

Water-Data Report 2012

**01578457 Tweed Creek at Tweedale near Oxford, PA**

Lower Susquehanna Basin  
Lower Susquehanna Subbasin

LOCATION.--Lat 39°47'53", long 76°02'18" referenced to North American Datum of 1927, Chester County, PA, Hydrologic Unit 02050306, 1000 feet upstream from confluence with Octoraro Creek, 3.3 miles west of Oxford, Pa.

DRAINAGE AREA.--6.11 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--December 2011 to current year.

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 2011 TO SEPTEMBER 2012**

Part 1 of 3

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/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 <sup>3</sup> /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)
12-15-2011	1500	11	11.4	7.1	7.4	283	280	9.5	22.6	10.1

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

Part 2 of 3

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/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 <sub>3</sub> (90410)	ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as CaCO <sub>3</sub> (00419)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia, water, filtered, mg/L as N (00608)
12-15-2011	1500	2.97	12.9	30.0	31	30.2	< .04	13.4	23.3	0.015

**01578457 Tweed Creek at Tweedale near Oxford, PA—Continued**

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

Part 3 of 3

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/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]

<b>Date</b>	<b>Sample start time</b>	<b>Nitrate plus nitrite, water, filtered, mg/L as N (00631)</b>	<b>Nitrite, water, filtered, mg/L as N (00613)</b>	<b>Orthophosphate, water, filtered, mg/L as P (00671)</b>	<b>Iron, water, filtered, μg/L (01046)</b>	<b>Boron, water, filtered, μg/L (01020)</b>
<b>12-15-2011</b>	<b>1500</b>	8.60	0.004	0.023	9.1	9.0

**01578457 Tweed Creek at Tweedale near Oxford, PA—Continued****ECOLOGICAL RECORDS**

PERIOD OF RECORD.—December 2011 to current year.

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

## BIOLOGICAL DATA-BENTHIC MACROINVERTEBRATES

Date	12/15/11
Benthic Macroinvertebrate	Count
Nematoda (NEMATODES)	4
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	2
Tubificida	
Naididae	18
Arthropoda	
Acariformes	
Hydrachnidae (WATER MITES)	2
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	1
<i>Baetis</i>	1
Ephemerellidae	
<i>Serratella</i>	1
Heptageniidae	
<i>Maccaffertium</i>	2
Plecoptera (STONEFLIES)	
Capniidae	
<i>Allocapnia</i>	9
Chloroperlidae	2

**01578457 Tweed Creek at Tweedale near Oxford, PA—Continued**

Date	12/15/11
Benthic Macroinvertebrate	Count
Taeniopterygidae	
<i>Strophopteryx</i>	7
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	4
<i>Hydropsyche</i>	10
Hydroptilidae	
<i>Hydroptila</i>	1
Philopotamidae	
<i>Dolophilodes</i>	2
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	1
<i>Stenelmis</i>	5
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	1
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	107
Simuliidae (BLACK FLIES)	
<i>Prosimulium</i>	3
Tipulidae (CRANE FLIES)	
<i>Dicranota</i>	3
<b>Total Organisms</b>	<b>186</b>