



Water-Data Report 2012

**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 mi<sup>2</sup>.

**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, 11.73 ft, Apr 23 at 1230.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 8, 2011	177
Feb 8, 2012	175
Jun 18, 2012	80.0
Aug 13, 2012	109

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

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1998 to 2012. 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 and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 1 of 5

[%, 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; <, 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 cm (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per cm (61726)	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
11-08-2011	0940	766	21.0	0.440	0.347	177	11.3	96	6.5
02-08-2012	1130	761	6.5	.351	.278	175	12.6	98	6.3
06-18-2012	1202	764	25.0	.641	.515	80	9.2	102	6.4
08-13-2012	1000	761	25.0	.470	.375	109	7.5	90	6.6

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

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 <sub>3</sub> (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
11-08-2011	0940	98	8.4	6.4	60	54	20.7	6.0	5.81
02-08-2012	1130	97	4.8	5.2	62	52	20.1	7.0	5.66
06-18-2012	1202	111	20.1	11	66	62	22.1	5.0	6.40
08-13-2012	1000	100	24.0	15	67	55	20.0	19	5.63

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

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 3 of 5

[%, 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; <, less than]

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 <sub>3</sub> (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 <sub>2</sub> (00955)
11-08-2011	0940	1.51	1.65	7.82	4.34	1.61	14.6	0.05	< .03	7.13
02-08-2012	1130	1.45	1.45	7.81	2.98	.94	14.7	.06	< .03	5.81
06-18-2012	1202	1.49	2.00	9.71	7.7	2.33	15.6	.11	< .03	6.52
08-13-2012	1000	1.44	1.80	8.93	4.55	3.82	14.9	.06	< .03	6.12

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 4 of 5

[%, 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; <, less than]

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)
11-08-2011	0940	10.7	0.55	0.237	0.311	0.135	0.027	0.081	0.86	0.99
02-08-2012	1130	11.4	.54	.328	.397	.080	.023	.059	.93	1.0
06-18-2012	1202	12.1	.71	.329	.592	.164	.049	.158	1.3	1.5
08-13-2012	1000	10.8	.55	.208	.496	.255	.042	.198	1.0	1.3

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WATER YEAR OCTOBER 2011 TO SEPTEMBER  
2012**

Part 5 of 5

[%, 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; <, less than]

<b>Date</b>	<b>Sample start time</b>	<b>Organic carbon, suspended sediment, total, mg/L (00689)</b>	<b>Organic carbon, water, filtered, mg/L (00681)</b>
<b>11-08-2011</b>	<b>0940</b>	1.61	7.98
<b>02-08-2012</b>	<b>1130</b>	.94	6.75
<b>06-18-2012</b>	<b>1202</b>	2.33	9.77
<b>08-13-2012</b>	<b>1000</b>	3.81	7.43