Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0081345**
Facility Type	**Non-Municipal**	APS ID	**311209**
Major / Minor	**Minor**	Authorization ID	**1518090**

Applicant and Facility Information

Applicant Name	**Grier Foundation**	Facility Name	**Grier School**
Applicant Address	2522 Grier School Road PO Box 308	Facility Address	2522 Grier School Road
	Tyrone, PA 16686-0308		Tyrone, PA 16686-5013
Applicant Contact	Geoffrey Grier	Facility Contact	Geoffrey Grier
Applicant Phone	(814) 684-3000	Facility Phone	(814) 684-3000
Client ID	43830	Site ID	453118
Ch 94 Load Status	Not Overloaded	Municipality	Warriors Mark Township
Connection Status	No Limitations	County	Huntingdon
Date Application Received	February 28, 2025	EPA Waived?	Yes
Date Application Accepted	March 4, 2025	If No, Reason	

Purpose of Application: NPDES Permit Renewals.

Summary of Review

EADS Group, Inc., on behalf of Grier Foundation, has applied to the Pennsylvania Department of Environmental Protection (DEP) for issuance of the NPDES permit. The permit was issued on August 25, 2020, became effective on September 1, 2020, and expired on August 31, 2025.

Grier School owns, operates, and maintains the wastewater treatment plant located in Warriors Mark Townships, Huntingdon County. The aeration secondary treatment plant discharges treated municipal wastewater to Little Juniata River, which is classified for High Quality-Cold Water Fishes (HQ-CWF). The facility has a design average annual flow of 0.0225 MGD.

WQM Part II No. 3113401 was issued in 1995. The WQM permit No. 3113401 A-1 was amended on 2/18/2014 to add aerobic sludge digestion capability to the treatment process. The WQM permit No. 3113401 A-2 was amended on 4/25/2024 to replace Chlorine disinfection to UV disinfection. The amendment construction project was done on 8/26/2025 and the plant was put into operation on 9/2/2025, *reference this factsheet pages 13 & 14*.

Sludge use and disposal description and location(s): N/A because sludge is hauled by Wilts Septic Service.

Changes from the previous permit: The E. Coli. monitoring and report requirements will add to the proposed permit. The UV system daily monitor and report UV intensity ($\mu W/cm^2$) included in the proposed permit.

Based on the review outline in this fact sheet, it is recommended that the permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	September 19, 2025
X		*Maria D Bebenek for* Daniel W. Martin, P.E. / Environmental Engineer Manager	October 17, 2025

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0225
Latitude	40º 38' 42.86"	Longitude	-78º 11' 49.63"
Quad Name	Tyrone	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Little Juniata River (CWF)	Stream Code	15664
NHD Com ID	65604836	RMI	12.22 miles
Drainage Area	179 mi.^{2}	Yield (cfs/mi^2)	0.07
Q_{7-10} Flow (cfs)	13.2	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	833	Slope (ft/ft)	
Watershed No.	11-A	Chapter 93 Class.	CWF
Existing Use	HQ-CWF	Existing Use Qualifier	Designated Class A Wild Trout
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Mifflintown Borough Municipal Authority, Juniata County		
PWS Waters	Juniata River	Flow at Intake (cfs)	
PWS RMI	34.4 miles	Distance from Outfall (mi)	Approximate 80.0 miles

Changes Since Last Permit Issuance:

Drainage Area
The discharge is to Little Juniata River at RMI 12.2 miles. A drainage area upstream of the discharge is estimated to be 179 mi.^{2}, according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/.

Stream Flow
According to USGS StreamStats, the point of first use at the confluence with Little Juniata River (Stream Code 15664) has a Q_{7-10} of 13.2 cfs and a drainage area of 179 mi.^{2}, which results in a Q_{7-10} low flow yield of 0.07 cfs/mi.^{2}. This information is used to obtain a chronic or 30-day (Q_{30-10}), and an acute or 1-day (Q_{1-10}) exposure stream flow for the discharge point as follows (Guidance No. 391-2000-023):

Q_{7-10} = 13.2 cfs
Low Flow Yield = 13.2 cfs / 179 mi.^{2} = 0.07 cfs/mi.^{2}
Q_{30-10} = 1.36 * 13.2 cfs = 17.95 cfs
Q_{1-10} = 0.64 * 13.2 cfs = 8.45 cfs

The resulting Q_{7-10} dilution ratio is: Q_{stream} / $Q_{discharge}$ = 13.2 cfs / [0.0225 MGD * (1.55 cfs/MGD)] = 378.5:1

Little Juniata River
Under 25 Pa Code § 93.9n, the Little Juniata River is designated as Class A Wild Trout and HQ-CWF during the permit cycle. Since the discharge predates the designation and the stream is attaining its uses, no further action is warranted at this time. Integrate Report 2024, Little Juniata River (Assessment Unit ID 16851) is not impaired.

Potable Water Supply Intake
The nearest downstream public water supply intake is the Mifflintown Borough Municipal Authority, Juniata County intake on the Juniata River, approximately 80.0 miles from the point of discharge. Given the nature and dilution, the discharge is not expected to impact the water supply.

Treatment Facility Summary

Treatment Facility Name: Grier School

WQM Permit No.	Issuance Date
3113401	1995
3113401 A-1	2/18/2014
3113401 A-2	4/25/2024

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Ultraviolet	0.0225

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0225		Not Overloaded	Aerobic Digestion	Combination of methods

Changes Since Last Permit Issuance:

Other Comments:
The WWTP train is as follows:

Comminutor / Bar Screen (1) ⇒ EQ inline type Aerated (1) ⇒ Aeration Tanks (3) ⇒ Final Clarifiers (2) ⇒ Fixed Media Filters (2) ⇒ UV Disinfection (1) ⇒ Post Aeration Tank (1) ⇒ Aerated Sludge Holding Tank (1) ⇒ Discharge to Little Juniata River

Biosolids:
The total sewage sludge/biosolids production within the facility for the previous year was 4.0 dry tons.

Industrial/Commercial Users:
The permit application indicated there are no commercial or industrial contributors to the treatment plant.

Compliance History

Summary of DMRs:	DMRs reported last 12 months in the next page.
Summary of Inspections:	8/26/2025: Mr. Clark, DEP WQS, conducted a partial inspection to check on the construction of the new sewage treatment plant. All of the treatment tanks were in place and the electrical work had been completed. The system was tested after being filled with clear water. The only problem found so far was a faulty module from the automatic D.O. blower control. A replacement unit had been ordered. The new treatment system is scheduled to go online next Tuesday (9/2/2025). There were no violations noted during the inspection. 4/24/2025: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. Effluent was clear. The field test results were within permitted limits. There were no violations noted during inspection. Recommendations were: 1. Install an in-ground or external grease trap to kitchen drains to prevent oil and grease related problems at the treatment plant. 2. Perform routine process control testing on a regular basis and record all results. 3. Locate the outfall pipe.
Other Comments:	There are no open violations associated with this facility or permittee.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from August 1, 2024 to July 31, 2025)

Parameter	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24
Flow (MGD) Average Monthly	0.001572	0.000706	0.003302	0.004335	0.002196	0.004912	0.002744	0.00196	0.003818	0.003804	0.003365	0.00144
Flow (MGD) Daily Maximum	0.006274	0.00298	0.007382	0.008514	0.006429	0.007914	0.009592	0.005976	0.006481	0.008058	0.008450	0.007255
pH (S.U.) Daily Minimum	6.67	6.18	7.39	7.17	7.17	7.47	7.62	7.41	7.27	7.16	7.46	7.55
pH (S.U.) Instantaneous Maximum	8.15	8.08	8.31	8.24	8.52	7.78	8.75	8.4	8.12	7.89	8.47	8.53
DO (mg/L) Daily Minimum	7.84	8.28	6.51	8.41	9.89	7.8	11.1	8.72	7.13	9.36	9.5	8.07
TRC (mg/L) Average Monthly	0.3	0.2	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3
TRC (mg/L) Instantaneous Maximum	0.53	1.08	0.85	0.63	0.93	0.63	0.73	0.78	0.53	0.56	0.43	0.89
CBOD5 (mg/L) Average Monthly	< 4.0	< 3.0	< 5.0	< 3.0	< 3.0	< 3.0	< 3.0	< 4.0	< 3.0	< 3.0	< 3.0	< 3.0
TSS (mg/L) Average Monthly	15	5.0	7.0	6.0	8.0	12.0	6.0	8.0	4.0	6.0	< 3.0	< 2.0
Fecal Coliform (No./100 ml) Geometric Mean	< 111	< 4.0	< 14.0	< 16.0	18	91	24	< 28	37	27	114	< 6.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	3080.4	4.0	48.4	63.2	20.8	665.6	34.4	201.6	39.2	182.8	774	8.0
Nitrate-Nitrite (mg/L) Average Quarterly		46.25			44.49			< 53.7			< 50.56	
Total Nitrogen (mg/L) Average Quarterly		< 46.75			< 44.99			< 54.20			< 51.06	
TKN (mg/L) Average Quarterly		< 0.5			< 0.50			< 0.50			< 0.50	
Total Phosphorus (mg/L) Average Quarterly		5.28			5.18			4.72			9.39	

Existing Effluent Limitations and Monitoring Requirements

Outfall 001,

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Daily Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
D.O.	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
$CBOD_5$	XXX	XXX	XXX	25.0	XXX	50.0	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
TKN	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite
Nitrate-Nitrite	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	Calculation
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite

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	Daily Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
D.O.	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
UV Intensity (mW/cm²)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Recorded
$CBOD_5$	XXX	XXX	XXX	25.0	XXX	50.0	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
TKN	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite
Nitrate-Nitrite	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	Calculation
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location:

Other Comments:

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0225
Latitude 40º 38' 42.86" **Longitude** -78º 11' 49.63"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

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

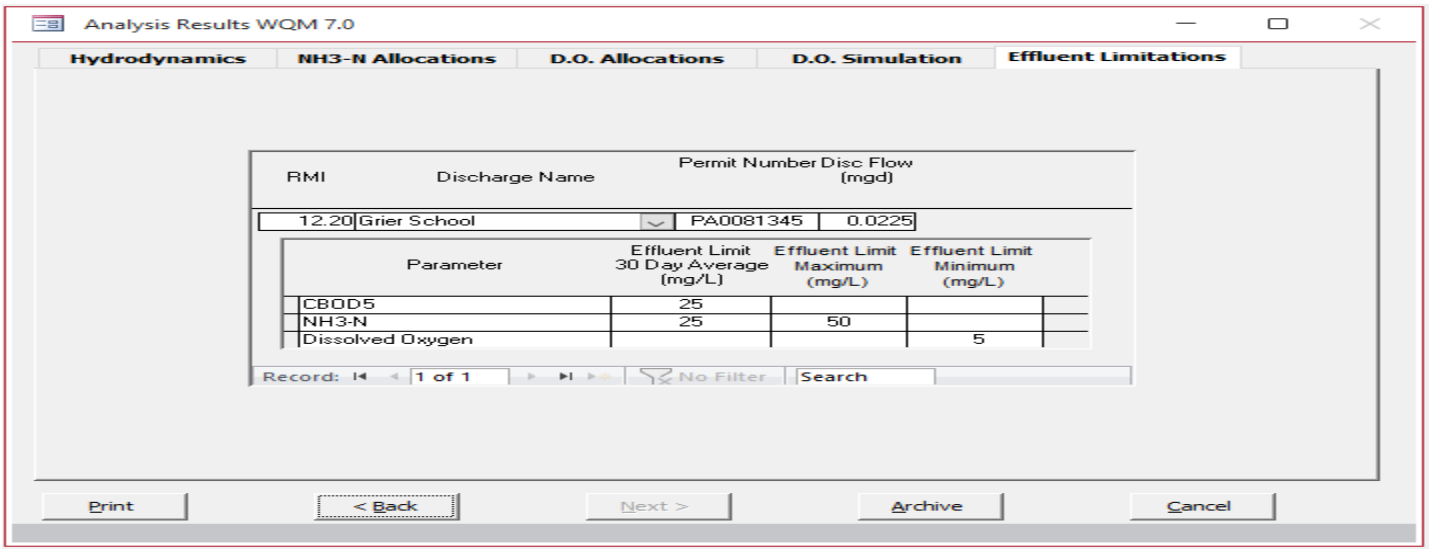
Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	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: The facility utilizes UV disinfection.

Water Quality-Based Limitations

Ammonia (NH_3-N):
NH_3-N calculations are based on the Department's Implementation Guidance of Section 93.7 Ammonia Criteria, dated 11/4/97 (ID No. 391-2000-013). The following data is necessary to determine the in-stream NH_3-N criteria used in the attached WQM 7.0 computer model of the stream:

*	Discharge pH	=	7.0	(Default)
*	Discharge Temperature	=	20°C	(Default)
*	Stream pH	=	7.0	(Default)
*	Stream Temperature	=	20ºC	(Default for CWF)
*	Background NH_3-N	=	0 mg/L	(Default)



The attached computer printout of the WQM 7.0 stream model indicates that no limitation on NH_3-N as a monthly average is necessary to protect the aquatic life from toxicity effects.

Carbonaceous Biochemical Oxygen Demand ($CBOD_5$):
The attached computer printout of the WQM 7.0 stream model indicates that a monthly average limit of 25.0 mg/L, or secondary treatment, is adequate to protect the water quality of the stream. However, the existing limits of 25.0 mg/L monthly average, and 50.0 mg/L instantaneous maximum will remain in the proposed permit as per guidance document 391-2000-014. Recent DMRs and inspection reports show that the facility has been consistently achieving these limits.

Dissolved Oxygen (D.O.):
A minimum D.O. of 5.0 mg/L is required per 25 Pa. Code § 93.7. This is consistent with the previous permit and current Department criteria.

Fecal Coliform:
The recent coliform guidance in 25 Pa. Code § 92a.47.(a)(4) requires a summer technology limit of 200/100 ml as a geometric mean and an instantaneous maximum not greater than 1,000/100 ml and 25 Pa Code § 92a.47.(a)(5) requires a winter limit of 2,000/100 ml as a geometric mean and an instantaneous maximum not greater than 10,000/100 ml.

E. Coli:
As recommended by DEP's SOP No. BCW-PMT-033, version 2.0 revised February 5, 2024, a routine monitoring for E. Coli will be included in the proposed permit under 25 Pa. Code § 92a.61. This requirement applies to all sewage dischargers greater than 0.002 MGD in their new and reissued permits. A monitoring frequency of 1/year will be included in the permit to be consistent with the recommendation from this SOP.

Total Suspended Solids (TSS):
The existing technology-based limits of 30.0 mg/L average monthly, and 60.0 mg/L instantaneous maximum will remain in the proposed permit based on the minimum level of effluent quality attainable by secondary treatment based on 25 Pa. Code § 92a.47. Recent DMRs and inspection reports show that the facility has been consistently achieving these limits.

pH:
The effluent discharge pH should remain above 6 and below 9 standard units according to 25 Pa Code § 95.2(1).

UV:
The UV system daily monitor and report the UV intensity ($\mu W/cm^2$) after update to replace chlorine disinfection system will be in the proposed permit.

Chesapeake Bay Strategy:
The Department formulated a strategy to comply with the EPA and Chesapeake Bay Foundation requirements by reducing point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP). Sewage discharges have been prioritized by Central Office based on their delivered TN loadings to the Bay. The highest priority (Phases I, II, and III) dischargers will receive annual loading caps based on their design flow on August 29, 2005 and concentrations of 6 mg/L TN and 0.8 mg/L TP. These limits may be achieved through a combination of treatment technology, credits, or offsets. Phase IV (0.2 -0.4 MGD) will be required to monitor and report TN and TP during permit renewal monthly and Phase V (below 0.2 MGD) will monitor during current permit renewal once a year. However, any facility in Phases IV and V that undergoes expansion is subjected to cap load right away. This plant, classified as a phase V, will be required to monitor and report for Total Phosphorus, Nitrate-Nitrite as N, Total Kjeldahl Nitrogen, and Total Nitrogen.

Additionally, according to SOP for establishing effluent limitation for individual sewage, monitoring frequency for nutrients should be equivalent to conventional pollutants in Table 6-3 of DEP's *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) ("Permit Writer's Manual") where the facility discharges to nutrient-impaired waters, or a lesser frequency for discharges to waters not impaired for nutrients. Quarterly monitoring frequency is required for this discharge since the receiving stream is not nutrient impaired. These requirements will remain in the proposed permit.

Stormwater:
There is no stormwater outfall associated with this facility.

Toxics:
Review of the permit application revealed no toxic parameters of concern. The application states that there are no industrial wastewater contributions.

Antidegradation (93.4):
The 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. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

303d Listed Streams:
The discharge is not located on a 303d listed stream segment.

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

WQM 7.0

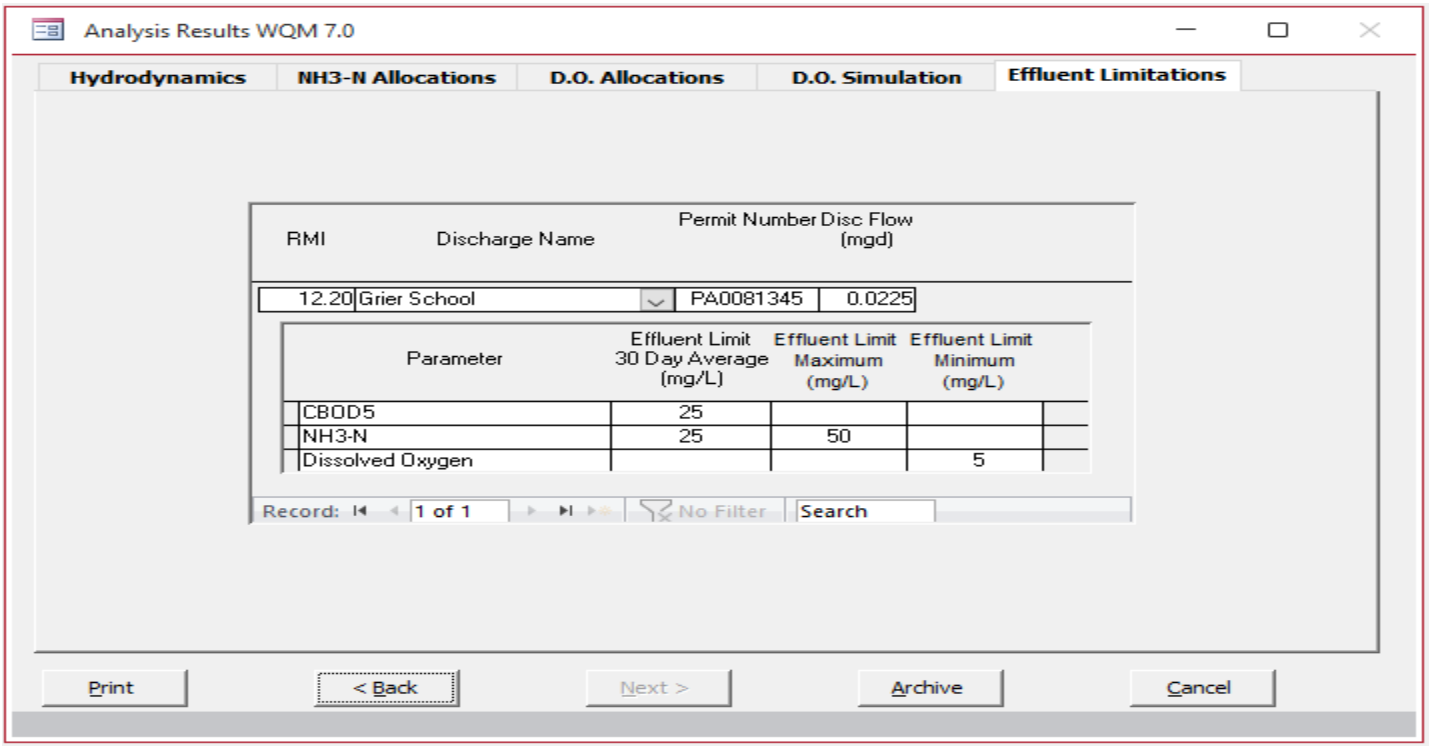
*	Discharge pH	=	7.0	(Default)
*	Discharge Temperature	=	20°C	(Default)
*	Stream pH	=	7.0	(Default)
*	Stream Temperature	=	20°C	(Default for CWF)
*	Background NH_3-N	=	0 mg/L	(Default)

Node 1: Outfall 001 on Little Juniata River (15664)

Elevation:	832.85 ft (USGS National Map Viewer)
Drainage Area:	179 $mi.^2$ (USGS PA StreamStats)
River Mile Index:	12.2 (PA DEP eMapPA)
Low Flow Yield:	0.07 $cfs/mi.^2$
Discharge Flow:	0.0225 MGD (NPDES Application)

Node 2: Just before confluence Little Juniata River to Sinking Run

Elevation:	773.35 ft (USGS National Map Viewer)
Drainage Area:	189 $mi.^2$ (USGS PA StreamStats)
River Mile Index:	8.82 (PA DEP eMapPA)
Low Flow Yield:	0.07 $cfs/mi.^2$
Discharge Flow:	0.000 MGD



rptEffLimits

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
11A	15664	LITTLE JUNIATA RIVER

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)
12.200	Grier School	PA0081345	0.023	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			5

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rpt_WLA

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
11A	15664	LITTLE JUNIATA RIVER

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
12.200	Grier School	16.76	50	16.76	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
12.200	Grier School	1.89	25	1.89	25	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	CBOD5 Baseline (mg/L)	CBOD5 Multiple (mg/L)	NH3-N Baseline (mg/L)	NH3-N Multiple (mg/L)	Dissolved Oxygen Baseline (mg/L)	Dissolved Oxygen Multiple (mg/L)	Critical Reach	Percent Reduction
12.20	Grier School	25	25	25	25	5	5	0	0

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rptDOSim

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
11A	15664	LITTLE JUNIATA RIVER

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
12.200	0.023	20.000	7.000
Reach Width (ft)	Reach Depth (ft)	Reach W/D Ratio	Reach Velocity (fps)
57.268	0.819	69.932	0.268
Reach CBOD5 (mg/L)	Reach Kc (1/days)	Reach NH3-N (mg/L)	Reach Kn (1/days)
2.06	0.030	0.07	0.700
Reach DO (mg/L)	Reach Kr (1/days)	Kr Equation	Reach DO Goal (mg/L)
8.234	6.091	Tsivoglou	5
Reach Travel Time (days)			
0.771			

Subreach Results

Trav Time (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.077	2.06	0.07	8.24
0.154	2.05	0.06	8.24
0.231	2.05	0.06	8.24
0.309	2.04	0.06	8.24
0.386	2.04	0.05	8.24
0.463	2.04	0.05	8.24
0.540	2.03	0.05	8.24
0.617	2.03	0.04	8.24
0.694	2.02	0.04	8.24
0.771	2.02	0.04	8.24

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rptModelSpecs

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	1.36	Temperature Adjust Kr	☑
D.O. Saturation	90.00%	Use Balanced Technology	☑
D.O. Goal	5		

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rptHydro

WQM 7.0 Hydrodynamic Outputs

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	WD Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
SWP Basin: 11A	Stream Code: 15664				Stream Name: LITTLE JUNIATA RIVER							
Q7-10 Flow												
12.200	12.53	0.00	12.53	.0348	0.00333	.819	57.39	69.93	0.27	0.771	20.00	7.00
Q1-10 Flow												
12.200	8.02	0.00	8.02	.0348	0.00333	NA	NA	NA	0.21	0.990	20.00	7.00
Q30-10 Flow												
12.200	17.04	0.00	17.04	.0348	0.00333	NA	NA	NA	0.32	0.650	20.00	7.00

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Page: 1 No Filter

rptGeneral

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
11A	15664	LITTLE JUNIATA RIVER	12.200	832.85	179.00	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	0.070	0.00	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
Grier School	PA0081345	0.0225	0.0225	0.0225	0.000	20.00	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	5.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

Thursday, September 18, 2025 Version 1.1 Page 1 of 2

Page: 1 No Filter

rptGeneral

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
11A	15664	LITTLE JUNIATA RIVER	8.820	772.35	189.00	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	0.070	0.00	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

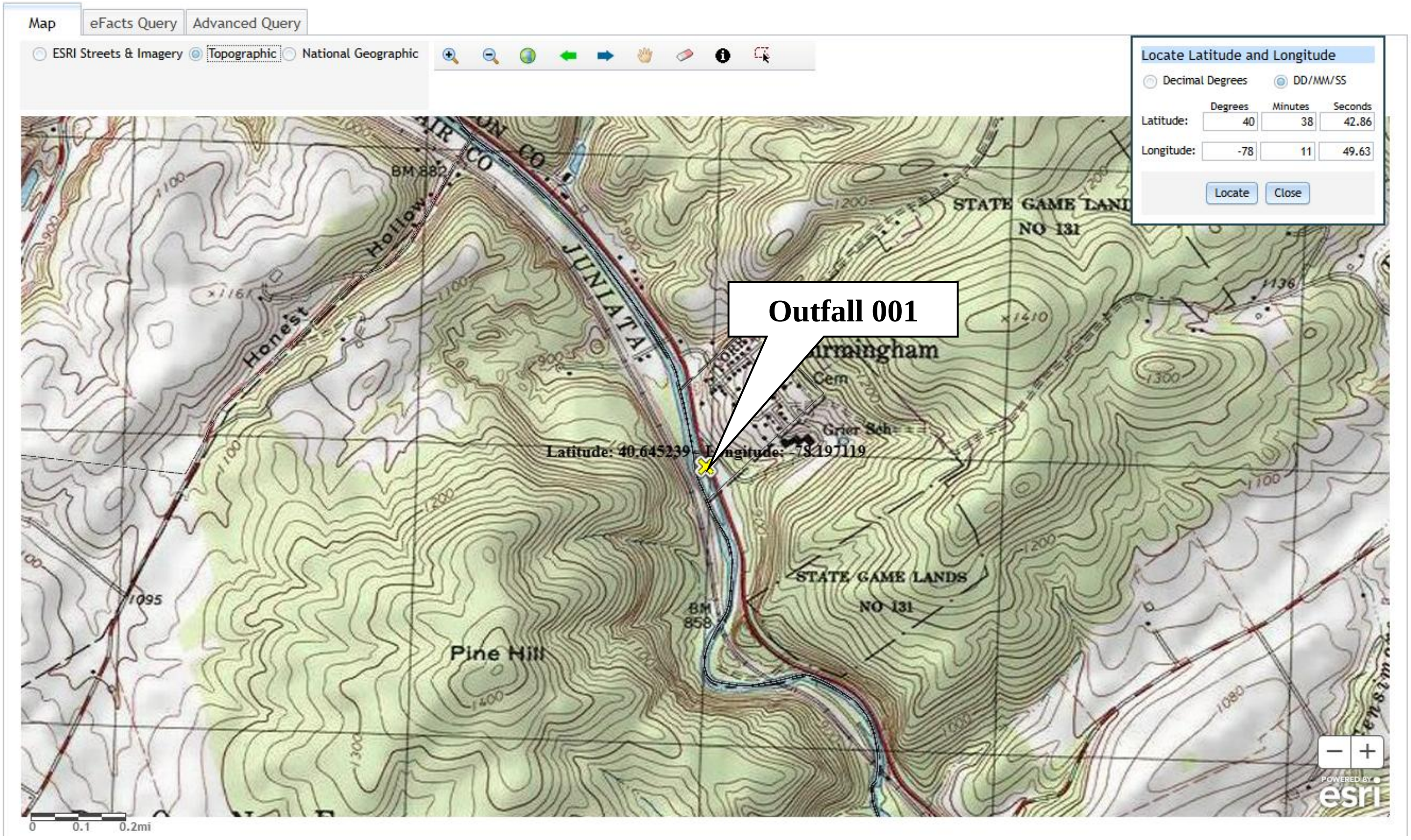
Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Grier School	PA0081345	0.0000	0.0000	0.0000	0.000	20.00	7.00

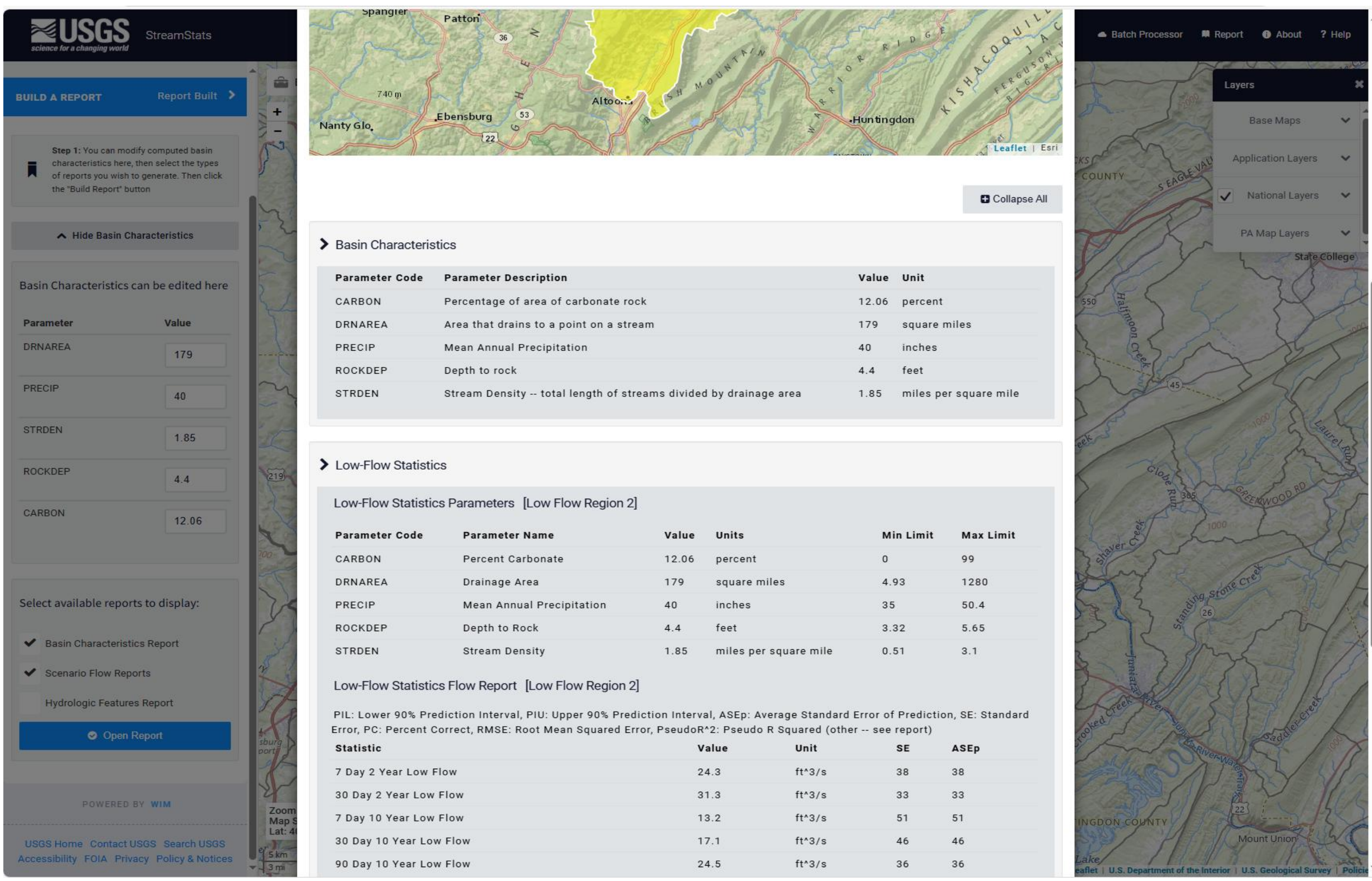
Parameter Data

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	5.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

Thursday, September 18, 2025 Version 1.1 Page 2 of 2

Page: 2 No Filter





Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	12.06	percent
DRNAREA	Area that drains to a point on a stream	179	square miles
PRECIP	Mean Annual Precipitation	40	inches
ROCKDEP	Depth to rock	4.4	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	1.85	miles per square mile

Low-Flow Statistics

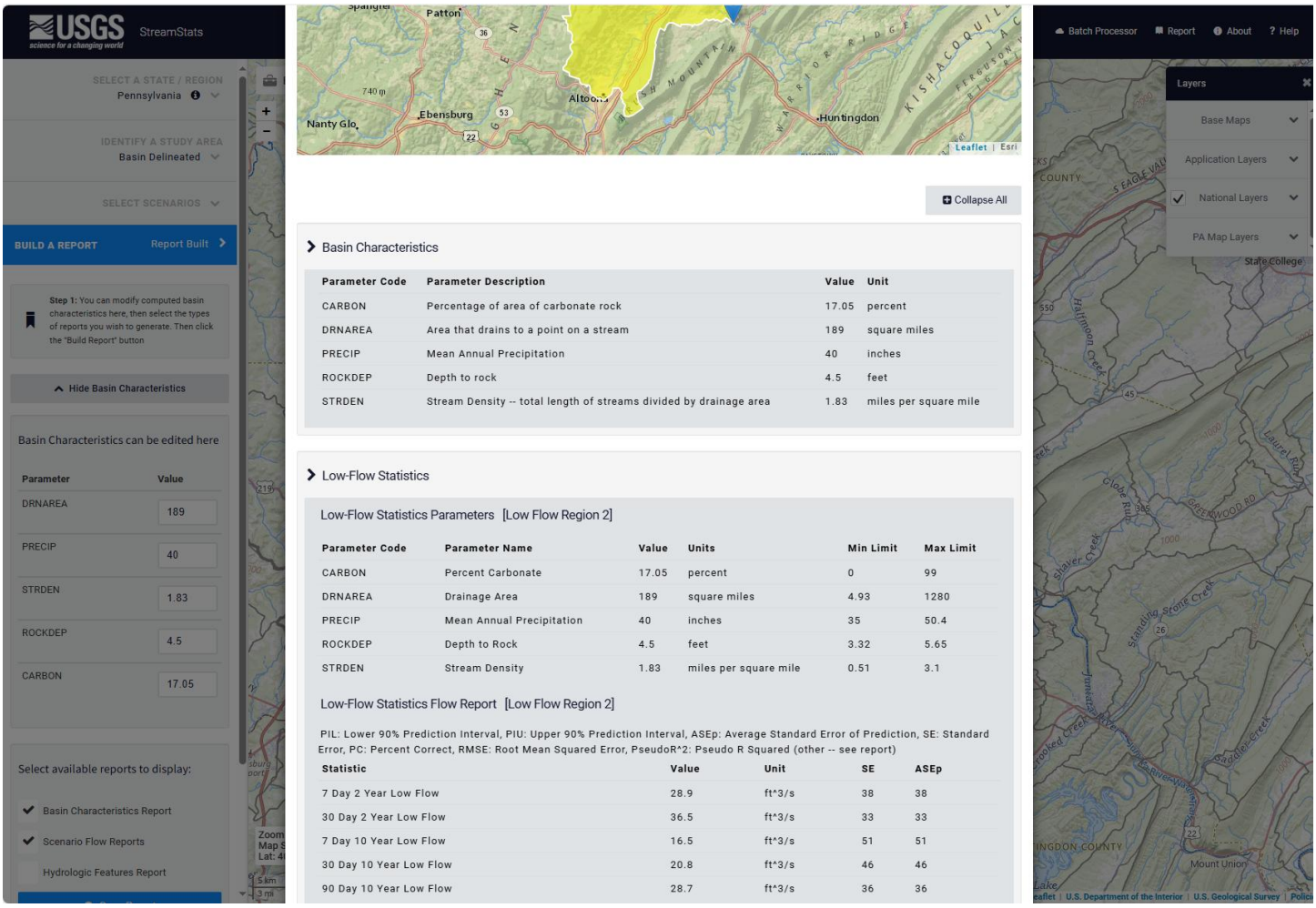
Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	12.06	percent	0	99
DRNAREA	Drainage Area	179	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	40	inches	35	50.4
ROCKDEP	Depth to Rock	4.4	feet	3.32	5.65
STRDEN	Stream Density	1.85	miles per square mile	0.51	3.1

Low-Flow Statistics Flow Report [Low Flow Region 2]

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	24.3	ft^3/s	38	38
30 Day 2 Year Low Flow	31.3	ft^3/s	33	33
7 Day 10 Year Low Flow	13.2	ft^3/s	51	51
30 Day 10 Year Low Flow	17.1	ft^3/s	46	46
90 Day 10 Year Low Flow	24.5	ft^3/s	36	36



[External] RE: Follow Up is the Grier Foundation WQM Part II No. 3113401 A-2 modification construction complete or not?

Reply | Reply All | Forward

Dan Beyer <dbeyer@eadsgroup.com>
To Le, Hilary
Cc ggrier@grier.org; Brian Bloom; Sam McCloskey
You replied to this message on 9/17/2025 3:29 PM.

Wed 9/17/2025 3:24 PM

20250915160820726.pdf
203 KB

ATTENTION: *This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the Report Phishing button in Outlook.*

Good afternoon Hilary,

The construction of the new WWTP was just completed on August 26, 2025. The owner is in the process of signing the construction certification.

Thanks,

Daniel Beyer, P.E.
Municipal/Site Department Manager

814.944.5035 ext. 136
814.659.4552 mobile
1126 8th Ave., Altoona, PA 16602

dbeyer@eadsgroup.com

3800-PM-WSFR0179a 9/2005
Post Construction Certification

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

WATER QUALITY MANAGEMENT
POST CONSTRUCTION CERTIFICATION

PERMITTEE IDENTIFIER	
Permittee	Grier Foundation
Municipality	Warriors Mark Township
County	Huntingdon
WQM Permit No.	3113401 A-2
Facility Type	Sewage

All of the above information should be taken directly from the Water Quality Management Permit.

CERTIFICATION

This certification must be completed and returned to the permits section of the DEP's regional office issuing the WQM permit within 30 days of completion of the project and received by DEP prior to operation, and if requested, as-built drawings, photographs (if available) and a discussion of any DEP-approved deviations from the design plans during construction.

I, being a Registered Professional Engineer in Pennsylvania, do hereby certify to the best of my knowledge and belief, based upon personal observation and interviews, that the above facility approved under the Water Quality Management Permit has been constructed in accordance with the plans, specifications and modifications approved by DEP.

Construction Completion Date (MM/DD/YYYY): 09/02/2025

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — DANIEL JAMES BEYER — ENGINEER No. PE081052

Engineer's Seal

Professional Engineer

Name Daniel J. Beyer (Please Print or Type)
Signature
Date 09/18/2025
License Expiration Date 09/30/2025
Firm or Agency The EADS Group, Inc.
Telephone 814-944-5035

Permittee or Authorized Representative

Name Geoffrey Grier (Please Print or Type)
Signature
Title President, The Grier Foundation
Telephone 814-684-3000

RE: [External] RE: Follow Up is the Grier Foundation WQM Part II No. 3113401 A-2 modification construction complete or not?

Reply | Reply All | Forward

Dan Beyer <dbeyer@eadsgroup.com>
To Le, Hilary
Cc ggrier@grier.org; Brian Bloom; Sam McCloskey
Thu 9/18/2025 8:52 AM

Waste Quality Management Certification Sep 18 2025.pdf
369 KB

Good morning Hilary,

Please find attached the completed/signed Post Construction Certification. Please note that I revised the date on the form to match when the plant was put into operation. The plant was put into operation on September 2, 2025.

Thanks,
Dan

From: Le, Hilary <hle@pa.gov>
Sent: Wednesday, September 17, 2025 3:29 PM
To: Dan Beyer <dbeyer@eadsgroup.com>
Cc: ggrier@grier.org; Brian Bloom <bbloom@eadsgroup.com>; Sam McCloskey <sam@mccloskeybuilders.com>
Subject: RE: [External] RE: Follow Up is the Grier Foundation WQM Part II No. 3113401 A-2 modification construction complete or not?

Warning: Unusual sender <hle@pa.gov>
You don't usually receive emails from this address. Make sure you trust this sender before taking any actions.

Thanks Dan! Can you please provide the date when the new plant started operation?

Thanks!
Hilary

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: BCW-PMT-033
☐	Other: