



Water-Data Report 2010

01367770 WALLKILL RIVER NEAR SUSSEX, NJ

HUDSON RIVER BASIN

LOCATION.--Lat 41°11'38", long 74°34'31" referenced to North American Datum of 1983, Wantage Township, Sussex County, NJ, Hydrologic Unit 02020007, at bridge on Glenwood Road, 0.6 mi upstream from Papakating Creek, 1.7 mi southwest of Independence Corner, and 2.0 mi southeast of Sussex.

DRAINAGE AREA.--60.8 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1978-82, 1985, and 1987 to current year.

GAGE.--Staff gage.

REMARKS.--Flow includes some sewage effluent.

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

Date	Discharge, in ft³/s
Nov 12, 2009	44.8
Mar 2, 2010	125
Jun 21, 2010	34.2
Aug 24, 2010	44.8

01367770 WALLKILL RIVER NEAR SUSSEX, NJ—Continued

WATER-QUALITY RECORDS

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

REMARKS.--Cooperative Network Site Descriptor: Watershed Integrator, NJ Department of Environmental Protection Watershed Management Area 02.

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]

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, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter (61726)	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)
11-12-2009	1000	754	8.5	.108	.083	45	10.8	91	7.6
03-02-2010	1250	750	7.0	.092	.070	125	14.0	105	7.9
06-21-2010	1010	752	24.0	.132	.101	34	7.3	84	8.0
08-24-2010	1150	751	19.5	.145	.110	45	8.9	98	8.1

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 (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)	
			Dissolved solids, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, mg/L (70301)					
11-12-2009	635	8.2	3.1	354	343	211	1	49.6	21.2
03-02-2010	686	3.2	6.1	367	347	174	6	41.2	17.3
06-21-2010	676	22.0	4.9	370	367	231	6	52.9	24.0
08-24-2010	626	19.9	7.5	350	326	197	11	42.4	22.2

01367770 WALLKILL RIVER NEAR SUSSEX, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 5

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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)							
11-12-2009	2.24	43.9	180	.27	82.7	.11	< .06	7.7	18.0	.31
03-02-2010	1.73	57.0	150	.57	114	.10	< .06	7.1	14.7	.23
06-21-2010	2.70	48.1	188	.44	91.6	.10	< .06	8.4	16.1	.41
08-24-2010	1.98	43.5	155	1.04	86.6	.10	< .06	8.0	23.7	.43

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)
		11-12-2009	.018	2.11	.014	.04	.018	.031	2.4
03-02-2010	.020	.84	.011	.06	.013	.030	1.1	1.1	.57
06-21-2010	.012	2.35	--	.04	.033	.054	2.8	2.8	.44
08-24-2010	.028	.94	--	.09	.043	.071	1.4	1.5	1.02

01367770 WALLKILL RIVER NEAR SUSSEX, 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)
11-12-2009	3.3
03-02-2010	2.8
06-21-2010	3.9
08-24-2010	3.8