

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, 14.38 ft, Aug 28, 2011.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.38 ft, Aug 28 at 1445.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Date	Discharge, in ft³/s
Nov 17, 2010	99.4
Feb 16, 2011	217
May 31, 2011	113
Aug 9, 2011	65.6

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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. Determination of concentrations of ammonia in filtered water was performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory (DHSS-ECL) except during the period May 12 through August 25, 2011 when the determination was performed by the National Water-Quality Laboratory. Determination of concentrations of suspended solids in unfiltered water was performed by the DHSS-ECL except during the period June 17 through August 25, 2011 when samples could not be accepted.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

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)
11-17-2010	1100	744	16.0	.163	.130	99	10.3	93	6.5
02-16-2011	0840	771	3.0	.262	.203	217	13.6	100	6.1
05-31-2011	1151	764	29.0	.549	.437	113	7.6	91	6.4
08-09-2011	1000	753	27.0	.452	.363	66	7.2	87	6.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 5

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Date	Sample start time	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, mg/L (70301)	Hardness, water, mg/L as CaCO ₃ (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
11-17-2010	1100	123	10.9	7.8	70	70	26.4	2	7.52
02-16-2011	0840	113	2.7	6.0	77	61	22.1	4	6.15
05-31-2011	1151	109	24.4	10	79	60	22.5	9	6.45
08-09-2011	1000	121	25.2	9.7	61	62	22.0	--	6.26

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 5

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Date	Sample start time	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint 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)
11-17-2010	1100	1.85	2.25	9.36	10	1.25	17.3	.08	< .03	6.9
02-16-2011	0840	1.64	1.50	8.86	4	.75	15.6	.09	< .03	6.5
05-31-2011	1151	1.55	1.83	8.94	8	2.37	16.0	.05	< .03	6.2
08-09-2011	1000	1.55	2.07	9.80	8	1.28	16.8	.05	< .03	6.5

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

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Date	Sample start time	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	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)
11-17-2010	1100	17.1	.54	.357	.19	.12	.018	.104	.73	.85
02-16-2011	0840	15.7	.48	.253	.34	.06	.021	.058	.82	.89
05-31-2011	1151	12.3	.74	.407	.30	.19	.041	.155	1.0	1.2
08-09-2011	1000	11.3	.62	.299	.56	.09	.051	.149	1.2	1.3

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WATER YEAR OCTOBER 2010 TO SEPTEMBER
2011**

Part 5 of 5

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Date	Sample start time	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
11-17-2010	1100	1.25	3.7
02-16-2011	0840	.75	5.8
05-31-2011	1151	2.37	9.0
08-09-2011	1000	1.27	7.4