



Water-Data Report 2010

**01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°58'30", long 74°50'56" referenced to North American Datum of 1983, Frelinghuysen Township, Warren County, NJ, Hydrologic Unit 02040105, at bridge on Dark Moon Road, 1.3 mi northeast of Johnsonburg, 1,100 ft upstream from abandoned railroad, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--5.10 mi<sup>2</sup>.

**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**

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 4, 2009	4.41
Feb 1, 2010	9.78
May 3, 2010	14.7
Aug 3, 2010	1.02

## 01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, 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 1.

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; 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; 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 <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)
11-04-2009	0930	758	8.5	.107	.082	4.4	9.4	79	8.3
02-01-2010	1130	751	-1.0	.080	.063	9.8	11.8	88	7.7
05-03-2010	1130	739	20.0	.148	.115	15	7.3	77	7.8
08-03-2010	1120	750	25.0	.015	.011	1.0	10.0	98	8.0

**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 <sub>3</sub> (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)
11-04-2009	403	7.9	1.5	247	E 219	163	1	41.1	14.7
02-01-2010	391	3.1	4.2	214	E 213	160	4	39.6	14.8
05-03-2010	302	17.5	9.0	163	E 156	106	8	28.5	8.54
08-03-2010	482	14.4	1.9	258	264	219	1	52.9	21.2

## 01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, 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)	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)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)
			titration, laboratory, mg/L as CaCO <sub>3</sub> (90410)							
11-04-2009	1.74	18.2	150	.36	30.1	E .05	< .06	8.4	12.5	.27
02-01-2010	1.50	17.2	145	.60	30.4	E .06	< .06	6.0	13.9	.20
05-03-2010	1.01	15.6	100	1.49	27.4	E .04	< .06	3.3	10.2	.32
08-03-2010	1.37	14.7	204	.20	24.2	.09	< .06	7.0	15.1	.12

**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)
		11-04-2009	.014	.54	.013	.06	.014	.025	.81
02-01-2010	.024	.73	E .005	.09	E .007	.031	.93	1.0	.60
05-03-2010	.022	.34	--	.16	.033	.062	.66	.82	1.48
08-03-2010	< .010	1.23	--	E .02	< .008	.010	1.4	E 1.4	.20

**01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, 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)
11-04-2009	3.1
02-01-2010	2.4
05-03-2010	4.2
08-03-2010	.7