

**01531488 SUGAR CREEK NEAR NORTH TOWANDA, PA**

Upper Susquehanna Basin  
Upper Susquehanna-Tunkhannock Subbasin

LOCATION.--Lat 41°46'52", long 76°30'10" referenced to North American Datum of 1927, Bradford County, PA, Hydrologic Unit 02050106, at steel-truss bridge in North Towanda township, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--184 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--April 2000 to current year.

GAGE.--Non-recording gage. Datum of gage is 790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the Pennsylvania Department of Environmental Protection.

**DISCHARGE MEASUREMENTS**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Oct 16, 2012	10.3
Nov 29, 2012	30.4
Mar 13, 2013	543
Apr 29, 2013	115
Jun 19, 2013	27.5
Aug 13, 2013	10.9
Aug 30, 2013	5.17

## 01531488 SUGAR CREEK NEAR NORTH TOWANDA, PA—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2010 to current year.

REMARKS.--Analyses for pH, water temperature, specific conductance, and dissolved oxygen were performed on site. All other sample analyses were performed at the Pennsylvania Department of Environmental Protection laboratory in Harrisburg, Pa. Occasionally, values for filtered parameters may exceed values for the corresponding unfiltered parameter. These results are within the limits of analytical precision and methods.

COOPERATION.--Water-quality samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

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

Part 1 of 4

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; 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; M, presence verified but not quantified]

Date	Sample start time	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Osmotic pressure, water, unfiltered, milliosmoles per kilogram (82550)	pH, water, field, standard units (00400)	pH, water, laboratory, standard units (00403)	Specific conductance, water, unfiltered, µS/cm at 25°C (90095)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)
11-08-2012	1100	44	13.0	2.0	7.5	8.0	255	263	4.4	122
01-30-2013	1330	386	13.8	< 1.0	7.8	7.6	183	189	.0	116
03-12-2013	1300	225	12.1	3.0	7.6	7.8	168	171	5.4	122
05-20-2013	1400	32	11.2	5.0	7.9	8.3	225	224	19.8	142
07-22-2013	1400	6.8	11.1	5.0	8.8	8.8	266	272	28.2	148
09-03-2013	1330	5.3	9.9	6.0	8.2	8.3	261	266	23.2	146

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

Part 2 of 4

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; 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; M, presence verified but not quantified]

Date	Sample start time	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, unfiltered, recoverable, mg/L (00916)	Magnesium, water, unfiltered, recoverable, mg/L (00927)	Sodium, water, unfiltered, recoverable, mg/L (00929)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as CaCO <sub>3</sub> (00417)	Bromide, water, filtered, mg/L (71870)	Chloride, water, filtered, mg/L (00940)	Sulfate, water, filtered, mg/L (00945)
11-08-2012	1100	94	< 5	28.4	5.4	11.9	78	M	20.6	16.0
01-30-2013	1330	57	130	15.7	4.3	11.2	40	< 0.025	22.4	10.3
03-12-2013	1300	61	168	17.8	4.1	7.3	43	< 0.025	13.9	11.1
05-20-2013	1400	80	< 5	24.3	4.6	10.8	75	< 0.025	17.8	11.8
07-22-2013	1400	88	< 5	26.4	5.4	16.1	92	M	23.5	10.7
09-03-2013	1330	94	< 5	29.0	5.3	13.4	85	M	18.2	13.4

## 01531488 SUGAR CREEK NEAR NORTH TOWANDA, PA—Continued

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

Part 3 of 4

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; 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; M, presence verified but not quantified]

Date	Sample start time	Ammonia, water, unfiltered, mg/L as N (00610)	Nitrate, water, unfiltered, mg/L as N (00620)	Nitrite, water, unfiltered, mg/L as N (00615)	Orthophosphate, water, unfiltered, mg/L as P (70507)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, unfiltered, mg/L (00600)	Aluminum, water, unfiltered, recoverable, µg/L (01105)	Barium, water, unfiltered, recoverable, µg/L (01007)	Copper, water, unfiltered, recoverable, µg/L (01042)
11-08-2012	1100	< .020	0.91	< .040	0.02	0.027	1.0	< 200	M	< 4
01-30-2013	1330	.120	.83	< .040	.07	.482	1.6	3,600	M	M
03-12-2013	1300	.020	.65	< .040	.02	.172	1.1	4,300	M	M
05-20-2013	1400	.020	.28	< .040	< .01	.018	.51	< 200	M	< 4
07-22-2013	1400	.020	< .04	< .040	< .01	.020	< .25	< 200	M	< 4
09-03-2013	1330	.020	.33	< .040	.03	.050	.66	< 200	M	< 4

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

Part 4 of 4

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; 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; M, presence verified but not quantified]

Date	Sample start time	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)	Nickel, water, unfiltered, recoverable, µg/L (01067)	Strontium, water, unfiltered, recoverable, micrograms per liter (01082)	Zinc, water, unfiltered, recoverable, µg/L (01092)	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Selenium, water, unfiltered, µg/L (01147)
11-08-2012	1100	170	< 1.0	30	< 50	80	< 10	< 200	< 7
01-30-2013	1330	6,250	M	220	< 50	40	20	< 200	< 7
03-12-2013	1300	7,390	M	180	< 50	40	30	< 200	< 7
05-20-2013	1400	120	< 1.0	20	< 50	70	< 10	< 200	< 7
07-22-2013	1400	80	< 1.0	20	< 50	80	< 10	< 200	< 7
09-03-2013	1330	160	< 1.0	40	< 50	80	< 10	< 200	< 7