



Water-Data Report 2010

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°53'50", long 74°16'22" referenced to North American Datum of 1983, Fairfield Township, Essex County, NJ, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, 50 ft upstream from Pompton River, and 1.3 mi southwest of Mountainview.

DRAINAGE AREA.--361 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous and occasional low-flow measurements, water years 1963-68 and 1983 to current year.

GAGE.--Reference point only.

REMARKS.--Flow regulated by Boonton Reservoir (see 01380900) and includes some sewage effluent.

DISCHARGE MEASUREMENTS WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Date	Discharge, in ft ³ /s
Nov 24, 2009	463
Feb 24, 2010	890
May 26, 2010	353
Jul 6, 2010	101
Aug 10, 2010	97.2
Aug 30, 2010	137

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ—Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1969 to September 1974.

pH: June 1969 to September 1974.

WATER TEMPERATURE: October 1962 to May 1969 (once daily), June 1969 to September 1974.

DISSOLVED OXYGEN: June 1969 to September 1974.

REMARKS.--Cooperative Network Site Descriptor: Watershed Integrator, NJ Department of Environmental Protection Watershed Management Area 6.

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, 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)
11-24-2009	1110	761	13.5	.220	.169	463	8.6	76	7.3
02-24-2010	1015	749	4.0	.141	.110	890	13.0	95	7.1
05-26-2010	1210	754	--	.162	.122	353	6.8	77	7.5
08-10-2010	1140	758	32.0	.117	.087	97	11.7	147	8.4

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 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	Specific conductivity, 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 dried at 180 °C, water, filtered, mg/L (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)
11-24-2009	500	9.7	7.8	273	267	123	4	31.0	11.0
02-24-2010	1,420	2.3	16	768	E 714	135	16	35.3	11.3
05-26-2010	556	21.1	10	303	291	135	9	34.9	11.7
08-10-2010	893	26.5	16	519	E 474	206	24	51.2	19.0

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) titration, laboratory, mg/L as CaCO ₃ (90410)	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)
11-24-2009	3.42	44.8	73	.57	90.5	.11	< .06	13.2	21.6	.53
02-24-2010	2.97	207	57	1.19	387	E .06	< .06	8.9	20.2	.37
05-26-2010	2.87	49.1	75	.76	107	.09	E .05	12.2	18.9	.44
08-10-2010	7.56	85.5	112	2.48	176	.15	< .06	9.4	41.5	.46

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ—Continued

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

Part 4 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	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Orthophosphate, 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)
11-24-2009	.119	1.65	.200	.07	.22	.29	2.2	2.2	.57
02-24-2010	.095	1.64	.148	.12	.13	.23	2.0	2.1	1.17
05-26-2010	.070	1.93	--	.10	.20	.30	2.4	2.5	.71
08-10-2010	E .009	3.84	--	.44	.58	.70	4.3	4.7	2.48

**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)
11-24-2009	5.6
02-24-2010	4.0
05-26-2010	4.3
08-10-2010	4.0