

Water-Data Report 2010

01378770 GREAT BROOK AT WOODLAND ROAD, AT GREEN VILLAGE, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°43'30", long 74°28'27" referenced to North American Datum of 1983, Harding Township, Morris County, NJ, Hydrologic Unit 02030103, in the Great Swamp National Wildlife Refuge, 500 ft south of foot of Woodland Road, 1.0 mi southeast of Pleasantville, 1.4 mi southwest of Green Village, and 2.4 mi upstream of Primrose Brook.

DRAINAGE AREA.--14.1 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2009, 2010.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 6.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of 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 7

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; 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)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1		Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)
						cm path length, water, filtered, units	280 nm, 1 cm path length, water, filtered, units		
12-08-2009	0815	Surface water	Regular	764	.5	.238	.185	10.7	79
03-02-2010	0850	QC sample - Artificial	Field Blank	--	--	--	--	--	--
03-02-2010	0925	Surface water	Regular	754	7.0	.173	.135	10.9	79
05-12-2010	1030	Surface water	Regular	762	11.0	.114	.090	8.8	81
08-25-2010	1005	QC sample - Artificial	Field Blank	--	--	--	--	--	--
08-25-2010	1045	Surface water	Regular	755	21.0	.272	.210	6.0	65

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 7

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Date	pH, water, unfiltered, field, standard units (00400)		Specific conduc- tance, water, unfiltered, µS/cm at 25 °C (00095)		Tempera- ture, 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)
12-08-2009	7.5	779	2.6		10		445	E 405	116	14	28.3		
03-02-2010	--	--	--		--		--	--	--	--	--		
03-02-2010	7.2	786	2.2		9.2		443	E 398	101	8	26.1		
05-12-2010	7.7	597	11.3		24		345	319	153	40	37.4		
08-25-2010	--	--	--		--		--	--	--	--	--		
08-25-2010	7.2	514	19.5		5.9		284	E 285	126	5	32.0		

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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Date	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) titration, laboratory, mg/L as CaCO ₃ (90410)		Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)		Inorganic carbon, water, filtered, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)
12-08-2009	10.9	2.66	95.5		68		.94	185	E .07	< .06	13.7	22.6	
03-02-2010	--	--	--		--		--	--	--	--	--	--	
03-02-2010	8.77	2.03	98.8		51		.82	200	E .05	< .06	10.0	18.3	
05-12-2010	14.5	2.23	50.2		87		2.41	115	.11	E .04	14.0	27.5	
08-25-2010	--	--	--		--		--	--	--	--	--	--	
08-25-2010	11.2	3.22	53.7		59		.51	97.1	E .08	< .06	11.1	37.9	

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 7

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Date	Ammonia		Nitrate plus nitrite, water, filtered,	Orthophos- phate, water, filtered,	Particulate		Total nitrogen, water, unfiltered,	Total nitrogen, water, unfiltered,			
	mg/L as N (00623)	mg/L as N (00608)			mg/L as N (00631)	mg/L as P (00671)	mg/L (49570)	as P (00666)	mg/L as P (00665)	mg/L (00602)	mg/L (00600)
12-08-2009	.37	.052	1.03	.026	.08	.036	.112	1.4	1.5		
03-02-2010	--	--	--	--	--	--	--	--	--	--	--
03-02-2010	.29	.018	.75	.014	.10	.022	.060	1.0	1.1		
05-12-2010	.32	.049	1.24	--	.28	.037	.144	1.6	1.8		
08-25-2010	--	--	--	--	--	--	--	--	--	--	--
08-25-2010	.54	.061	.75	--	.08	.094	.148	1.3	1.4		

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Date	Barium, water, unfiltered,	Beryllium, water, unfiltered,	Chromium, water, unfiltered,	Copper, water, unfiltered,	Iron, water, unfiltered,	Lead, water, unfiltered,	Manganese, water, unfiltered,			
	µg/L (01007)	µg/L (01012)	µg/L (01027)	µg/L (01034)	µg/L (01040)	µg/L (01042)	µg/L (01045)	µg/L (01049)	µg/L (01051)	µg/L (01055)
12-08-2009	--	--	--	--	--	--	--	--	--	--
03-02-2010	--	--	--	--	< 1.0	--	--	< .03	--	--
03-02-2010	38.9	E .02	E .03	.62	--	3.1	600	--	.80	99.9
05-12-2010	--	--	--	--	--	--	--	--	--	--
08-25-2010	--	--	--	--	< 1.0	--	--	< .03	--	--
08-25-2010	32.7	< .04	.06	E .37	--	3.1	735	--	.65	187

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WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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Date	Mercury, water, unfiltered, recover- able, filtered, µg/L (71890)	Nickel, water, unfiltered, recover- able, filtered, µg/L (01065)	Silver, water, unfiltered, recover- able, µg/L (01077)	Zinc, water, unfiltered, recover- able, filtered, µg/L (01090)	Arsenic, water, unfiltered, recover- able, filtered, µg/L (01000)	Arsenic, water, unfiltered, recoverable, µg/L (01002)	Boron, water, unfiltered, recoverable, µg/L (01022)
12-08-2009	--	--	--	--	--	--	--
03-02-2010	<.010	--	<.12	--	--	<.04	--
03-02-2010	--	<.010	--	.91	<.02	.34	.56
05-12-2010	--	--	--	--	--	--	--
08-25-2010	<.010	--	<.12	--	<.2.8	<.04	--
08-25-2010	--	<.010	--	1.5	E .01	12.3	97

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2010

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Date	Selenium, water, unfiltered, µg/L (01147)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
12-08-2009	--	.94	5.7
03-02-2010	--	--	--
03-02-2010	.16	.81	4.3
05-12-2010	--	2.37	3.3
08-25-2010	--	--	--
08-25-2010	.15	.50	6.3