



Water-Data Report 2007

**01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°58'14", long 75°07'34" referenced to North American Datum of 1983, Hardwick Township, Warren County, NJ, Hydrologic Unit 02040104, at footbridge in Delaware Water Gap National Recreation Area, 300 ft upstream from mouth and Delaware River, 0.6 mi northwest of Arrow Island, and 0.6 mi southeast of Delaware Water Gap Toll Bridge on Interstate 80.

DRAINAGE AREA.--3.56 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 1998 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 13, 2006	16.4
Feb 12, 2007	1.51
May 1, 2007	7.87
Aug 8, 2007	7.68

## 01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia-plus-organic nitrogen (00623), filtered nitrite-plus-nitrate nitrogen (00631), and total particulate nitrogen (49570). Cooperative Network Site Descriptor: Background and Low Level Mercury Assessment special study site, NJ Department of Environmental Protection Watershed Management Area 1. Samples on May 3 and Aug 13 were for the low level mercury assessment.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Physical measurements and samples for laboratory analysis on May 3 and Aug 13 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 2006 TO SEPTEMBER 2007**

Part 1 of 5

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf 25 degC (00095)	Temperature, air, deg C (00020)
<b>Nov</b>												
13...	0920	Environmental	16	.4	.019	.013	751	11.2	102	6.4	31	13.0
<b>Feb</b>												
12...	0930	Field Blank	--	--	--	--	--	--	--	--	--	--
12...	1000	Environmental	1.5	.4	.009	.007	761	14.9	106	--	33	2.0
<b>May</b>												
01...	1020	Environmental	7.9	.4	.018	.014	754	11.1	98	6.6	31	13.0
03...	0900	Field Blank	--	--	--	--	--	--	--	--	--	--
03...	0930	Environmental	--	--	--	--	--	--	--	--	--	--
03...	1000	Environmental	--	.3	--	--	761	9.8	87	6.9	40	13.0
<b>Aug</b>												
08...	1040	Environmental	7.7	1.2	.078	.058	746	9.1	99	7.0	37	26.0
13...	1045	Field Blank	--	--	--	--	--	--	--	--	--	--
13...	1100	Environmental	--	.3	--	--	751	--	--	7.1	34	26.0

## 01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 5

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

Date	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	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)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
Nov 13...	10.5	9	2.41	.829	.43	.76	5	1.10	<.10	4.6	7.53		18
Feb 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	1.2	12	3.04	1.05	.36	.76	6	1.12	<.10	4.5	7.89	22	--
May 01...	9.5	10	2.69	.908	.43	.70	5	.99	<.10	4.1	7.79	21	26
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	9.7	--	--	--	--	--	--	--	--	--	--	--	--
Aug 08...	19.5	11	2.81	.905	.49	.76	6	2.14	<.10	4.5	6.10	22	28
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	18.4	--	--	--	--	--	--	--	--	--	--	--	--

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 5

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

Date	Residue total non- filter- able, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
Nov 13...	2	E.07	.017	<.06	<.02	--	--	<.008	<.008	<.1	<.1	<.1	1.0
Feb 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	2	.27	.015	.06	<.02	.34	E.007	<.008	<.008	<.1	<.1	<.1	.4
May 01...	<1	E.07	<.010	<.06	<.02	--	E.002	<.008	<.008	<.1	<.1	<.1	.9
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 08...	3	<.10	.023	.13	<.02	--	<.010	E.006	.010	.2	<.1	.2	2.4
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--

## 01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 5

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

Date	Arsenic	Arsenic	Barium,	Beryll-	Boron,	Boron,	Cadmium	Chrom-	Copper,	Copper,	Iron,	Lead,	Lead,
	water,	water,	water,	ium,	water,	water,	water,	ium,	water,	water,	water,	water,	water,
	flt	unflt	reco	reco	flt	reco	unflt	reco	flt	reco	reco	flt	reco
	-able,												
	µg/L												
	(01000)	(01002)	(01007)	(01012)	(01020)	(01022)	(01027)	(01034)	(01040)	(01042)	(01045)	(01049)	(01051)
Nov													
13...	--	--	--	--	6.5	--	--	--	--	--	--	--	--
Feb													
12...	<.1	--	--	--	--	--	--	--	<.4	--	--	<.12	--
12...	<.12	E.10	14.4	<.06	4.0	E4	.03	<.60	--	<1.2	14	--	<.06
May													
01...	--	--	--	--	5.1	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug													
08...	.13	E.12	15.1	<.06	7.7	E7	.04	<.60	--	1.4	27	--	.09
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 5 of 5

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

Date	Mangan-	Mercury	Mercury	Nickel,	Nickel,	Selen-	Silver,	Zinc,	Zinc,	Methyl-
	ese,	water,	water,	water,	water,	ium,	water,	water,	water,	mercury
	unflt	reco	unflt	reco	reco	unflt	unflt	reco	reco	unflt
	-able,	able,	low level	-able,	able,	-able,	-able,	-able,	-able,	low level
	µg/L	µg/L	ng/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ng/L
	(01055)	(71890)	(50286)	(71900)	(01065)	(01067)	(01147)	(01077)	(01090)	(01092)
	(50284)									
Nov										
13...	--	--	--	--	--	--	--	--	--	--
Feb										
12...	--	<.010	--	--	<.06	--	--	--	<.6	--
12...	1.3	--	--	--	--	1.14	<.08	<.02	--	7
May										
01...	--	--	--	--	--	--	--	--	--	--
03...	--	--	.05	--	--	--	--	--	--	<.04
03...	--	--	.52	--	--	--	--	--	--	.05
03...	--	--	.49	--	--	--	--	--	--	<.04
Aug										
08...	3.7	--	--	E.009	--	1.3	<.08	<.02	--	5.3
13...	--	--	.29	--	--	--	--	--	--	<.04
13...	--	--	.60	--	--	--	--	--	--	<.04