

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°10'02", long 74°40'39" referenced to North American Datum of 1983, Hamilton Township, Mercer County, NJ, Hydrologic Unit 02040201, at bridge on Groveville Road (Main Street) in Groveville, 1.2 mi upstream from Doctors Creek, and 2.2 mi northeast of Bordentown.

DRAINAGE AREA.--98.0 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1966, 1998 to current year.

GAGE.--Staff gage.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Date	Discharge, in ft³/s
Nov 8, 2011	103
Feb 6, 2012	112
Jun 20, 2012	42.4
Aug 14, 2012	43.2

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1998 to current year.

REMARKS.--Site is at head of tide, infrequently affected, but sampled at low tide. Cooperative Network Site Descriptor: Watershed Integrator, NJ Department of Environmental Protection Watershed Management Area 20.

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; 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 cm (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per cm (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)
11-08-2011	0910	768	13.0	0.199	0.159	103	11.1	94	6.9
02-06-2012	0950	762	9.0	.115	.091	112	12.8	97	7.2
06-20-2012	1240	766	34.0	.295	.239	42	8.6	98	7.4
08-14-2012	0915	761	24.0	.281	.226	43	7.5	88	7.4

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 ₃ (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
11-08-2011	0910	200	7.9	11	122	114	60.8	5.0	17.7
02-06-2012	0950	199	3.8	9.8	115	113	55.9	3.0	16.2
06-20-2012	1240	212	21.4	9.9	124	E 122	65.2	6.0	19.8
08-14-2012	0915	202	23.0	12	142	E 114	61.6	5.0	18.7

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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, (pH 4.5) 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)
11-08-2011	0910	4.03	2.90	10.4	26.3	0.69	24.0	0.12	< .03	11.4
02-06-2012	0950	3.78	2.55	11.0	22.0	.83	23.3	.14	< .03	10.4
06-20-2012	1240	3.85	3.12	12.9	32.9	.55	25.0	.17	< .03	10.9
08-14-2012	0915	3.62	3.52	11.6	33.7	.60	22.4	.16	< .03	11.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 5

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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)
11-08-2011	0910	24.8	0.22	0.050	0.576	0.089	0.020	0.068	0.79	0.88
02-06-2012	0950	26.6	.21	.081	1.33	.047	.019	.068	1.5	1.6
06-20-2012	1240	22.8	.29	E .035	.810	.053	.098	.153	1.1	1.1
08-14-2012	0915	19.8	.31	E .026	.734	.045	.089	.157	1.0	1.1

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

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)
11-08-2011	0910	0.68	4.04
02-06-2012	0950	.83	2.43
06-20-2012	1240	.55	4.59
08-14-2012	0915	.60	4.56