



Water-Data Report 2010

01464527 BLACKS CREEK AT CHESTERFIELD, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°06'34", long 74°38'30" referenced to North American Datum of 1983, Chesterfield Township, Burlington County, NJ, Hydrologic Unit 02040201, at bridge on Chesterfield-Georgetown Road, 0.4 mi south of Chesterfield, 2.2 mi north of Georgetown, and 2.4 mi upstream of Bacons Run.

DRAINAGE AREA.--8.91 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 2001 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Date	Discharge, in ft ³ /s
Nov 24, 2009	8.44
Feb 1, 2010	8.92
May 26, 2010	6.83
Sep 15, 2010	0.89

01464527 BLACKS CREEK AT CHESTERFIELD, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2001 to current year.

REMARKS.--Cooperative Network Site Descriptor: Agricultural Land Use Indicator, 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, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

**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; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Tempera-ture, air, °C (00020)	Absorbance, UV, organic constituents, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter (50624)	water, filtered, units per centimeter (61726)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter (61726)	Discharge, instantane-ous, ft ³ /s (00061)
11-24-2009	1100	Surface water	Regular	767	12.0	.170	.141	8.4	
02-01-2010	1110	Surface water	Regular	762	-.5	.151	.127	8.9	
05-26-2010	1040	Surface water	Regular	758	26.5	.183	.149	6.8	
09-15-2010	0820	Surface water	Replicate	761	16.5	.254	.225	.89	
09-15-2010	0820	QC sample - Surface water	Split Replicate	--	--	--	--	--	
09-15-2010	0821	QC sample - Surface water	Concurrent Replicate	--	--	--	--	--	

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

Part 2 of 5

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Date	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU						Dissolved solids, water, filtered, sum of constituents, milligrams per liter			Hardness, water, mg/L as CaCO ₃
	Dissolved oxygen, water, unfiltered, %	Dissolved oxygen, water, unfiltered, saturation	pH, water, unfiltered, field, standard	Specific conductance, water, µS/cm at 25 °C	Temperature, water, °C	Dissolved solids, dried at 180 °C, water, filtered, mg/L	Dissolved solids, dried at 180 °C, water, filtered, mg/L	Hardness, water, mg/L as CaCO ₃	Hardness, water, mg/L as CaCO ₃	
	mg/L (00300)	(00301)	(00400)	(00095)	(00010)	(63676)	(70300)	(70301)	(00900)	
11-24-2009	11.3	100	7.0	198	10.0	26	127	113	64.7	
02-01-2010	14.1	98	7.0	190	.7	41	112	E 105	54.1	
05-26-2010	7.0	78	7.1	191	21.2	21	109	105	60.6	
09-15-2010	6.6	67	6.8	248	15.7	30	143	135	83.8	
09-15-2010	--	--	--	--	--	30	171	131	79.6	
09-15-2010	--	--	--	--	--	30	160	132	79.6	

01464527 BLACKS CREEK AT CHESTERFIELD, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 5

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Date	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)	Magne- sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint (pH 4.5) 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)
11-24-2009	12	18.0	4.82	5.61	7.23	38	1.88	20.5	.32	<.06
02-01-2010	18	14.3	4.46	4.41	7.55	20	1.13	19.7	.21	<.06
05-26-2010	10	16.7	4.58	3.76	7.46	35	1.02	20.2	.38	E .06
09-15-2010	8	23.5	6.09	5.14	9.26	43	.47	28.5	.35	<.06
09-15-2010	11	22.0	6.00	4.90	9.00	44	--	34.0	.35	--
09-15-2010	11	22.0	6.00	4.90	9.10	44	--	34.0	.36	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 5

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Date	Silica, water, filtered, mg/L as SiO ₂ (00955)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	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)		
11-24-2009	11.8	18.7	.28	--	.029	.69	.011	.33	.012
02-01-2010	11.4	22.3	.44	--	.252	1.85	E .003	.15	.012
05-26-2010	8.4	18.2	.34	--	.065	.93	--	.15	.022
09-15-2010	12.0	22.3	.26	--	.053	.49	--	E .03	.015
09-15-2010	--	26.0	E .16	E .20	.060	.530	<.010	--	<.050
09-15-2010	--	27.0	E .54	E .22	.078	.540	<.010	--	.050

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Part 5 of 5

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Date	Total Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)	Total nitrogen, water, unfiltered, mg/L (00600)	Boron, water, filtered, µg/L (01020)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
11-24-2009	.130	.97	1.3	--	1.85	3.4
02-01-2010	.147	2.3	2.4	--	1.11	2.1
05-26-2010	.127	1.3	1.4	--	.96	3.7
09-15-2010	.126	.75	E .78	--	.47	2.5
09-15-2010	.120	E .69	E .73	30	--	3.3
09-15-2010	.130	E 1.1	E .76	30	--	3.3