Water-Data Report 2012

0163289259 SMITH CREEK TRIBUTARY AT ROUTE 620 AT NEW MARKET, VA

Potomac Basin
North Fork Shenandoah Subbasin

LOCATION.--Lat 38°37'53.75", long 78°39'19.47" referenced to North American Datum of 1983, Shenandoah County, VA, Hydrologic Unit 02070006.

DRAINAGE AREA.--1.16 mi^2.

SURFACE-WATER RECORDS

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Date	Discharge, in ft^3/s
May 21, 2012	0.26

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 0163289259, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/0163289259.2012.pdf

0163289259 SMITH CREEK TRIBUTARY AT ROUTE 620 AT NEW MARKET, VA—Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 5

[%, percent; $CaCO_3$, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Discharge, instantaneous, ft^3/s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
05-21-2012	**1245**	Surface water	Regular	736	23.0	0.26	9.1	96	7.7

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 5

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Date	Sample start time	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, monochrome near infrared LED light, 780-900 nm, detection angle 90 +/- 2.5 degrees, FNU (63680)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)
05-21-2012	**1245**	102	16.0	4.2	77	14.3	2.98	0.66	2.32

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 5

[%, percent; $CaCO_3$, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as $CaCO_3$ (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Bromide, water, filtered, mg/L (71870)	Carbonate, water, filtered, inflection-point incremental titration method, field, mg/L (00452)	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)
05-21-2012	**1245**	41	50	< .010	<1.0	1.66	< .04	11.1	8.95

0163289259 SMITH CREEK TRIBUTARY AT ROUTE 620 AT NEW MARKET, VA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 5

[%, percent; $CaCO_3$, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrate, water, filtered, mg/L as N (00618)	Nitrite, water, filtered, mg/L as N (00613)	Orthophos-phate, water, filtered, mg/L as P (00671)	Phos-phorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, analytically determined, mg/L (62854)
05-21-2012	**1245**	< .010	< .040	< .040	< .001	< .004	< .003	0.016	0.15

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 5 of 5

[%, percent; $CaCO_3$, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Total nitrogen, water, unfiltered, analytically determined, mg/L (62855)	Iron, water, filtered, µg/L (01046)	Manga-nese, water, filtered, µg/L (01056)	Nitrogen-15/-Nitrogen-14 ratio in nitrate fraction, water, filtered, per mil (82690)	Oxygen-18/Oxygen-16 ratio in nitrate fraction, water, filtered, per mil (63041)
05-21-2012	**1245**	2.00	15.8	1.46	-1.91	0.26