



Water-Data Report 2013

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA

Lower Delaware Basin
Brandywine-Christina Subbasin

LOCATION.--Lat 40°01'56", long 75°47'00" referenced to North American Datum of 1927, Chester County, PA, Hydrologic Unit 02040205, 300 ft upstream of Beaver Creek Reservoir, 4.2 mi north of Coatesville.

DRAINAGE AREA.--0.14 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2005; December 2012.

REMARKS.--Samples were collected as part of the Chester County Biological Monitoring project.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the Chester County Water Resources Authority.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 1 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25°C (90095)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery (99584)	Decafluoro biphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery (99585)
12-04-2012	1100	0.12	11.7	7.3	7.4	185	183	9.7	76.3	36.0

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 2 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery (99586)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, inflection-point, titration method, laboratory, mg/L as CaCO ₃ (90410)	ANC, water, unfiltered, inflection-point, titration method, field, mg/L as CaCO ₃ (00419)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)
12-04-2012	1100	78.7	16.2	6.20	2.53	6.87	28.1	35	14.0	< .04

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)		Nitrate plus nitrite, water, filtered, mg/L as N (00631)		Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)
				Ammonia, water, filtered, mg/L as N (00608)	Ammonia, water, filtered, mg/L as N (00608)	Nitrite, water, filtered, mg/L as N (00613)	Nitrite, water, filtered, mg/L as N (00613)		
12-04-2012	1100	14.9	22.0	0.23	< .010	4.36	0.004	0.006	< .02

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 4 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Iron, water, filtered, µg/L (01046)	Manganese, water, filtered, µg/L (01056)	Boron, water, filtered, µg/L (01020)	1,4-Dichlorobenzene, water, recoverable, µg/L (34572)		Bromacil, water, filtered, recoverable, µg/L (04029)	Camphor, water, filtered, recoverable, µg/L (62070)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82680)	Chlorpyrifos, water, filtered, recoverable, µg/L (38933)	Diazinon, water, filtered, recoverable, µg/L (39572)
					1,4-Dichlorobenzene, water, recoverable, µg/L (34572)	1,4-Dichlorobenzene, water, recoverable, µg/L (34572)					
12-04-2012	1100	50.3	10.3	16	< .040	< .36	0.011	< .16	< .16	< .16	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 5 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Metalaxyl, water, filtered, recoverable, µg/L (50359)	Metolachlor, water, filtered, recoverable, µg/L (39415)	DEET, water, filtered, recoverable, µg/L (62082)	p-Cresol, water, filtered, recoverable, µg/L (62084)	Prometon, water, filtered, recoverable, µg/L (04037)	1-Methylnaphthalene, water, filtered, recoverable, µg/L (62054)	2,6-Dimethylnaphthalene, water, filtered, recoverable, µg/L (62055)	2-Methylnaphthalene, water, filtered, recoverable, µg/L (62056)	3-beta-Coprosanol, water, filtered, recoverable, µg/L (62057)
12-04-2012	1100	< .12	< .028	0.01	< .08	< .12	< .022	< .06	< .036	< 1.8

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 6 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	3-Methyl-1H-indole,	4-Cumyl-phenol,	4-n-Octyl-phenol,	4-Nonyl-phenol (sum of all isomers),	4-Nonyl-phenol diethyl-oxylate (sum of all isomers),	4-tert-Octyl-phenol diethyl-oxylate,	4-tert-Octyl-phenol,	5-Methyl-1H-benzotriazole,	9,10-Anthraquinone,
		water, filtered, recoverable, µg/L (62058)	water, filtered, recoverable, µg/L (62060)	water, filtered, recoverable, µg/L (62061)	water, filtered, recoverable, µg/L (62085)	water, filtered, recoverable, µg/L (62083)	water, filtered, recoverable, µg/L (61705)	water, filtered, recoverable, µg/L (62062)	water, filtered, recoverable, µg/L (62063)	water, filtered, recoverable, µg/L (62066)
12-04-2012	1100	< .036	< .060	< .06	< 2	< 5.0	< 1.0	< .14	< 1.2	< .16

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 7 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Acetyl hexa-methyl tetrahydro	Aceto-phenone,	Anthra-cene,	Benzo[a]-pyrene,	Benzo-phenone,	beta-Sitos-terol,	beta-Stigmas-tanol,	Caffeine,	Choles-terol,
		naphtha-lene, water, filtered, recoverable, µg/L (62064)	water, filtered, recoverable, µg/L (62065)	water, filtered, recoverable, µg/L (34221)	water, filtered, recoverable, µg/L (34248)	water, filtered, recoverable, µg/L (62067)	water, filtered, recoverable, µg/L (62068)	water, filtered, recoverable, µg/L (62086)	water, filtered, recoverable, µg/L (50305)	water, filtered, recoverable, µg/L (62072)
12-04-2012	1100	< .4	< .028	< .010	< .06	0.05	< 4	< 2.6	0.01	< 2.0

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 8 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Cotinine, water, filtered, recoverable, µg/L (62005)	D-Limonene, water, filtered, recoverable, µg/L (62073)	Fluoranthene, water, filtered, recoverable, µg/L (34377)	Hexahydrohexamethylcyclopentabenzopyran, water, filtered, recoverable, µg/L (62075)	Indole, water, filtered, recoverable, µg/L (62076)	Isoborneol, water, filtered, recoverable, µg/L (62077)	Iso-phorone, water, filtered, recoverable, µg/L (34409)	Isopropylbenzene, water, filtered, recoverable, µg/L (62078)	Iso-quinoline, water, filtered, recoverable, µg/L (62079)
12-04-2012	1100	< .800	< .08	< .024	< .052	< .08	< .08	< .032	< .30	< .046

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 9 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Menthol, water, filtered, recoverable, µg/L (62080)	Methyl salicylate, water, filtered, recoverable, µg/L (62081)	Naphthalene, water, filtered, recoverable, µg/L (34443)	Phenanthrene, water, filtered, recoverable, µg/L (34462)	Phenol, water, filtered, recoverable, µg/L (34466)	Pyrene, water, filtered, recoverable, µg/L (34470)	Tetrachloroethene, water, filtered, recoverable, µg/L (34476)	Tribromomethane, water, filtered, recoverable, µg/L (34288)	Tributyl phosphate, water, filtered, recoverable, µg/L (62089)
12-04-2012	1100	< .32	< .044	< .040	0.008	< .16	< .042	< .12	< .10	< .16

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 10 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample start time	Triclosan, water, filtered, recoverable, μg/L (62090)	Triethyl citrate, water, filtered, recoverable, μg/L (62091)	Triphenyl phosphate, water, filtered, recoverable, μg/L (62092)	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, μg/L (62093)	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, μg/L (62087)	Tris(di-chloroisopropyl) phosphate, water, filtered, recoverable, μg/L (62088)
12-04-2012	1100	< .20	< .16	< .12	< .8	< .10	< .16

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA—Continued**ECOLOGICAL RECORDS**

PERIOD OF RECORD.--October 2005; December 2012.

REMARKS.--Samples were collected using a Hess sampler with a mesh size of 500 mm. Each sample covered a total area of 2.4 m².

Date	12/04/12
Benthic Macroinvertebrate	Count
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoplonemertea	
Tetrastemmatidae	
<i>Prostoma</i>	1
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Physidae	1
Bivalvia (CLAMS)	
Veneroidea	
Pisidiidae	1
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	1
Tubificida	
Naididae	66
Arthropoda	
Acariformes	
Hydrachnidae (WATER MITES)	13
Insecta	
Ephemeroptera (MAYFLIES)	

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA—Continued

Date	12/04/12
Benthic Macroinvertebrate	Count
Baetidae	
<i>Acerpenna</i>	40
Ephemerellidae	
<i>Eurylophella</i>	51
<i>Serratella</i>	101
Heptageniidae	
<i>Maccaffertium</i>	84
Leptophlebiidae	
<i>Habrophlebiodes</i>	38
Odonata (DRAGONFLIES AND DAMSELFLIES)	
Gomphidae	2
Plecoptera (STONEFLIES)	
Capniidae	
<i>Allocapnia</i>	81
Nemouridae	3
Perlidae	
<i>Acroneuria</i>	2
Megaloptera	
Sialidae (ALDERFLIES)	
<i>Sialis</i>	1
Trichoptera (CADDISFLIES)	
Glossosomatidae	
<i>Glossosoma</i>	9
Hydropsychidae	
<i>Cheumatopsyche</i>	65
<i>Diplectrona</i>	6
<i>Hydropsyche</i>	22

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA—Continued

Date	12/04/12
Benthic Macroinvertebrate	Count
Limnephilidae	
<i>Hydatophylax</i>	2
Odontoceridae	
<i>Psilotreta</i>	4
Philopotamidae	
<i>Chimarra</i>	79
Uenoidae	
<i>Neophylax</i>	3
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Dubiraphia</i>	3
<i>Optioservus</i>	156
<i>Oulimnius</i>	45
<i>Stenelmis</i>	17
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	12
Ptilodactylidae	
<i>Anchytarsus</i>	12
Diptera (TRUE FLIES)	
Ceratopogonidae (BITING MIDGES)	17
Chironomidae (MIDGES)	221
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	2
Simuliidae (BLACK FLIES)	
<i>Prosimulium</i>	73
<i>Simulium</i>	11
Tabanidae	5

014807438 UNNAMED TRIBUTARY TO BEAVER CREEK RESERVOIR NEAR REECEVILLE, PA—Continued

Date	12/04/12
Benthic Macroinvertebrate	Count
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	15
<i>Dicranota</i>	17
Total Organisms	1282