra-methyl-benzene water, unfltrd µg/L (50000)	1,2,3-Tri-chloro-benzene water, unfltrd µg/L (77613)	1,2,3-Tri-methyl-benzene water, unfltrd µg/L (77221)
Mar 05...	<.10	<.04	<.02	<.10	<.04	<.06	<.04	<.02	<.04	<.1	<.1	<.1	<.1

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

Part 3 of 7

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

Date	1,2,4-Tri-chloro-benzene water, unfltrd µg/L (34551)	1,2,4-Tri-methyl-benzene water, unfltrd µg/L (77222)	1,2-Di-chloro-benzene water, unfltrd µg/L (34536)	1,3,5-Tri-methyl-benzene water, unfltrd µg/L (77226)	1,3-Di-chloro-benzene water, unfltrd µg/L (34566)	2,2-Di-chloro-propane water, unfltrd µg/L (77170)	2-Chloro-toluene water, unfltrd µg/L (77275)	2-Ethyl-toluene water, unfltrd µg/L (77220)	4-Chloro-toluene water, unfltrd µg/L (77277)	4-Iso-propyl-toluene water, unfltrd µg/L (77356)	Acetone water, unfltrd µg/L (81552)	Benzene water, unfltrd µg/L (34030)	Bromo-benzene water, unfltrd µg/L (81555)
Mar 05...	<.04	<.04	<.02	<.04	<.02	<.06	<.02	<.02	<.02	<.06	<4	E.02	<.02

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

Part 4 of 7

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

Date	Bromo-chloro-methane water, unfltrd µg/L (77297)	Bromo-di-chloro-methane water, unfltrd µg/L (32101)	Bromo-ethene, water, unfltrd µg/L (50002)	Chloro-benzene water, unfltrd µg/L (34301)	Chloro-ethane, water, unfltrd µg/L (34311)	Chloro-methane water, unfltrd µg/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd µg/L (77093)	Di-bromo-chloro-methane water, unfltrd µg/L (32105)	Di-bromo-methane water, unfltrd µg/L (30217)	Di-chloro-fluoro-methane water, unfltrd µg/L (34668)	Di-chloro-methane water, unfltrd µg/L (34423)	Di-ethyl-ether, water, unfltrd µg/L (81576)	Diiso-propyl-ether, water, unfltrd µg/L (81577)
Mar 05...	<.06	<.04	<.1	<.02	<.1	<.1	E.03	<.1	<.04	<.10	<.04	<.1	<.06

## 01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

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

Part 5 of 7

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

Date	Ethyl methacrylate, water, unfltrd µg/L (73570)	Ethyl methyl ketone, water, unfltrd µg/L (81595)	Ethyl-benzene, water, unfltrd µg/L (34371)	Hexa-chloro-butadiene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)	Iso-butyl methyl ketone, water, unfltrd µg/L (78133)	Iso-propyl-benzene, water, unfltrd µg/L (77223)	Methyl acrylate, water, unfltrd µg/L (49991)	Methyl acrylonitrile, water, unfltrd µg/L (81593)	Methyl methacrylate, water, unfltrd µg/L (81597)	Methyl t-butyl ether, water, unfltrd µg/L (78032)	Methyl tert-pentyl ether, water, unfltrd µg/L (50005)	meta- + para-Xylene, water, unfltrd µg/L (85795)
Mar 05...	<.1	<1.6	<.04	<.1	<.1	<.4	<.04	<.6	<.2	<.2	<.10	<.06	<.08

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

Part 6 of 7

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

Date	Naphthalene, water, unfltrd µg/L (34696)	Methyl n-butyl ketone, water, unfltrd µg/L (77103)	n-Butyl benzene, water, unfltrd µg/L (77342)	n-Propyl benzene, water, unfltrd µg/L (77224)	o-Xylene, water, unfltrd µg/L (77135)	sec-Butyl benzene, water, unfltrd µg/L (77350)	Styrene, water, unfltrd µg/L (77128)	t-Butyl ethyl ether, water, unfltrd µg/L (50004)	tert-Butyl benzene, water, unfltrd µg/L (77353)	Tetra-chloro-ethene, water, unfltrd µg/L (34475)	Tetra-chloro-methane, water, unfltrd µg/L (32102)	Tetra-hydro-furan, water, unfltrd µg/L (81607)	Toluene, water, unfltrd µg/L (34010)
Mar 05...	<.2	<.6	<.1	<.04	<.04	<.02	<.04	<.04	<.06	E.04	<.06	<.1	E.02

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

Part 7 of 7

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

Date	trans-1,2-Dichloro-ethene, water, unfltrd µg/L (34546)	trans-1,4-Dichloro-2-butene, water, unfltrd µg/L (73547)	Tri-bromo-methane, water, unfltrd µg/L (32104)	Tri-chloro-ethene, water, unfltrd µg/L (39180)	Tri-chloro-fluoro-methane, water, unfltrd µg/L (34488)	Tri-chloro-methane, water, unfltrd µg/L (32106)	Vinyl chloride, water, unfltrd µg/L (39175)
Mar 05...	<.02	<.4	<.10	<.02	<.08	E.03	<.1