Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0272060**
Facility Type	**Municipal**	APS ID	**1104432**
Major / Minor	**Minor**	Authorization ID	**1468579**

Applicant and Facility Information

Applicant Name	**White Township Municipal Authority Indiana County**	Facility Name	**White Township Municipal Authority Fulton Run STP**
Applicant Address	950 Indian Springs Road	Facility Address	Fulton Lane
	Indiana, PA 15701-3506		Indiana, PA 15701
Applicant Contact	Daniel Jageman	Facility Contact	Daniel Jageman
Applicant Phone	(724) 463-8585	Facility Phone	(724) 463-8585
Client ID	66230	Site ID	834648
Ch 94 Load Status	Not Overloaded	Municipality	White Township
Connection Status	No Limitations	County	Indiana
Date Application Received	December 29, 2023	EPA Waived?	Yes
Date Application Accepted	January 26, 2024	If No, Reason	

Purpose of Application: Renewal of Existing NPDES Permit

Summary of Review

The White Township Municipal Authority (WTMA) has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of a NPDES permit for the Fulton Run STP. The permit was originally issued on June 12, 2019 with an effective date of July 1, 2019. The permit expired on June 30, 2024, but the terms and conditions of the permit have been administratively extended since that time.

Based on the review outlined in this fact sheet, it is recommended that the permit be drafted, and a notice of the draft permit be published in the *Pennsylvania Bulletin* for public comments for 30 days.

Sludge use and disposal description and location(s): Not documented in the application

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		*Aaron Baar* Aaron Baar / Project Manager	May 17, 2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	May 22, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.0042
Latitude	40º 39' 46.40"	Longitude	-79º 11' 59.02"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Fulton Run (CWF)	Stream Code	46769
NHD Com ID	123858690	RMI	0.7000
Drainage Area	3.87 mi^2	Yield (cfs/mi^2)	0.045
Q_{7-10} Flow (cfs)	0.174	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1052.57	Slope (ft/ft)	
Watershed No.	17-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s) – Downstream impairment of Crooked Creek		
Cause(s) of Impairment	Crooked Creek: Nutrients, Organic Enrichment/Low D.O.		
Source(s) of Impairment	Crooked Creek: Agriculture		
TMDL Status	Final	Name	Crooked Creek Watershed

Background/Ambient Data		Data Source
pH (SU)	7.0	Assumed, default value
Temperature (°C)	20	CWF, default value
Hardness (mg/L)	N/A	N/A
Other: Ammonia (mg/L)	0.1	Assumed, default value

Nearest Downstream Public Water Supply Intake		Buffalo Township Municipal Authority at Freeport	
PWS Waters	Allegheny River	Flow at Intake (cfs)	2,390
PWS RMI	29.4	Distance from Outfall (mi)	~50

Drainage Area

The discharge is to Fulton Run at RMI 0.7. A drainage area upstream of the discharge is determined to be 3.87 sq.mi. according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/.

Stream Flow

According to StreamStats, the watershed has a Q_{7-10} of 0.174 cfs and a Q_{30-10} of 0.25 cfs. This information was used to obtain a Low Flow Yield (LFY), a chronic Q_{30-10}:Q_{7-10} ratio and acute (Q_{1-10}) exposure stream flows for the discharge point as follows (Guidance No. 391-2000-023).

Q_{7-10} = 0.174 cfs
Q_{30-10} = 0.25 cfs
Q_{1-10} = 0.64 * 0.174 cfs = 0.1114 cfs
Q_{30-10}:Q_{7-10} = 0.25 cfs / 0.174 cfs = 1.4368
LFY = 0.174 cfs/3.87 mi^2 = 0.0450 cfs/mi^2

The calculated LFY in this renewal is identical to the one used in the existing permit.

Fulton Run

25 Pa Code §93.9 classifies the receiving water, Fulton Run, with a Cold Water Fishery (CWF) Existing Use designation. Effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. The discharge is in a stream segment listed as attaining uses.

Local Watershed Total Maximum Daily Loads (TMDLs)

According to PA's 2024 integrated water quality monitoring and assessment report, Fulton Run in the vicinity of the proposed point of discharge is currently assessed for aquatic life; the most recently assessment found aquatic life in the waterway to be supported. The waterway is listed as Category 2 in the 2024 integrated report, indicating that some but not all uses are met. The assessment status of the remaining uses may be unknown because data are insufficient to assess the water, or it may be impaired.

There is an existing TMDL for the downstream Crooked Creek Watershed to address use impairments caused by suspended solids. In March 2019, 384 lb/yr was moved from the bulk reserve to the non-mining WLA to account for the issuance of PA0272060 to White Township Municipal Authority.

Public Water Supply Intake

The nearest downstream public water supply intake is the Buffalo Township Municipal Authority at Freeport intake, locate on the Allegheny River approximately 50 miles from the point of discharge. Considering the nature of the discharge and distance, the discharge is not expected to impact the water supply.

Class A Wild Trout Streams

The receiving stream is not a Class A Wild Trout stream; therefore, no Class A Wild Trout Fishery is impacted by this discharge.

Treatment Facility Summary				
Treatment Facility Name: White Township Municipal Authority Fulton Run STP				
WQM Permit No.	**Issuance Date**			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Orenco Membrane Filter System	Ultraviolet	0.0042
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0042		Not Overloaded		

WTMA operates and owns the wastewater treatment facility located on Fulton Lane (White Township, Indiana County). The facility only serves a portion of White Township (14 current residences; 24 residences at max build-out). With an annual average design flow and hydraulic design capacity of 0.0042 MGD, the treatment process is configured as follows:

Septic Tank Effluent Pumping (STEP → UV disinfection → Outfall 001

The facility adds soda ash for pH control. Solids handling is not described in the renewal application.

Compliance History	
Summary of DMRs:	DMR results for the past year are presented below.
Summary of Inspections:	Since the last renewal of the facility's NPDES permit, the following inspections have been logged: November 18, 2021: A routine CEI was conducted by Clinton Stonesifer. No violations were noted. A recommendation to, "Consider longterm implications of ownership and operation of septic tanks and pumps," was made.

Other Comments: As of April 27, 2025, there are no open violations associated with this facility.

Existing Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) 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	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	0.9	XXX	XXX	25.0	XXX	50	2/month	Grab
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
TSS	1.1	XXX	XXX	30.0	XXX	60	2/month	Grab
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	Grab
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Ammonia May 1 - Oct 31	0.9	XXX	XXX	25.0	XXX	50	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	Grab
UV Dosage (mjoules/cm²)	XXX	XXX	XXX	Report	XXX	XXX	1/day	Measured

Compliance Sampling Location: Outfall 001

Compliance History

DMR Data for Outfall 001 (from March 1, 2024 to February 28, 2025)

Parameter	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24
Flow (MGD) Average Monthly	848	731	0.000755	0.000668	0.000659	0.000636	625	0.000618	0.000660	1118	0.001231	0.001112
Flow (MGD) Daily Maximum	1055	1064	0.001250	0.001023	0.001029	0.001289	956	0.000882	0.001151	1471	0.001558	0.001413
pH (S.U.) Instantaneous Minimum	5.0	5.0	6.8	6.9	6.9	6.7	6.8	6.5	6.5	6.4	6.2	6.5
pH (S.U.) Instantaneous Maximum	6.0	9.4	8.0	7.7	7.9	7.7	7.7	8.1	7.8	8.6	7.8	7.8
DO (mg/L) Instantaneous Minimum	6.0	4.1	4.8	5.0	4.2	4.3	4.1	4.5	4.0	2.3	2.6	4.2
CBOD5 (lbs/day) Average Monthly	0.021	< 0.014	< 0.011	< 0.012	< 0.008	< 0.009	< 0.04	< 0.004	0.03	< 0.045	< 0.06	< 0.019
CBOD5 (mg/L) Average Monthly	2.89	< 2.62	< 2.0	< 2.0	< 2.0	< 2.0	< 8.1	< 2.0	4.75	< 6.6	< 5.5	< 2.59
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	0.25	0.16	0.19	0.10	0.05	0.06	0.09	0.05	0.30	0.48	0.93	0.42
BOD5 (mg/L) Raw Sewage Influent Average Monthly	34.0	29.0	35.9	17.5	12.8	14.8	15.9	24.9	52.1	64.0	82.8	57.5
TSS (lbs/day) Average Monthly	< 0.04	< 0.03	< 0.03	< 0.03	< 0.02	< 0.02	< 0.03	0.02	0.05	0.08	0.09	< 0.04
TSS (lbs/day) Raw Sewage Influent Average Monthly	0.13	0.17	0.11	0.08	0.08	0.07	0.14	0.04	0.15	0.41	0.23	0.16
TSS (mg/L) Average Monthly	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	8.0	8.5	10.5	8.0	< 5.5
TSS (mg/L) Raw Sewage Influent Average Monthly	17.0	33.0	20.0	14.0	19.0	16.0	28.0	20.0	26.5	50.0	20.0	22.0

Fecal Coliform (No./100 ml) Geometric Mean	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.8	< 1.0	< 1.0	1.0	< 1.0	< 1.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	23	< 1.0	< 1.0	1.0	< 1.0	< 1.0
Total Nitrogen (mg/L) Average Quarterly			48.9			46.5			6.9			61.3
Ammonia (lbs/day) Average Monthly	0.1824	0.040	0.0034	< 0.0006	< 0.0004	< 0.0004	< 0.002	< 0.001	0.002	0.009	< 0.009	< 0.004
Ammonia (mg/L) Average Monthly	24.800	7.280	0.583	< 0.102	< 0.100	< 0.100	< 0.351	< 0.400	0.318	1.136	< 0.790	< 0.542
Total Phosphorus (mg/L) Average Quarterly			12.1			5.5			1.96			3.2
UV Dosage (mjoules/cm²) Average Monthly	42.8	43.3	41.6	39.0	38.4	41.9	38.4	35.9	36.1	60.4	45.6	38.3

Compliance History

Effluent Violations for Outfall 001, from: April 1, 2024 To: February 28, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	02/28/25	Inst Min	5.0	S.U.	6.0	S.U.
pH	01/31/25	Inst Min	5.0	S.U.	6.0	S.U.
pH	01/31/25	IMAX	9.4	S.U.	9.0	S.U.
DO	05/31/24	Inst Min	2.3	mg/L	4.0	mg/L
DO	04/30/24	Inst Min	2.6	mg/L	4.0	mg/L

Other Comments: No cause for the violations above are noted in the associated Non-Compliance forms. NWRO Operations will determine if further action is needed or not.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .0042
Latitude 40º 39' 46.68" **Longitude** -79º 11' 59.83"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Comments: These standards apply, subject to water quality analysis and BPJ where applicable.

Water Quality-Based Limitations

CBOD5, NH3-N and Dissolved Oxygen (DO)

WQM 7.0 version 1.0b is a water quality model designed to assist DEP to determine appropriate permit requirements for CBOD5, NH3-N and DO. DEP's guidance no. 391-2000-007 provides the technical methods contained in WQM 7.0 for conducting wasteload allocation and for determining recommended NPDES effluent limits for point source discharges. The model was utilized using data derived by USGS StreamStats and the model output indicated that existing WQBELs for ammonia and CBOD5 are still protective of water quality

The model also determined that the facility's existing DO limit of 4 mg/L is still protective of water quality.

See attached for model inputs and outputs.

Toxics

DEP's NPDES permit application for minor sewages (less than 0.1 MGD) does not require sampling for heavy metals including Total Copper, Total Lead, and Total Zinc.

E. Coli Monitoring

In conformity with the Department's *Establishing Effluent Limitations for Individual Sewage Permits* (SOP No. BCW-PMT-033) and as authorized by § 92a.61 of the PA Code, annual E. Coli monitoring has been proposed in this permit. The collection method will be via grab sample.

Best Professional Judgment (BPJ) Limitations

Ultraviolet Disinfection

The existing UV system is equipped with a dosage sensor; therefore, UV dosage is proposed to be continued as the monitoring parameter for the UV system.

Total Phosphorus & Total Nitrogen

DEP's SOP no. BPNPSM-PMT-033 (Establishing Effluent Limitations for Individual Sewage Permits) recommends monitoring requirements for Total Phosphorus and Total Nitrogen for all sewage facilities. Therefore, routine monitoring for Total Phosphorus and Total Nitrogen are recommended to be continued in this permit. Sampling frequency for is currently required 1/quarter, which is consistent with Table 6.3 in Guidance Doc. 362-0400-001. No change is proposed.

Additional Considerations

Flow Monitoring

The requirement to monitor the volume of effluent will remain in the draft permit per 40 CFR § 122.44(i)(1)(ii).

Monitoring Frequency and Sample Type

Unless discussed otherwise above, the permit's monitoring frequency and sample type for all parameters will remain unchanged from the last permit renewal.

Antidegradation Requirements

All effluent limitations and monitoring requirements 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.

Anti-backsliding Requirement

All effluent limits proposed in this fact sheet are as stringent as effluent limits specified in the existing permit renewal unless noted otherwise above. This approach is in accordance with 40 CFR §122.44(l(1).

Annual Fees

An annual fee clause is continued in the permit in accordance with 25 Pa. Code § 92a.62. The facility covered by the permit is classified in the Minor Sewage Facility <0.05 MGD fee category, which has an annual fee of $500.

Mass Loading Limitations

Unless stated otherwise in this fact sheet, mass loading effluent limits are calculated based on the formula: design flow (average annual) (MGD) x concentration limit (mg/L) at design flow x conversion factor (8.34).

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) (1)		Concentrations (mg/L)				Minimum (2) 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	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	0.9	XXX	XXX	25.0	XXX	50	2/month	Grab
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
TSS	1.1	XXX	XXX	30.0	XXX	60	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	Grab
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Ammonia May 1 - Oct 31	0.9	XXX	XXX	25.0	XXX	50	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	Grab

Outfall 001, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
UV Dosage (mjoules/cm²)	XXX	XXX	XXX	Report	XXX	XXX	1/day	Measured

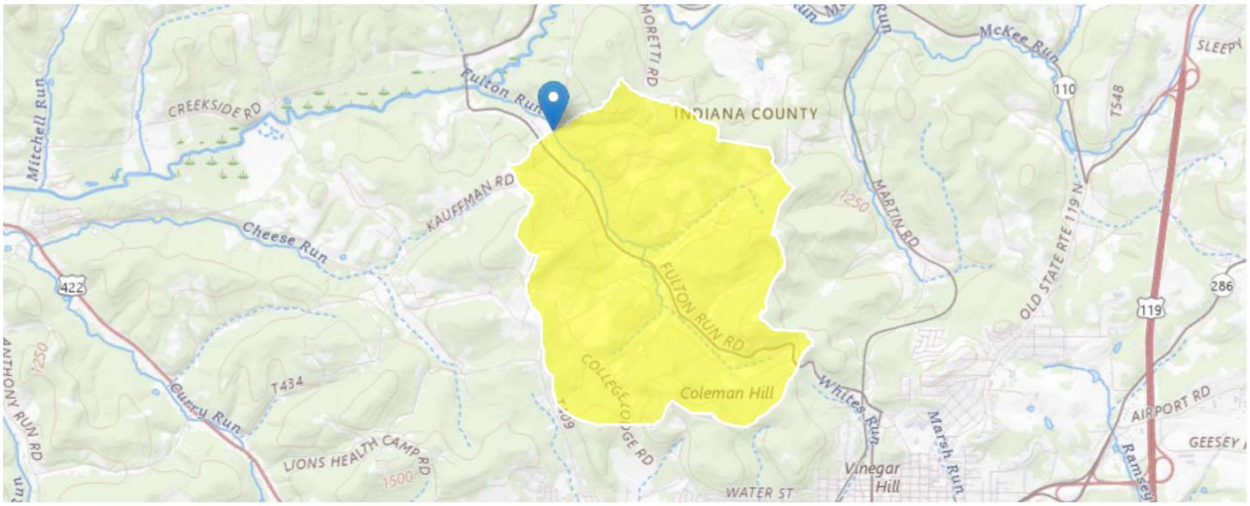
Compliance Sampling Location: Outfall 001

Tools and References Used to Develop Permit	
☒	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	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.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
☐	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.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
☐	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.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	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.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:


Fulton Run
Fulton Run Rd
954
Fulton Run Rd
Fulton Ln
1281634 - DISCHARGE POINT
Fulton Run
Bash Rd
954
Moretti Rd
Moretti Rd
Fulton Run Rd
Moretti Rd
Kauffman Rd
Kauffman Rd

StreamStats Report

Region ID: PA
Workspace ID: PA20250427170657507000
Clicked Point (Latitude, Longitude): 40.66319, -79.19990
Time: 2025-04-27 13:07:22 -0400



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Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	3.87	square miles
ELEV	Mean Basin Elevation	1326	feet
PRECIP	Mean Annual Precipitation	45	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	3.87	square miles	2.33	1720
ELEV	Mean Basin Elevation	1326	feet	898	2700
PRECIP	Mean Annual Precipitation	45	inches	38.7	47.9

Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	0.393	ft^3/s	43	43
30 Day 2 Year Low Flow	0.585	ft^3/s	38	38
7 Day 10 Year Low Flow	0.174	ft^3/s	54	54
30 Day 10 Year Low Flow	0.25	ft^3/s	49	49

Statistic	Value	Unit	SE	ASEp
90 Day 10 Year Low Flow	0.369	ft^3/s	41	41

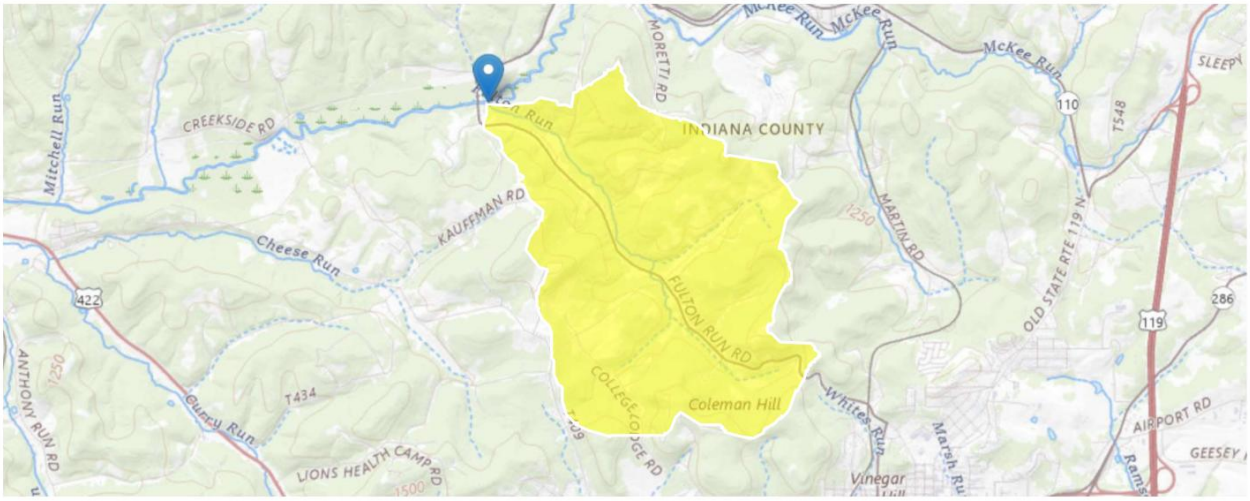
Low-Flow Statistics Citations

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/)

Application Version: 4.28.1
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: PA
Workspace ID: PA20250427170926455000
Clicked Point (Latitude, Longitude): 40.66773, -79.21040
Time: 2025-04-27 13:09:49 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	4.25	square miles
ELEV	Mean Basin Elevation	1314	feet
PRECIP	Mean Annual Precipitation	45	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4.25	square miles	2.33	1720
ELEV	Mean Basin Elevation	1314	feet	898	2700
PRECIP	Mean Annual Precipitation	45	inches	38.7	47.9

Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	0.43	ft^3/s	43	43
30 Day 2 Year Low Flow	0.639	ft^3/s	38	38
7 Day 10 Year Low Flow	0.19	ft^3/s	54	54
30 Day 10 Year Low Flow	0.275	ft^3/s	49	49

Statistic	Value	Unit	SE	ASEp
90 Day 10 Year Low Flow	0.404	ft^3/s	41	41

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/)

Application Version: 4.28.1
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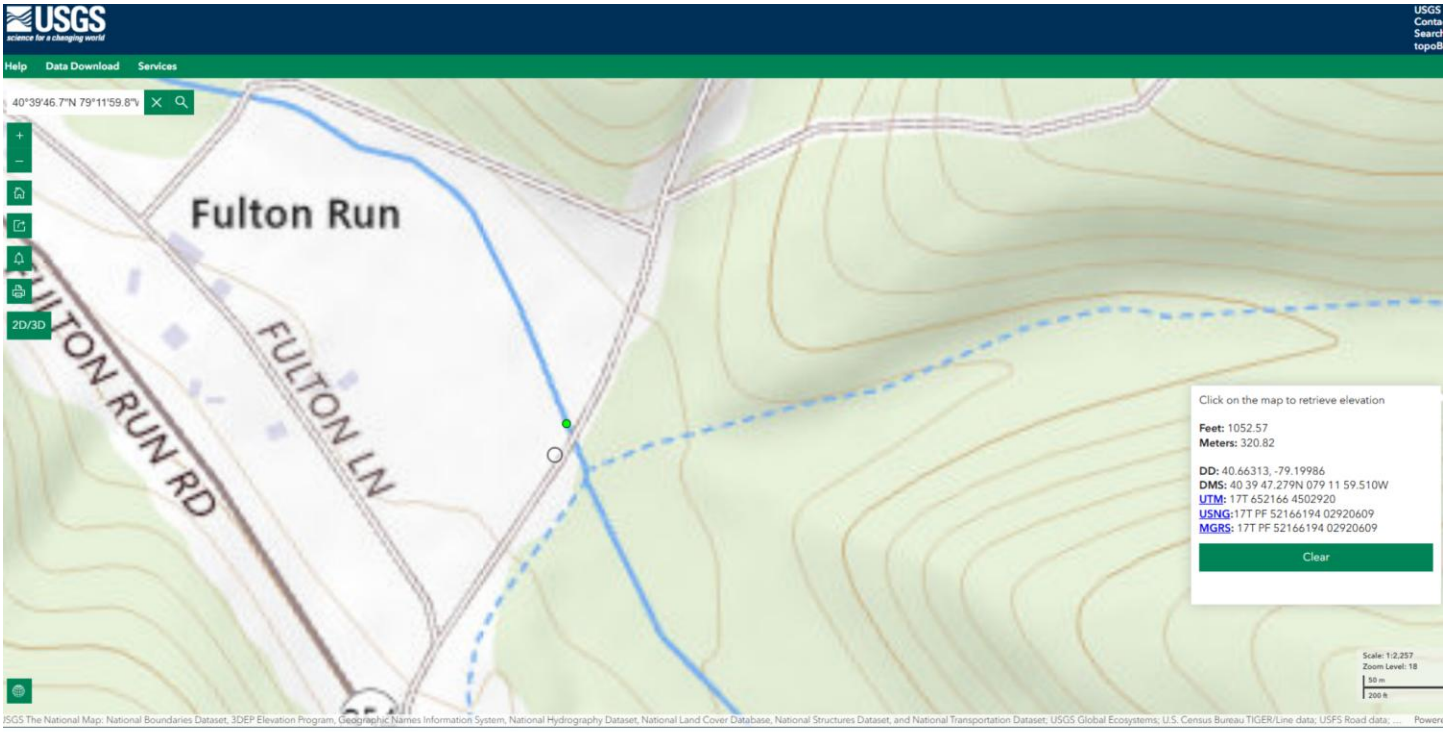
USGS
Help
Data Download
Services
40°39'46.7"N 79°11'59.8"W
Fulton Run
FULTON RUN RD
FULTON LN
2D/3D
Click on the map to retrieve elevation
Feet: 1052.57
Meters: 320.82
DD: 40.66313, -79.19986
DMS: 40 39 47.279N 079 11 59.510W
UTM: 17T 652166 4502920
USNG: 17T PF 52166194 02920609
MGRS: 17T PF 52166194 02920609
Clear


USGS
Help
Data Download
Services
40°39'46.7"N 79°11'59.8"W
1020
1020
1240
BASH RD
Fulton Run
1040
1080
2D/3D
Click on the map to retrieve elevation
Feet: 1013.62
Meters: 308.95
DD: 40.66774, -79.21045
DMS: 40 40 03.861N 079 12 37.632W
UTM: 17T 651260 4503413
USNG: 17T PF 51260616 03413668
MGRS: 17T PF 51260616 03413668
Clear

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
17E	46769	FULTON RUN

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
0.700	Fulton Run STP	PA0272060	0.004	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			4

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
17E	46769	FULTON RUN

NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
0.700	Fulton Run STP	16.37	50	16.37	50	0	0

NH3-N Chronic Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
0.700	Fulton Run STP	1.87	25	1.87	25	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	CBOD5		NH3-N		Dissolved Oxygen		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
0.70	Fulton Run STP	25	25	25	25	4	4	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
17E	46769	FULTON RUN

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
0.700	0.004	20.184	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
7.259	0.387	18.759	0.063
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
2.85	0.340	1.02	0.710
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
8.087	19.770	Owens	6
Reach Travel Time (days)			
0.680			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.068	2.78	0.97	8.21
0.136	2.72	0.92	8.21
0.204	2.65	0.88	8.21
0.272	2.59	0.84	8.21
0.340	2.53	0.80	8.21
0.408	2.48	0.76	8.21
0.476	2.42	0.73	8.21
0.544	2.36	0.69	8.21
0.612	2.31	0.66	8.21
0.680	2.26	0.63	8.21

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	☑
WLA Method	EMPR	Use Inputted W/D Ratio	☐
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	☐
Q30-10/Q7-10 Ratio	1.7935	Temperature Adjust Kr	☑
D.O. Saturation	90.00%	Use Balanced Technology	☑
D.O. Goal	6		

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
17E	46769	FULTON RUN

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
Q7-10 Flow												
0.700	0.17	0.00	0.17	.0065	0.01055	.387	7.26	18.76	0.06	0.680	20.18	7.00
Q1-10 Flow												
0.700	0.11	0.00	0.11	.0065	0.01055	NA	NA	NA	0.05	0.863	20.28	7.00
Q30-10 Flow												
0.700	0.30	0.00	0.30	.0065	0.01055	NA	NA	NA	0.09	0.495	20.10	7.00

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
17E	46769	FULTON RUN	**0.700**	1052.57	3.87	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.000	0.17	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Fulton Run STP	PA0272060	0.0042	0.0042	0.0042	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	4.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.10	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
17E	46769	FULTON RUN	**0.001**	1013.62	4.25	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.000	0.19	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	0.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70