



Water-Data Report 2010

01411196 BABCOCK CREEK NEAR MAYS LANDING, NJ

GREAT EGG HARBOR RIVER BASIN

LOCATION.--Lat 39°28'08", long 74°41'33" referenced to North American Datum of 1983, Hamilton Township, Atlantic County, NJ, Hydrologic Unit 02040302, at bridge on U.S. Route 322 (Black Horse Pike), 1.1 mi east from intersection of State Route 50, 2.2 mi northeast of Mays Landing, and 2.8 mi upstream from Watering Race Branch.

DRAINAGE AREA.--16.3 mi².

SURFACE-WATER RECORDS

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

GAGE.--Staff gage.

DISCHARGE MEASUREMENTS WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Date	Discharge, in ft ³ /s
Nov 19, 2009	30.9
Mar 2, 2010	59.3
Jun 10, 2010	13.5
Aug 3, 2010	4.36

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1998 to current year.

REMARKS.--Cooperative Network Site Descriptor: Undeveloped Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 15.

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)
11-19-2009	1140	768	20.0	.773	.601	31	7.8	72	4.1
03-02-2010	1150	757	9.5	.385	.294	59	11.1	84	4.0
06-10-2010	1140	754	18.0	.493	.392	14	7.7	78	5.2
08-03-2010	0950	764	26.0	.137	.111	4.4	7.6	79	5.5

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)
11-19-2009	85	11.5	1.6	64	< 38	7.38	1	1.44	.916
03-02-2010	178	3.7	1.7	100	< 76	9.61	6	2.07	1.08
06-10-2010	84	15.6	3.6	70	< 47	10.5	5	2.10	1.28
08-03-2010	50	17.2	5.7	32	E 31	8.54	7	1.44	1.20

01411196 BABCOCK CREEK NEAR MAYS LANDING, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 5

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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)
11-19-2009	1.01	7.03	< 1.7	.24	14.3	< .08	< .06	6.9	4.12	.39
03-02-2010	.96	20.6	< 1.7	.30	37.9	< .08	< .06	3.5	7.11	.23
06-10-2010	1.06	9.76	< 1.7	.74	18.0	< .08	< .06	7.3	3.63	.37
08-03-2010	.85	4.24	E 1.0	.41	8.28	< .08	< .06	7.9	2.65	.16

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 5

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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)
11-19-2009	.021	.26	E .007	< .03	.008	.010	.65	< .68	.24
03-02-2010	< .010	.33	E .005	< .03	E .005	E .006	.56	< .59	.30
06-10-2010	.055	.52	--	.06	.013	.011	.89	.95	.74
08-03-2010	.010	.80	--	.05	E .007	.022	.96	1.0	.41

01411196 BABCOCK CREEK NEAR MAYS LANDING, NJ—Continued**WATER-QUALITY DATA
WATER YEAR OCTOBER
2009 TO SEPTEMBER
2010**

Part 5 of 5

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Date	Organic carbon, water, filtered, mg/L (00681)
11-19-2009	15.0
03-02-2010	8.3
06-10-2010	8.9
08-03-2010	2.2