



Water-Data Report 2010

01411907 WHITE MARSH RUN AT MILLVILLE, NJ

MAURICE RIVER BASIN

LOCATION.--Lat 39°23'23", long 75°02'40" referenced to North American Datum of 1983, Millville City, Cumberland County, NJ, Hydrologic Unit 02040206, at bridge on South Race Street (County Route 555) at Millville, 0.2 mi upstream from mouth, and 1.3 mi northwest of Roosevelt Park.

DRAINAGE AREA.--8.77 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2009-10.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 17.

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, 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 6

[%, 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	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)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)
12-02-2009	0930	767	7.8	.358	.286	9.0	74	6.4	111
02-18-2010	0900	753	1.5	.302	.233	10.6	80	6.1	82
05-25-2010	0800	769	15.5	.463	.366	8.1	82	6.1	70
09-09-2010	0800	757	17.0	.291	.236	4.4	44	6.5	134

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WATER-QUALITY DATA
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Date	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 constit- uents, 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)	Magne- sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)
12-02-2009	7.0	7.1	69	E 62	20.9	9	4.48	2.35	2.03
02-18-2010	3.1	2.2	60	E 43	10.7	5	2.10	1.33	1.04
05-25-2010	16.1	3.6	71	38	11.0	4	2.21	1.33	1.38
09-09-2010	16.8	12	85	71	24.3	7	4.64	3.09	2.89

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Date	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as CaCO ₃ (90410)	Carbon plus (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)	Ammonia, water, filtered, mg/L as N (00608)
12-02-2009	10.1	21	.58	15.1	E .04	< .06	7.7	5.27	.61	.343
02-18-2010	8.41	3.6	.57	15.2	< .08	< .06	5.7	5.55	.76	.141
05-25-2010	7.46	4.0	1.34	13.2	< .08	< .06	6.1	2.75	.70	.210
09-09-2010	12.1	24	1.44	18.0	< .08	< .06	7.6	4.31	.84	.511

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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Date	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Orthophosphate, 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)	Barium, water, unfiltered, recoverable, μg/L (01007)	Beryllium, water, unfiltered, recoverable, μg/L (01012)
12-02-2009	.36	E .003	.06	.011	.023	.98	1.0	--	--
02-18-2010	.26	E .004	.06	E .006	.015	1.0	1.1	36.6	.10
05-25-2010	.13	--	.08	.017	.029	.83	.90	--	--
09-09-2010	.79	--	.10	.011	.028	1.6	1.7	86.5	E .03

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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Date	Cadmium, water, unfiltered, μg/L (01027)	Chromium, water, unfiltered, recoverable, μg/L (01034)	Copper, water, unfiltered, recoverable, μg/L (01042)	Iron, water, unfiltered, recoverable, μg/L (01045)	Lead, water, unfiltered, recoverable, μg/L (01051)	Manganese, water, unfiltered, recoverable, μg/L (01055)	Mercury, water, unfiltered, recoverable, μg/L (71900)	Nickel, water, unfiltered, recoverable, μg/L (01067)	Silver, water, unfiltered, recoverable, μg/L (01077)	Zinc, water, unfiltered, recoverable, μg/L (01092)
12-02-2009	--	--	--	--	--	--	--	--	--	--
02-18-2010	.07	.57	1.9	674	.91	30.6	E .006	.99	E .01	11.2
05-25-2010	--	--	--	--	--	--	--	--	--	--
09-09-2010	E .03	E .42	< 1.4	2,900	1.04	161	.029	.96	< .02	3.9

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Date	Arsenic, water, filtered, μg/L (01000)	Arsenic, water, unfiltered, μg/L (01002)	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Selenium, water, unfiltered, μg/L (01147)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
12-02-2009	--	--	--	--	.57	6.9
02-18-2010	.29	.25	89	E .07	.56	6.4
05-25-2010	--	--	--	--	1.33	16.1
09-09-2010	.44	.67	287	E .10	1.44	4.3

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

Date	Sample start time	1-Naphthol,	2,6-Diethyl-	2-Chloro-	2-Chloro-4-	2-Ethyl-6-	3,4-	3,5-Di-	4-Chloro-2-	Acetochlor
		water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (49295)	water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82660)	2',6'-diethylacetanilide, water, filtered, recoverable, µg/L (61618)	isopropyl-amino-6-triazine, water, filtered, recoverable, µg/L (04040)	water, filtered, recoverable, µg/L (61620)	aniline, water, filtered, recoverable, µg/L (61625)	Dichloro-aniline, water, filtered, recoverable, µg/L (61627)	chloro-aniline, water, filtered, recoverable, µg/L (61627)	methyl-phenol, water, filtered, recoverable, µg/L (61633)
05-25-2010	0800	< .04	< .006	< .010	E .011	< .010	< .004	< .003	< .003	< .010

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

Date	Alachlor, water, filtered, recoverable, µg/L (46342)	alpha-Endo-sulfan, water, filtered, recoverable, µg/L (34362)	Atrazine, water, filtered, recoverable, µg/L (39632)	Azinphos-	Azinphos-	Carbaryl,	Carbofuran,	Chlorpyrifos	
				methyl oxygen analog, water, filtered, recoverable, µg/L (61635)	methyl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82686)	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82673)	water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82680)	oxygen analog, water, filtered, recoverable, µg/L (61636)	
05-25-2010	< .008	< .006	E .006	< .04	< .120	< .014	< .060	< .060	< .05

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

Date	Chlorpyrifos, water, filtered, recoverable, µg/L (38933)	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82687)	cis-Propiconazole, water, filtered, recoverable, µg/L (79846)	Cyanazine, water, filtered, recoverable, µg/L (04041)	Cyfluthrin, water, filtered, recoverable, µg/L (61585)	Cypermethrin, water, filtered, recoverable, µg/L (61586)	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82682)	Desulfinyl-fipronil amide, water, filtered, recoverable, µg/L (62169)	Desulfinyl-fipronil, water, filtered, recoverable, µg/L (62170)	Diazinon, water, filtered, recoverable, µg/L (39572)
		05-25-2010	< .010	< .014	< .006	< .022	< .016	< .020	< .008	< .029

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

Date	Dichlorvos , water, filtered, recover- able, µg/L (38775)	Dicro- tophos, water, filtered, recover- able, µg/L (38454)	Diieldrin, water, filtered, recover- able, µg/L (39381)	Dimetho- ate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82662)	Disulfoton sulfone, water, filtered, recover- able, µg/L (61640)	Disulfoton, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82677)	Endosulfan sulfate, water, filtered, recover- able, µg/L (61590)	EPTC, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82668)	Ethion monoxon, water, filtered, recover- able, µg/L (61644)	Ethion, water, filtered, recover- able, µg/L (82346)
05-25-2010	< .02	< .08	< .009	< .006	< .01	< .04	< .014	< .002	< .02	< .008

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

Date	Ethoprop, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82672)	Fenami- phos sulfone, water, filtered, recover- able, µg/L (61645)	Fenami- phos sulfoxide, water, filtered, recover- able, µg/L (61646)	Fenami- phos, water, filtered, recover- able, µg/L (61591)	Fipronil sulfide, water, filtered, recover- able, µg/L (62167)	Fipronil sulfone, water, filtered, recover- able, µg/L (62168)	Fipronil, water, filtered, recover- able, µg/L (62166)	Fonofos, water, filtered, recover- able, µg/L (04095)	Hexa- zinone, water, filtered, recover- able, µg/L (04025)	Iprodione, water, filtered, recover- able, µg/L (61593)
05-25-2010	< .016	< .053	< .08	< .03	< .013	< .024	< .018	< .004	< .008	< .014

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

Date	Isofen- phos, water, filtered, recover- able, µg/L (61594)	lambda- Cyhalo- thrin, water, filtered, recover- able, µg/L (61595)	Malaoxon, water, filtered, recover- able, µg/L (61652)	Malathion, water, filtered, recover- able, µg/L (39532)	Metalaxyl, water, filtered, recover- able, µg/L (61596)	Methida- thion, water, filtered, recover- able, µg/L (61598)	Methyl paraoxon, water, filtered, recover- able, µg/L (61664)	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82667)	Metola- chlor, water, filtered, recover- able, µg/L (39415)	Metribuzin , water, filtered, recover- able, µg/L (82630)
05-25-2010	< .006	< .010	< .080	< .016	< .007	< .006	< .01	< .008	E .010	< .012

01411907 WHITE MARSH RUN AT MILLVILLE, NJ—Continued

WATER-QUALITY DATA
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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Molinate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82671)	Myclo- butanil, water, filtered, recover- able, µg/L (61599)	Oxy- fluorfen, water, filtered, recover- able, µg/L (61600)	Pendi- methalin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82683)	Phorate oxygen analog, water, filtered, recover- able, µg/L (61666)	Phorate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82664)	Phosmet oxygen analog, water, filtered, recover- able, µg/L (61668)	Phosmet, water, filtered, recover- able, µg/L (61601)	Prometon, water, filtered, recover- able, µg/L (04037)	Prometryn, water, filtered, recover- able, µg/L (04036)
05-25-2010	< .003	< .010	< .010	< .012	< .03	< .020	< .05	< .034	E .01	< .006

WATER-QUALITY DATA
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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Propanil, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82679)	Propargite, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82685)	Propyz- amide, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82676)	Simazine, water, filtered, recover- able, µg/L (04035)	Tebu- thiuron, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82670)	Tefluthrin, water, filtered, recover- able, µg/L (61606)	Terbufos oxygen analog sulfone, water, filtered, recover- able, µg/L (61674)	Terbufos, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82675)	Terbuthyl- azine, water, filtered, recover- able, µg/L (04022)	Thioben- carb, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82681)
05-25-2010	< .010	< .02	< .004	E .007	< .03	< .010	< .04	< .02	< .01	< .016

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

Date	trans- Propicon- azole, water, filtered, recover- able, µg/L (79847)	Tribuphos, water, filtered, recover- able, µg/L (61610)	Trifluralin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82661)
05-25-2010	< .02	< .018	< .018