

Water-Data Report 2011

01411444 WEST CREEK NEAR LEESBURG, NJ

WEST CREEK BASIN

LOCATION.--Lat 39°15'36", long 74°54'41" referenced to North American Datum of 1983, Maurice River Township, Cumberland County, NJ, Hydrologic Unit 02040206, at bridge on County Route 550 (Leesburg Belleplain Road) at Hoffmans Mill, 1.5 mi upstream from Hands Millpond, 2.4 mi south of Halberton, and 4.0 mi east of Leesburg.

DRAINAGE AREA.--6.64 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1999 to current year.

GAGE.--Staff gage.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Date	Discharge, in ft³/s
Feb 8, 2011	5.37
May 25, 2011	2.85
Aug 16, 2011	26.1

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to current year.

REMARKS.--Cooperative Network Site Descriptor: Undeveloped Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 16.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Determination of concentrations of ammonia in filtered water was performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory (DHSS-ECL) except during the period May 12 through August 25, 2011 when the determination was performed by the National Water-Quality Laboratory. Determination of concentrations of suspended solids in unfiltered water was performed by the DHSS-ECL except during the period June 17 through August 25, 2011 when samples could not be accepted.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

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)
11-29-2010	1120	773	8.0	.194	.144	--	9.9	75	4.2
02-08-2011	1010	752	4.0	.393	.299	5.4	11.2	86	4.3
05-25-2011	1010	761	24.8	.496	.381	2.8	6.2	62	4.3
08-16-2011	1140	756	24.0	1.06	.797	26	5.2	60	3.8

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

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)
11-29-2010	1120	62	3.6	8.6	--	--	4.26	17	.48
02-08-2011	1010	63	4.3	4.5	46	< 32	7.26	6	1.01
05-25-2011	1010	53	21.7	1.5	31	< 23	2.62	1	.31
08-16-2011	1140	74	22.2	11	62	--	7.53	--	1.18

01411444 WEST CREEK NEAR LEESBURG, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

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, 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)
11-29-2010	1120	.745	.83	3.36	< 1.7	2.60	5.85	< .04	< .03	13.5
02-08-2011	1010	1.15	.84	3.62	< 1.7	1.86	5.35	< .04	< .03	9.1
05-25-2011	1010	.446	.56	2.73	< 1.7	.33	5.76	< .04	< .03	8.8
08-16-2011	1140	1.11	.77	2.83	--	.76	4.87	< .04	< .03	8.9

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

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)
11-29-2010	1120	7.45	.15	< .010	< .02	.19	< .004	.017	< .17	< .37
02-08-2011	1010	9.89	.24	E .009	.04	.18	< .004	.010	.28	.46
05-25-2011	1010	3.61	.32	.011	.02	.03	< .004	.006	.34	.37
08-16-2011	1140	7.95	.63	.011	.07	.09	.009	.045	.71	.79

01411444 WEST CREEK NEAR LEESBURG, NJ—Continued**WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER
2011**

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)
11-29-2010	1120	2.60	4.5
02-08-2011	1010	1.86	8.8
05-25-2011	1010	.36	11.9
08-16-2011	1140	.76	27.0