



Water-Data Report 2010

**01368820 DOUBLE KILL AT WAWAYANDA, NJ**

HUDSON RIVER BASIN

LOCATION.--Lat 41°11'13", long 74°25'12" referenced to North American Datum of 1983, Vernon Township, Sussex County, NJ, Hydrologic Unit 02020007, 0.3 mi east of Wawayanda, 0.4 mi downstream from Wawayanda Lake, 3.5 mi east of Vernon, and 4.6 mi upstream from Wawayanda Creek.

DRAINAGE AREA.--6.46 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1998 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Date	Discharge, in ft <sup>3</sup> /s
Nov 12, 2009	4.48
Feb 2, 2010	12.1
Jun 17, 2010	2.87
Aug 23, 2010	1.32

**01368820 DOUBLE KILL AT WAWAYANDA, NJ—Continued****WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Cooperative Network Site Descriptor: Background, NJ Department of Environmental Protection Watershed Management Area 2.

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 6

[%; percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; cm, centimeter; ft<sup>3</sup>/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; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter (50624)	Absorbance, UV, 280 nm, 1 cm path length, water, filtered, units per centimeter (61726)	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter (00030)			Dissolved oxygen, water, unfiltered, mg/L (00301)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
							Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)				
11-12-2009	1300	733	8.0	.133	.099	4.5	11.5	98	7.5			
02-02-2010	1210	738	-1.0	.139	.105	12	13.4	98	7.5			
06-17-2010	1220	728	18.0	.140	.103	2.9	7.7	87	7.5			
08-23-2010	1030	729	17.5	.144	.109	1.3	7.4	80	7.3			

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 2 of 6

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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 including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids, (400-680 nm), detectors at multiple angles dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, sum of constituents, milligrams per liter (70301)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Dissolved solids, water, unfiltered, mg/L (00530)		Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)
							Suspended solids, water, unfiltered, mg/L (00900)	Magnesium, water, filtered, mg/L (00925)		
11-12-2009	308	8.2	2.9	167	E 157	73.3	5	19.3	6.09	
02-02-2010	248	2.1	1.8	147	E 125	57.4	2	15.0	4.82	
06-17-2010	275	21.3	2.5	152	E 137	65.0	8	16.8	5.62	
08-23-2010	207	18.7	5.3	127	E 110	62.8	3	17.0	4.93	

**01368820 DOUBLE KILL AT WAWAYANDA, NJ—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 3 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; cm, centimeter; ft<sup>3</sup>/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; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	CaCO <sub>3</sub> (90410)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as CaCO <sub>3</sub>	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 <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)
<b>11-12-2009</b>	1.05	30.2	55	.16	54.4	E .05	< .06	4.6	7.94	.29	
<b>02-02-2010</b>	.90	22.4	44	.43	42.7	< .08	< .06	4.8	8.29	.19	
<b>06-17-2010</b>	.87	27.4	49	.53	49.0	E .07	< .06	1.1	6.60	.33	
<b>08-23-2010</b>	1.05	13.4	50	.60	24.1	E .05	< .06	8.2	10.3	.41	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 4 of 6

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Date	Nitrate plus nitrite, water, filtered, mg/L as N (00608)	Orthophos phate, water, filtered, mg/L as P (00631)	Particulate nitrogen, suspended filtered, mg/L as P (00671)	Phosphorus, water, 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)	Barium, water, unfiltered, recover able, µg/L (01007)	
<b>11-12-2009</b>	.017	< .04	E .005	E .02	E .005	.018	< .33	< .35	--	
<b>02-02-2010</b>	.021	.04	E .003	.04	E .004	.014	.23	.27	9.1	
<b>06-17-2010</b>	.010	E .04	--	.04	.013	.023	E .37	E .41	--	
<b>08-23-2010</b>	.028	.18	--	.06	.018	.035	.58	.65	12.0	

**01368820 DOUBLE KILL AT WAWAYANDA, NJ—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 5 of 6

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Date	Beryllium, water, unfiltered, recover able, µg/L (01012)	Chromium, water, unfiltered, recover able, µg/L (01027)	Copper, water, unfiltered, recover able, µg/L (01034)	Iron, water, unfiltered, recover able, µg/L (01042)	Lead, water, unfiltered, recover able, µg/L (01045)	Manga- nese, water, unfiltered, recover able, µg/L (01051)	Mercury, water, unfiltered, recover able, µg/L (71900)	Nickel, water, unfiltered, recover able, µg/L (01067)	Silver, water, unfiltered, recover able, µg/L (01077)
<b>11-12-2009</b>	--	--	--	--	--	--	--	--	--
<b>02-02-2010</b>	< .04	< .04	< .42	E .83	86	.25	30.6	< .010	E .34
<b>06-17-2010</b>	--	--	--	--	--	--	--	--	--
<b>08-23-2010</b>	< .04	< .04	E .26	E 1.0	394	.36	127	< .010	.59

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 6 of 6

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Date	Zinc, water, unfiltered, recover able, µg/L (01092)	Arsenic, water, filtered, µg/L (01000)	Arsenic, water, unfiltered, µg/L (01002)	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Selenium, water, unfiltered, µg/L (01147)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
<b>11-12-2009</b>	--	--	--	--	--	.16	4.7
<b>02-02-2010</b>	E 1.2	.32	.33	E 10	< .10	.43	4.0
<b>06-17-2010</b>	--	--	--	--	--	.52	4.5
<b>08-23-2010</b>	2.4	.49	.71	14	E .05	.59	4.2