

Application Type Renewal  
Facility Type Industrial  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL INDUSTRIAL WASTE (IW)  
AND IW STORMWATER**

Application No. PA0082741  
APS ID 829052  
Authorization ID 1446064

**Applicant and Facility Information**

Applicant Name	<u>Elizabethtown Area Water Authority</u>	Facility Name	<u>Elizabethtown Area Water Authority – Conewago Creek Diversion</u>
Applicant Address	<u>211 W Hummelstown Street</u> <u>Elizabethtown, PA 17022</u>	Facility Address	<u>2199 Mill Road</u> <u>Elizabethtown, PA 17022</u>
Applicant Contact	<u>Del Becker</u>	Facility Contact	<u>Del Becker</u>
Applicant Phone	<u>(717) 367-7448</u>	Facility Phone	<u>(717) 367-7448</u>
Client ID	<u>240335</u>	Site ID	<u>262256</u>
SIC Code	<u>4941</u>	Municipality	<u>Mount Joy Township</u>
SIC Description	<u>Trans. &amp; Utilities - Water Supply</u>	County	<u>Lancaster</u>
Date Application Received	<u>July 3, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>July 17, 2023</u>	If No, Reason	<u></u>
Purpose of Application	<u>NPDES Renewal.</u>		

**Summary of Review**

Elizabethtown Area Water Authority has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its National Pollutant Discharge Elimination System (NPDES) permit. The existing permit was issued on December 19, 2018, and became effective on January 1, 2019, authorizing discharge of treated sewage from the Elizabethtown Area Water Authority Conewago Creek Diversion into UNT of Conoy Creek. The existing permit expiration date was December 31, 2023, and the permit has been administratively extended since that time.

Changes in this renewal: No changes were made to the permit.

Supplemental information for this facility is provided at the end of this fact sheet.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
X		Benjamin R. Lockwood Benjamin R. Lockwood / Environmental Engineering Specialist	January 31, 2024
X		Daniel W. Martin Daniel W. Martin, P.E. / Environmental Engineer Manager	February 1, 2024

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>1.62</u>
Latitude	<u>40° 9' 45"</u>	Longitude	<u>76° 36' 54"</u>
Quad Name	<u></u>	Quad Code	<u></u>
Wastewater Description: <u>Intermittent Discharge</u>			
Receiving Waters	<u>Unnamed Tributary of Conoy Creek (TSF)</u>	Stream Code	<u>8289</u>
NHD Com ID	<u>57462947</u>	RMI	<u>1.19</u>
Drainage Area	<u>0.23 mi<sup>2</sup></u>	Yield (cfs/mi <sup>2</sup> )	<u>0.0887</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.0204</u>	Q <sub>7-10</sub> Basis	<u>USGS PA StreamStats</u>
Elevation (ft)	<u>478</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>7-G</u>	Chapter 93 Class.	<u>TSF</u>
Existing Use	<u>N/A</u>	Existing Use Qualifier	<u>N/A</u>
Exceptions to Use	<u>N/A</u>	Exceptions to Criteria	<u>N/A</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Pathogens, Siltation, Agriculture, Habitat Alterations</u>		
Source(s) of Impairment	<u>Source Unknown, Urban Runoff/Storm Sewers, Habitat Modification Other Than Hydromodification</u>		
TMDL Status	<u>N/A</u>	Name	<u>N/A</u>
Nearest Downstream Public Water Supply Intake	<u>Elizabethtown Borough</u>		
PWS Waters	<u>UNT of Conoy Creek</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>0.85</u>

Changes Since Last Permit Issuance: USGS PA StreamStats is provided a drainage area of 0.23 mi<sup>2</sup> and a Q<sub>7-10</sub> of 0.0204 cfs.

Other Comments: None

<b>Compliance History</b>	
<b>Summary of DMRs:</b>	A summary of the past 12-month DMR effluent data is presented on the next page of this fact sheet.
<b>Summary of Inspections:</b>	1/28/2020: A routine inspection was conducted. The pumping station responsible for the diversion was inspected, and some recommendations were provided. The discharge pipe to UNT to Conoy Creek was observed, and no evidence of sediment accumulation or erosion were noted.

Other Comments: There are currently no open violations for this Applicant

**Compliance History**

**DMR Data for Outfall 001 (from December 1, 2022 to November 30, 2023)**

Parameter	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22
Flow (MGD) Average Monthly	0.724	0.645	0.596	0.628	0.423	0.710	0.860	0.479	0.034			0.206
Flow (MGD) Daily Maximum	0.812	0.839	0.800	0.811	0.871	1.054	1.275	1.243	0.540			1.033

**Existing Effluent Limitations and Monitoring Requirements**

The table below summarizes the effluent limits and monitoring requirements implemented in the existing NPDES permit.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	During Transfer	Pump Rate

Compliance Sampling Location: Taken at Conewago Creek Pump Station

**Development of Effluent Limitations**

<b>Outfall No.</b>	<u>001</u>	<b>Design Flow (MGD)</b>	<u>1.62</u>
<b>Latitude</b>	<u>40° 9' 45"</u>	<b>Longitude</b>	<u>76° 36' 45"</u>
<b>Wastewater Description:</b> <u>Intermittent Discharge</u>			

Limitations

Elizabethtown Area Water Authority diverts water from a public water supply intake on the Conewago Creek to an intermittent UNT of Conoy. This creek supplies the Elizabethtown Water Supply Reservoir. The diversion of water from the Conewago Creek occurs when the reservoir level drops below the spillway. This discharge has been in place since the 1950s. Elizabethtown Borough is permitted to transfer up to 1.62 mgd by its Water Allocation Permit. It is recommended that flow be monitored, which is consistent with the existing permit.

Anti-Degradation

The effluent limits for this discharge have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

303(d) Listed Streams

The discharge is located on a stream segment that is designated on the 303(d) list as impaired. There is a recreational impairment due to pathogens from an unknown source. There is an aquatic life impairment due to siltation from urban runoff/storm sewers, siltation from habitat modification, siltation from agriculture, and other habitat alterations from habitat modification.

Class A Wild Trout Fisheries

No Class A Wild Trout Fisheries are impacted by this discharge.

Anti-Backsliding

Pursuant to 40 CFR § 122.44(l)(1), all proposed permit requirements addressed in this fact sheet are at least as stringent as the requirements implemented

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

**Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.**

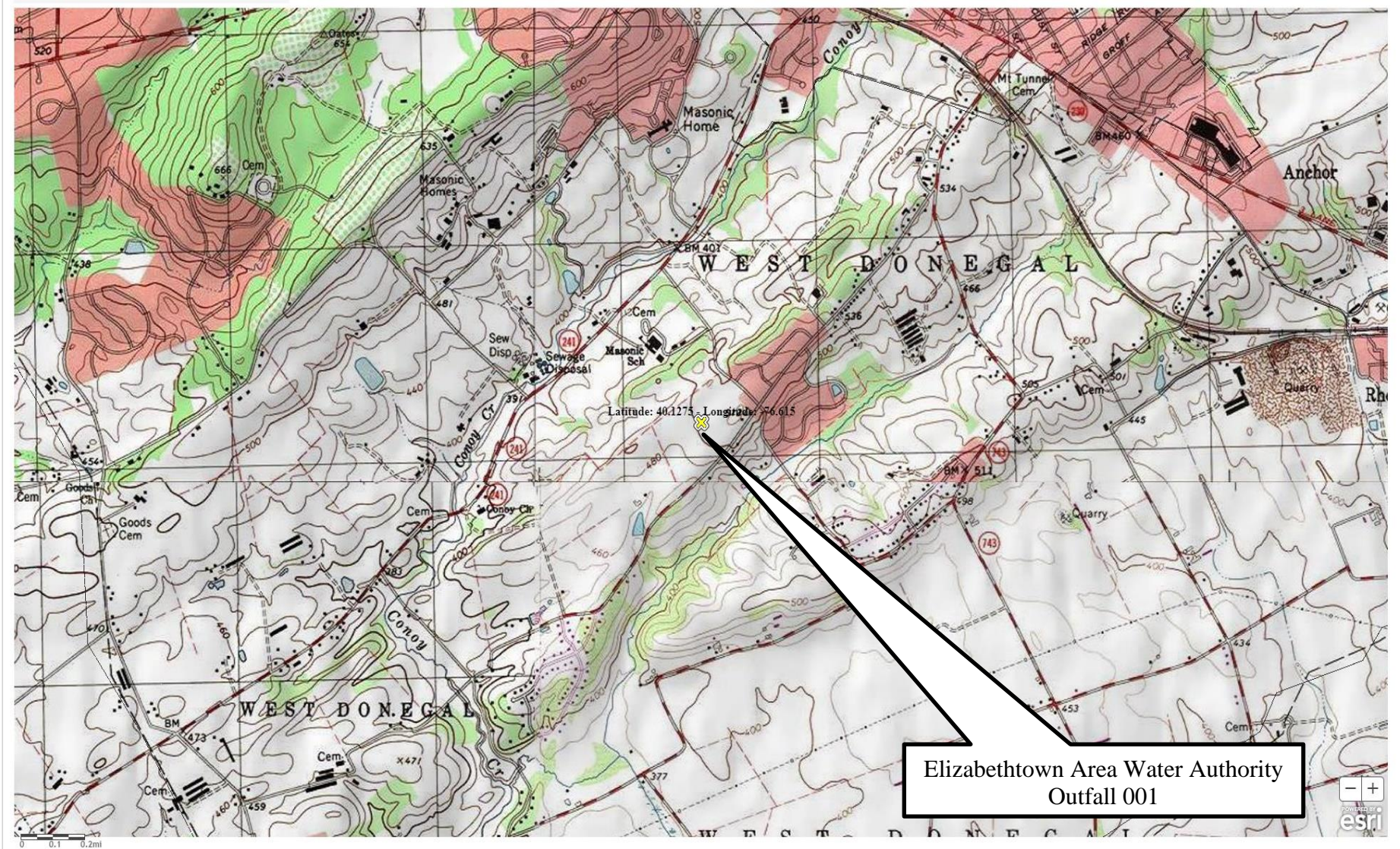
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Daily when Discharging	Measured

Compliance Sampling Location: Conewago Creek Pump Station

Other Comments: None

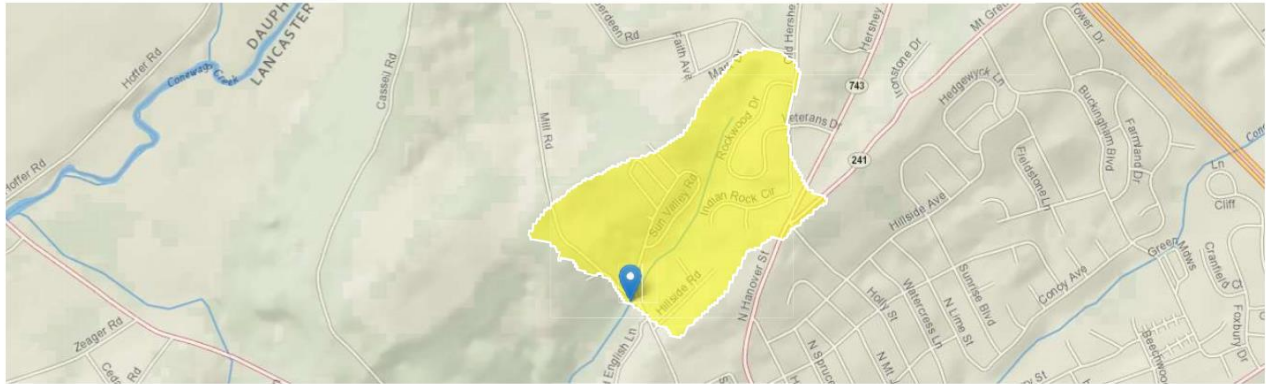
Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment [redacted])
<input type="checkbox"/>	Toxics Management Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input type="checkbox"/>	SOP: [redacted]
<input type="checkbox"/>	Other: [redacted]





Elizabethtown Area Water Authority Outfall 001 RMI = 1.19

Region ID: PA  
 Workspace ID: PA20240131170107338000  
 Clicked Point (Latitude, Longitude): 40.16256, -76.61496  
 Time: 2024-01-31 12:01:34 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	4.6617	degrees
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.23	square miles
PRECIP	Mean Annual Precipitation	39	inches
ROCKDEP	Depth to rock	4	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	2.32	miles per square mile
URBAN	Percentage of basin with urban development	52.2488	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [99.0 Percent (0.229 square miles) Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.23	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	4.6617	degrees	1.7	6.4
ROCKDEP	Depth to Rock	4	feet	4.13	5.21
URBAN	Percent Urban	52.2488	percent	0	89

Low-Flow Statistics Parameters [1.0 Percent (0.00171 square miles) Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.23	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	39	inches	35	50.4
STRDEN	Stream Density	2.32	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Low-Flow Statistics Disclaimers [99.0 Percent (0.229 square miles) Low Flow Region 1]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [99.0 Percent (0.229 square miles) Low Flow Region 1]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0494	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.0725	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.0204	ft <sup>3</sup> /s

Statistic	Value	Unit
30 Day 10 Year Low Flow	0.0319	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.0563	ft <sup>3</sup> /s

Low-Flow Statistics Disclaimers [1.0 Percent (0.00171 square miles) Low Flow Region 2]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [1.0 Percent (0.00171 square miles) Low Flow Region 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00833	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.0131	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.00253	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.00406	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.00815	ft <sup>3</sup> /s

Low-Flow Statistics Flow Report [Area-Averaged]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.049	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.0719	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.0202	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.0316	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.0558	ft <sup>3</sup> /s

*Low-Flow Statistics Citations*

**Stuckey, M.H., 2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)**

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Application Version: 4.19.3  
 StreamStats Services Version: 1.2.22  
 NSS Services Version: 2.2.1