



Water-Data Report 2010

01411438 DENNIS CREEK TRIBUTARY 1 NEAR NORTH DENNIS, NJ

DENNIS CREEK BASIN

LOCATION.--Lat 39°11'41", long 74°50'29" referenced to North American Datum of 1983, Dennis Township, Cape May County, NJ, Hydrologic Unit 02040206, at bridge at outlet of Ludlums Pond on State Highway 47, 0.8 mi southeast of North Dennis, and 1.2 mi from mouth.

DRAINAGE AREA.--2.74 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 16.

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)
12-01-2009	0830	763	4.0	.384	.294	11.0	93	4.9	58
02-02-2010	0900	768	-5.0	.238	.180	12.6	92	5.2	58
06-02-2010	0800	759	23.0	.431	.334	7.1	83	5.0	52
09-08-2010	0800	759	23.0	.064	.046	7.9	96	5.0	66

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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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)
12-01-2009	8.0	.6	41	< 33	8.13	5	1.31	1.18	1.46
02-02-2010	1.9	1.4	44	< 32	7.79	6	1.25	1.13	1.19
06-02-2010	25.5	.8	46	< 27	7.14	2	1.25	.977	1.36
09-08-2010	25.0	.6	37	< 31	7.65	4	.88	1.32	2.31

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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)
12-01-2009	4.95	< 1.7	.12	9.89	< .08	< .06	6.5	6.50	.26	.023
02-02-2010	4.51	< 1.7	.71	9.39	< .08	< .06	5.7	7.79	.16	.022
06-02-2010	4.66	< 1.7	.66	8.80	E .05	< .06	4.1	5.27	.45	< .010
09-08-2010	6.42	< 1.7	.49	12.5	< .08	< .06	E .1	6.38	.42	.011

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WATER-QUALITY DATA
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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)
12-01-2009	E .03	E .004	< .03	E .004	E .007	E .29	< .33	--	--
02-02-2010	.09	E .003	.06	< .008	E .004	.24	.30	70.3	.16
06-02-2010	< .04	--	.07	E .005	.010	< .49	< .55	--	--
09-08-2010	< .04	--	.06	E .004	.008	< .46	< .52	31.5	.05

WATER-QUALITY DATA
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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)
12-01-2009	--	--	--	--	--	--	--	--	--	--
02-02-2010	.05	E .28	< 1.4	213	.62	43.7	< .010	1.5	.04	7.5
06-02-2010	--	--	--	--	--	--	--	--	--	--
09-08-2010	E .03	< .42	< 1.4	82	.30	29.2	< .010	.77	< .02	5.3

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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)
12-01-2009	--	--	--	--	.12	8.2
02-02-2010	.28	.25	E 13	< .10	.71	5.6
06-02-2010	--	--	--	--	.66	8.6
09-08-2010	.47	.51	22	E .07	.48	4.5

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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)	Dichloro-aniline, water, filtered, recoverable, µg/L (61625)	chloro-aniline, water, filtered, recoverable, µg/L (61627)	methyl-phenol, water, filtered, recoverable, µg/L (61633)	, water, filtered, recoverable, µg/L (49260)
06-02-2010	0800	< .04	< .006	< .010	E .012	< .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, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82674)	Chlorpyrifos oxygen analog, water, filtered, recoverable, µg/L (61636)	
				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)
06-02-2010	< .008	< .006	.013	< .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)
		06-02-2010	< .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, recoverable, µg/L (38775)	Dicrotophos, water, filtered, recoverable, µg/L (38454)	Diieldrin, water, filtered, recoverable, µg/L (39381)	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82662)	Disulfoton sulfone, water, filtered, recoverable, µg/L (61640)	Disulfoton, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82677)	Endosulfan sulfate, water, filtered, recoverable, µg/L (61590)	EPTC, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82668)	Ethion monoxon, water, filtered, recoverable, µg/L (61644)	Ethion, water, filtered, recoverable, µg/L (82346)
06-02-2010	< .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), recoverable, µg/L (82672)	Fenamiphos sulfone, water, filtered, recoverable, µg/L (61645)	Fenamiphos sulfoxide, water, filtered, recoverable, µg/L (61646)	Fenamiphos, water, filtered, recoverable, µg/L (61591)	Fipronil sulfide, water, filtered, recoverable, µg/L (62167)	Fipronil sulfone, water, filtered, recoverable, µg/L (62168)	Fipronil, water, filtered, recoverable, µg/L (62166)	Fonofos, water, filtered, recoverable, µg/L (04095)	Hexazinone, water, filtered, recoverable, µg/L (04025)	Iprodione, water, filtered, recoverable, µg/L (61593)
06-02-2010	< .016	< .053	< .08	< .03	E .001	< .024	< .018	< .004	< .008	< .014

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

Date	Isofenphos, water, filtered, recoverable, µg/L (61594)	lambda-Cyhalothrin, water, filtered, recoverable, µg/L (61595)	Malaoxon, water, filtered, recoverable, µg/L (61652)	Malathion, water, filtered, recoverable, µg/L (39532)	Metalaxyl, water, filtered, recoverable, µg/L (61596)	Methidathion, water, filtered, recoverable, µg/L (61598)	Methyl paraoxon, water, filtered, recoverable, µg/L (61664)	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82667)	Metolachlor, water, filtered, recoverable, µg/L (39415)	Metribuzin, water, filtered, recoverable, µg/L (82630)
06-02-2010	< .006	< .010	< .080	< .016	< .007	< .006	< .01	< .008	E .009	< .012

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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)
06-02-2010	< .003	< .010	< .010	< .012	< .03	< .020	< .05	< .034	< .01	< .006

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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)
06-02-2010	< .010	< .02	< .004	< .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)
06-02-2010	< .02	< .018	< .018