



Water-Data Report 2009

**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, 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 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--November 2008 to August 2009

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 2008 TO SEPTEMBER 2009**

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Baro- metric pres- sure, mm Hg (00025)	Temper- ature, air, deg C (00020)	UV absorb- ance, 254 nm, wat flt units (50624)	UV absorb- ance, 280 nm, wat flt units (61726)	Dis- solved oxygen, of sat- uration mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm @ 25 degC (00095)	Temper- ature, water, deg C (00010)	Turbdty white light, 90+/-30 corrctd NTRU (63676)	Dis- solved solids dried @ 180degC wat flt mg/L (70300)	Hard- ness, water, mg/L as CaCO3 (00900)
<b>Nov</b>													
05...	0900	765	15.5	.062	.048	7.6	72	5.2	88	13.5	1.6	58	12
<b>Feb</b>													
02...	0800	761	1.0	.125	.092	11.5	89	4.8	68	4.3	.6	50	10
<b>May</b>													
06...	0800	764	11.5	.221	.167	8.9	89	5.1	54	14.9	.9	42	8
<b>Aug</b>													
12...	0830	760	23.5	.060	.044	6.5	84	4.9	58	29.6	.4	31	7

## 01411438 DENNIS CREEK TRIBUTARY 1 NEAR NORTH DENNIS, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Sus- pended solids, water, unfltrd mg/L (00530)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Total carbon, suspnd sedimnt total, mg/L (00694)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
Nov 05...	3	1.49	1.92	2.33	8.58	<1.7	.8	14.6	<.08	<.04	.5	10.3	.46
Feb 02...	3	1.44	1.50	1.39	4.95	<1.7	.2	9.17	<.08	<.04	7.0	9.71	.41
May 06...	3	1.26	1.20	.98	4.69	<1.7	.5	8.11	<.08	<.04	4.3	7.18	.29
Aug 12...	2	1.05	1.14	1.28	5.10	<1.7	.4	9.62	<.08	<.04	.6	6.43	.26

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 3 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfltrd mg/L as P (00665)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Barium, water, unfltrd recover -able, µg/L (01007)	Beryll- ium, water, unfltrd recover -able, µg/L (01012)	Cadmium water, unfltrd recover -able, µg/L (01027)	Chrom- ium, water, unfltrd recover -able, µg/L (01034)	Copper, water, unfltrd recover -able, µg/L (01042)
Nov 05...	.101	.06	E.003	.07	E.005	.012	.53	.60	--	--	--	--	--
Feb 02...	.309	.13	E.003	.04	<.008	E.004	.54	.58	83.1	.24	.07	<.40	<4.0
May 06...	.015	<.04	E.005	.06	E.008	E.005	--	--	--	--	--	--	--
Aug 12...	.013	<.04	E.005	E.02	<.008	E.006	--	--	53.7	.10	.37	<.40	<4.0

01411438 DENNIS CREEK TRIBUTARY 1 NEAR NORTH DENNIS, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 4 of 4

[Remark codes: <, less than; E, estimated.]

Date	Iron, water, unfltrd recover- able, µg/L (01045)	Lead, water, unfltrd recover- able, µg/L (01051)	Mangan- ese, water, unfltrd recover- able, µg/L (01055)	Mercury water, unfltrd recover- able, µg/L (71900)	Nickel, water, unfltrd recover- able, µg/L (01067)	Silver, water, unfltrd recover- able, µg/L (01077)	Zinc, water, unfltrd recover- able, µg/L (01092)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd µg/L (01002)	Boron, water, unfltrd recover- able, µg/L (01022)	Selen- ium, water, unfltrd µg/L (01147)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
Nov 05...	--	--	--	--	--	--	--	--	--	--	--	.82	5.0
Feb 02...	100	.64	55.1	<.010	1.7	<.06	7.5	.22	.22	14	<.12	.25	4.0
May 06...	--	--	--	--	--	--	--	--	--	--	--	.52	6.2
Aug 12...	46	.27	24.6	E.005	1.2	<.06	6.8	.37	.48	25	<.12	.43	5.5

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Mois- ture, bed sed <2 mm, wsv nat fld dry percent (49282)	Total carbon, bed sedimnt total, g/kg (00693)	Inor- ganic carbon, bed sedimnt total, g/kg (00686)	Phos- phorus, bed sedimnt total, mg/kg as P (00668)	Cadmium bed sedimnt recover- able, µg/g (01028)	Chrom- ium, bed sedimnt recover- able, µg/g (01029)	Cobalt bed sedimnt recover- able, µg/g (01038)	Copper, bed sedimnt recover- able, µg/g (01043)	Iron, bed sedimnt total digest, µg/g (01170)	Lead, bed sedimnt recover- able, µg/g (01052)	Mangan- ese, bed sedimnt recover- able, µg/g (01053)	Mercury bed sedimnt recover- able, µg/g (71921)	Nickel, bed sedimnt recover- able, µg/g (01068)
Aug 12...	22	2.0	<.2	60	.030	4.1	.6	2	1,100	8.7	15	<.007	2.0

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

Date	Zinc, bed sedimnt recover- able, µg/g (01093)	Arsenic bed sedimnt recover- able, µg/g (64847)	Sele- nium, bed sedimnt recover- able, µg/g (64848)	p- Cresol, bed sed <2 mm, wsv nat field, µg/kg (49451)	PCBs, bed sedimnt µg/kg (39519)	1,2-Di- methyl- naphth- alene, bed sed <2 mm, µg/kg (49403)	1,6-Di- methyl- naphth- alene, bed sed <2 mm, µg/kg (49404)	1Methyl -9H- fluor- ene, bed sed <2 mm, µg/kg (49398)	1- Methyl- phenan- threne, bed sed <2 mm, µg/kg (49410)	1- Methyl- pyrene, bed sed <2 mm, wsv nat µg/kg (49388)	236Tri- methyl- naphth- alene, bed sed <2 mm, µg/kg (49405)	2,6-Di- methyl- naphth- alene, bed sed <2 mm, µg/kg (49406)	2-Ethyl naphth- alene bed sed <2 mm wsv nat µg/kg (49948)
Aug 12...	15	.4	<.1	<50	5.54	<50	<50	<50	<50	<50	<50	<50	<50

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**WATER-QUALITY DATA**  
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[Remark codes: &lt;, less than; E, estimated.]

Date	2-Methyl-anthracene, bed sed <2 mm, µg/kg (49435)	4H-Cyclopenta-[def]-phenanthrene, bs <2mm µg/kg (49411)	9H-Fluorene, bed sed <2 mm, wsv nat µg/kg (49399)	Ace-naphthene, bed sed <2 mm, wsv nat µg/kg (49429)	Ace-naphthylene, bed sed <2 mm, wsv nat µg/kg (49428)	Anthracene, bed sed <2 mm, wsv nat field, µg/kg (49434)	Benzo-[a]-anthracene, bed sed <2 mm, µg/kg (49436)	Benzo-[a]-pyrene, bed sed <2 mm, wsv nat µg/kg (49389)	Benzo-[b]-fluoranthene, bed sed <2 mm, µg/kg (49458)	Benzo-[ghi]-perylene, bed sed <2 mm, µg/kg (49408)	Benzo-[k]-fluoranthene, bed sed <2 mm, µg/kg (49397)	Chrysene, bed sed <2 mm, wsv nat field, µg/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, µg/kg (49461)
Aug 12...	<50	<50	<50	<50	<50	<50	E20	E23	E33	E14	E12	<50	<50

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

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Date	Fluoranthene, bed sed <2 mm, wsv nat field, µg/kg (49466)	Indeno-[1,2,3-cd]-pyrene, bed sed <2 mm, µg/kg (49390)	Iso-phorone, bed sed <2 mm, wsv nat field, µg/kg (49400)	Naphthalene, bed sed <2 mm, wsv nat field, µg/kg (49402)	Phenanthrene, bed sed <2 mm, wsv nat field, µg/kg (49409)	Phenanthrene, thridine, bed sed <2 mm, wsv nat field, µg/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, µg/kg (49387)	Bed sediment dry svs percent <0.0625 mm (80164)
Aug 12...	E45	E13	<50	<50	<50	<50	E41	.0