



Water-Data Report 2012

01472109 STONY RUN NEAR SPRING CITY, PA

Lower Delaware Basin
Schuylkill Subbasin

LOCATION.--Lat 40°10'11", long 75°34'45" referenced to North American Datum of 1927, Chester County, PA, Hydrologic Unit 02040203, 50 feet upstream from bridge at Seven Stars Road, 4.25 miles northwest of Phonixville, PA.

DRAINAGE AREA.--2.00 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1970 to November 1996; November 2007; October 2011.

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

COOPERATION.--Samples were collected with cooperation from the Chester County Water Resources Agency.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 1 of 3

[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)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)
10-26-2011	1100	2.4	10.4	7.2	7.3	250	245	11.0	20.5	7.74

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 2 of 3

[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	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint titration, (pH 4.5) laboratory, mg/L as CaCO ₃ (90410)	ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (00419)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia, water, filtered, mg/L as N (00608)
10-26-2011	1100	1.92	13.6	42.7	46	24.1	0.04	16.4	20.5	< .010

01472109 STONY RUN NEAR SPRING CITY, PA—Continued**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 3 of 3

[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	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Orthophos- phate, water, filtered, mg/L as P (00671)	Iron, water, filtered, μg/L (01046)	Boron, water, filtered, μg/L (01020)
10-26-2011	1100	4.26	0.006	0.038	168	20

01472109 STONY RUN NEAR SPRING CITY, PA—Continued**ECOLOGICAL RECORDS**

PERIOD OF RECORD.--October 2007 to current year.

REMARKS.--Samples were collected using a Hess sampler with a mesh size of 500 mm. Three samples were collected and composited.

BIOLOGICAL DATA-BENTHIC MACROINVERTEBRATES

Date	10/26/11
Benthic Macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	19
Nematoda (NEMATODES)	4
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoplonemertea	
Tetrastemmatidae	
<i>Prostoma</i>	6
Annelida	
Lumbriculida	
Lumbriculidae	1
Tubificida	
Naididae	33
Arthropoda	
Acariformes	
Hydrachnidae (WATER MITES)	20
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	1
Insecta	

01472109 STONY RUN NEAR SPRING CITY, PA—Continued

Date	Count	
Date		10/26/11
Benthic Macroinvertebrate		Count
Ephemeroptera (MAYFLIES)		
Baetidae		
<i>Acentrella</i>	1	
<i>Baetis</i>	1	
Ephemerellidae		
<i>Serratella</i>	11	
Ephemeridae		
<i>Ephemera</i>	1	
Heptageniidae		
<i>Maccaffertium</i>	107	
Isonychiidae		
<i>Isonychia</i>	1	
Leptophlebiidae		
<i>Habrophlebiodes</i>	5	
Plecoptera (STONEFLIES)		
Capniidae		6
Chloroperlidae		2
Taeniopterygidae		
<i>Taeniopteryx</i>	1	
Trichoptera (CADDISFLIES)		
Apataniidae		
<i>Apatania</i>	3	
Hydropsychidae		
<i>Cheumatopsyche</i>	195	
<i>Hydropsyche</i>	229	
Philopotamidae		
<i>Chimarra</i>	101	

01472109 STONY RUN NEAR SPRING CITY, PA—Continued

Date	10/26/11
Benthic Macroinvertebrate	Count
Uenoidae	
<i>Neophylax</i>	3
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Macronychus</i>	4
<i>Optioservus</i>	230
<i>Oulimnius</i>	15
<i>Stenelmis</i>	89
Psephenidae (WATER PENNIES)	
<i>Ectopria</i>	1
<i>Psephenus</i>	28
Diptera (TRUE FLIES)	
Athericidae	
<i>Atherix</i>	3
Ceratopogonidae (BITING MIDGES)	
	1
Chironomidae (MIDGES)	
	173
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	1
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	1
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	2
<i>Hexatoma</i>	7
<i>Tipula</i>	1
Total Organisms	1307