

01467005 NORTH BRANCH RANCOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°59'35", long 74°46'53" referenced to North American Datum of 1983, Mount Holly Township, Burlington County, NJ, Hydrologic Unit 02040202, on right bank at Mill Dam in Iron Works and Mill Dam Park, 0.3 mi north of Saint Andrews Cemetery in Mount Holly, and 1.2 mi east of Clermont.

DRAINAGE AREA.--140 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1970, and 1998 to current year. Published as "at Pine Street" (station 01467006) 1998-99. Established as a continuous stage-only station September 2006.

GAGE.--Water-stage recorder and crest-stage gages. Downstream staff gage for QW sampling. Gage datum 0.00 ft above NAVD of 1988.

REMARKS.--Operation of gates in dam significantly affect water level during periods of high flow. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 14.23 ft, Apr 16, 2007.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.33 ft, Mar 15 at 1815.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Date	Discharge, in ft³/s
Nov 16, 2009	198
Mar 1, 2010	530
May 12, 2010	188
Aug 19, 2010	29.6

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year. Published as "at Pine Street" (station 01467006) 1998-99.

REMARKS.--Site is at head of tide; all samples collected at low tide. Cooperative Network Site Descriptor: Watershed Integrator, NJ Department of Environmental Protection Watershed Management Area 19.

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)
11-16-2009	1115	763	15.5	.559	.442	198	10.4	97	6.0
03-01-2010	1140	754	8.0	.506	.395	530	14.1	104	5.4
05-12-2010	1140	761	13.0	.656	.522	188	10.0	95	6.4
08-19-2010	0900	760	26.0	.378	.304	30	7.6	88	6.8

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 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)
11-16-2009	88	12.2	7.3	65	48	18.3	5	5.06	1.38
03-01-2010	79	2.7	5.0	53	E 39	12.9	4	3.54	.975
05-12-2010	91	13.0	11	72	E 49	17.1	8	4.88	1.19
08-19-2010	142	22.9	9.7	92	E 78	27.3	7	7.91	1.84

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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) 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)
11-16-2009	1.71	6.83	4.6	1.44	12.1	< .08	< .06	6.8	10.2	.55
03-01-2010	.95	6.71	E 1.2	.62	13.4	< .08	< .06	3.9	8.23	.38
05-12-2010	1.40	7.70	E 6	2.80	14.1	E .05	< .06	4.8	10.1	.73
08-19-2010	2.56	12.2	11	1.42	20.6	E .08	< .06	6.7	15.7	.56

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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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)
11-16-2009	.225	.17	.021	.11	.037	.100	.72	.83	1.44
03-01-2010	.096	.18	.016	.04	.022	.054	.56	.60	.62
05-12-2010	.388	.18	--	.21	.029	.114	.91	1.1	2.78
08-19-2010	.303	.63	--	.11	.037	.139	1.2	1.3	1.42

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WATER YEAR OCTOBER
2009 TO SEPTEMBER
2010**

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Date	Organic carbon, water, filtered, mg/L (00681)
11-16-2009	10.0
03-01-2010	9.6
05-12-2010	11.3
08-19-2010	5.0