Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0238686**
Facility Type	**Non-Municipal**	APS ID	**1102520**
Major / Minor	**Minor**	Authorization ID	**1464794**

Applicant and Facility Information

Applicant Name	**Brandywine Vineyards Master Community Association**	Facility Name	**Brandywine Village STP**
Applicant Address	PO Box 431	Facility Address	Route 68
	Connoquenessing, PA 16027-0431		Renfrew, PA 16053
Applicant Contact	Tom Weigand	Facility Contact	David Bocci
Applicant Phone	(724) 487-9426	Facility Phone	(724) 712-3219
Client ID	334036	Site ID	547903
Ch 94 Load Status	Not Overloaded	Municipality	Connoquenessing Township
Connection Status	No Limitations	County	Butler
Date Application Received	November 27, 2023	EPA Waived?	Yes
Date Application Accepted	December 20, 2023	If No, Reason	

Purpose of Application: Renewal of Existing NPDES Permit

Summary of Review

The Brandywine Vineyards Master Community Association (BVMCA) has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of a NPDES permit for the Brandywine Village STP. The permit was last reissued on August 20, 2019, with an effective date of September 1, 2019. The permit expired on August 31, 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): Dalton's Service Co., LLC

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 24, 2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	June 4, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.0239
Latitude	40º 51' 27.9"	Longitude	-79º 59' 37.4"
Quad Name	Butler	Quad Code	1206
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Little Connoquenessing Creek (CWF)	Stream Code	34990
NHD Com ID	126217472	RMI	1.03
Drainage Area	0.84 mi^2	Yield (cfs/mi^2)	0.0219
Q_{7-10} Flow (cfs)	0.018	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1084.15	Slope (ft/ft)	
Watershed No.	20-C	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Little Connoquenessing Creek Watershed

Background/Ambient Data		Data Source
pH (SU)	7.0	Assumed, default value
Temperature (°C)	20	CWF, default value
Hardness (mg/L)	100	Assumed, default value
Other: Ammonia (mg/L)	0.1	Assumed, default value

Nearest Downstream Public Water Supply Intake	Harmony Borough		
PWS Waters	Little Connoquenessing Creek	Flow at Intake (cfs)	5.33
PWS RMI	1.27	Distance from Outfall (mi)	11.02

Drainage Area

The discharge is to Unnamed Tributary to Little Connoquenessing Creek at RMI 1.03. A drainage area upstream of the discharge is determined to be 0.84 sq.mi. according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/.

Stream Flow

The Q_{7-10} flow for the facility was calculated by using USGS StreamStats to calculate a Low Flow Yield (LFY) for the entire Little Connoquenessing Creek watershed and then multiplying the watershed LFY by the drainage area of the receiving water tributary to Outfall 001 as follows:

Watershed Q_{7-10} = 1.42 cfs
Watershed Drainage Area = 64.6 mi^2
Watershed LFY = 1.42 cfs/64.6 mi^2 = 0.021981 cfs/mi^2

Local Drainage Area = 0.84 mi^2
Local Q_{7-10} = Watershed LFY x Local Drainage Area = 0.021981 cfs/mi^2 x 0.84 mi^2 = 0.018464 cfs

This information was used to obtain a chronic 30-day (Q_{30-10}) and acute (Q_{1-10}) exposure stream flows for the discharge point as follows (Guidance No. 391-2000-023).

Q_{7-10} = 0.018464 cfs
Q_{30-10} = 1.36 * 0.018464 cfs = 0.025112 cfs
Q_{1-10} = 0.64 * 0.018464 cfs = 0.011817 cfs

Unnamed Tributary to Little Connoquenessing Creek

25 Pa Code §93.9 classifies the receiving water, Unnamed Tributary to Little Connoquenessing Creek, 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.

Note: previous draft permits appear to have incorrectly identified the receiving water as the Little Connoquenessing Creek. Changes to discharge limits proposed in this permit may be due, in part, to this change.

Local Watershed Total Maximum Daily Loads (TMDLs)

According to PA's 2024 Integrated Water Quality Monitoring and Assessment Report, Unnamed Tributary to Little Connoquenessing Creek in the vicinity of the point of discharge is not impaired. The waterway's 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.

A TMDL for acid mine drainage affected segments has been developed for the Little Connoquenessing Creek Watershed (January 8, 2009), but the TMDL does not include the receiving water (DEP Stream Code (34990).

Public Water Supply Intake

The nearest downstream public water supply intake is the Harmony Borough intake, locate on the Little Connoquenessing Creek approximately 11 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: Brandywine Village STP

WQM Permit No.	Issuance Date
WQM 100143 T-1	July 19, 2017
WQM 100143 A-1	June 9, 2004

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary With Ammonia and Phosphorus	Extended Aeration	Chlorine With Dechlorination	0.0239

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0239	41	Not Overloaded	Aerobic Digestion	Landfill

The BVMCA operates and owns the wastewater treatment facility located Route 68 (Connoquenessing Township, Butler County). The facility currently serves the Brandywine Village development. With an annual average design flow and hydraulic design capacity of 0.0239 MGD, the treatment process is as follows:

Screening/Comminutor → Flow Equalization → Extended Aeration Reactors → Final Clarification → Chlorine Disinfection → Dechlorination → Outfall 001

The application states that alum is utilized to control phosphorus; aerobic digesters are utilized for solids handling.

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 in WMS: December 14, 2022: A routine CEI was conducted by Bruce Leidy. No violations were noted. Only observations are recorded.

Other Comments: As of May 17, 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	XXX	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	3/week	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	3/week	Grab
TRC	XXX	XXX	XXX	0.2	XXX	0.5	3/week	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60	2/month	8-Hr Composite
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	8-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	2.0	XXX	4	2/month	8-Hr Composite

Compliance Sampling Location: Outfall 001

Compliance History

DMR Data for Outfall 001 (from April 1, 2024 to March 31, 2025)

Parameter	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24
Flow (MGD) Average Monthly	0.019	0.019	0.016	0.019	0.017	0.015	0.015	0.019	0.016	0.017	0.019	0.022
pH (S.U.) Instantaneous Minimum	7.2	7.2	7.3	6.7	7.1	7.0	7.0	7.0	7.0	6.8	7.2	7.5
pH (S.U.) Instantaneous Maximum	7.9	7.5	7.7	7.4	7.7	7.5	7.6	7.7	7.6	7.3	7.5	7.9
DO (mg/L) Daily Minimum	5.8	4.8	4.7	4.6	4.5	4.1	4.2	4.4	4.8	4.0	4.4	5.0
TRC (mg/L) Average Monthly	0.05	0.07	0.11	0.04	0.08	0.08	0.09	0.10	0.09	0.05	0.07	0.06
TRC (mg/L) Instantaneous Maximum	0.20	0.20	0.5	0.30	0.30	0.20	0.20	0.30	0.20	0.30	0.20	0.4
CBOD5 (mg/L) Average Monthly	4.9	3.6	5.4	3.6	3.0	3.0	3.0	3.5	3.5	3.0	4.3	4.8
TSS (mg/L) Average Monthly	6.0	3.0	5.0	3.0	3.0	3.0	3.0	4.5	3.5	3.0	3.0	3.0
Fecal Coliform (No./100 ml) Geometric Mean	2	1	57	1	49	245	1	1	1	1	33	1
Fecal Coliform (No./100 ml) Instantaneous Maximum	4	1	102	1	2420	489	1	1	1	1	1120	2
Total Nitrogen (mg/L) Average Quarterly	6.0			4.4			4.6			4.6		
Ammonia (mg/L) Average Monthly	2.2	7.3	2.0	0.7	0.3	0.8	2.6	0.5	1.2	1.1	0.4	2.4
Total Phosphorus (mg/L) Average Monthly	1.2	0.5	0.9	1.2	1.7	1.5	1.3	0.5	1.5	1.9	2.8	0.7

Compliance History

Effluent Violations for Outfall 001, from: May 1, 2024 To: March 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	05/31/24	IMAX	1120	No./100 ml	1000	No./100 ml
Total Phosphorus	05/31/24	Avg Mo	2.8	mg/L	2.0	mg/L

Other Comments: A non-compliance form was not identifying the cause of the violations was not available to review. NWRO Operations will determine if further action is needed or not.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .0239
Latitude 40º 51' 27.90" **Longitude** -79º 59' 37.40"
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 past permits. Flow contributions from the downstream Buttercup Campground STP (PA0091316, 0.04 mgd) were included in the model.

The model output indicated that existing WQBELs for CBOD5 is still protective of water quality. However, the model also determined that existing WQBEL of 3.0 mg/L for ammonia (warm weather) is no longer protective of water quality. A new WQBEL of 2.4 mg/L for ammonia (warm weather) is proposed in this permit. Instantaneous limits for ammonia were updated with the Department's standard 2.0x multiplier. Updated winter limits were calculated with the Department's standard 3.0x multiplier for ammonia. Based on DMR data, the facility can already meet the proposed limits (55 of prior 60 (91.6%) months would have meet proposed monthly limits).

The model also determined that the facility's existing DO limits of 4 mg/L are no longer protective of water quality. A new limit of 5 mg/L is proposed; however, a review of the facility's DMR data shows that the existing facility is not currently capable of consistently meeting the proposed new DO limit. The Department proposes giving the facility 1-year (12-months) to meet the new DO limit – see Part C, Section II of the permit for details. The permittee is advised that a Water Quality Management Permit amendment may be needed before the facility is modified to meet the propose DO limit. Please contact the NWRO Clean Water Permitting Section to discuss before proceeding with equipment procurement or construction.

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

Total Residual Chlorine

Since chlorine is used for disinfection, Total Residual Chlorine (TRC) effluent levels must be regulated in accordance with 25 Pa Code §92a.48(b). DEP's TRC_CALC worksheet is utilized to determine if the existing BAT TBEL is still appropriate. The worksheet indicates that the existing limits of 0.2 mg/L (average monthly) and 0.5 mg/L (IMAX) are no longer protective of water quality. New limits of 0.082 mg/L (average monthly) and 0.267 mg/L (IMAX) are proposed in this draft (vs. a target QL value for TRC of 0.02 mg/L per the application instructions). A review of the facility's DMR data indicates that it will not be able to consistently meet the proposed TRC limits; therefore, a compliance schedule is appropriate.

The Department notes that both the 2017 and 2022 inspection reports indicate that the existing facility is already equipped with a dechlorination system; therefore, minimum work is anticipated to allow the facility to meet the proposed TRC limits. The Department proposes giving the facility 1-year (12-months) to take whatever measures are necessary to meet the new TRC limits – see Part C, Section II of the permit for details. As mentioned previously, the permittee is advised that a Water Quality Management Permit amendment may be needed before the facility is modified to meet the propose TRC limit. Please contact the NWRO Clean Water Permitting Section to discuss before proceeding with equipment procurement or construction.

The Department's TRC_CALC worksheet is presented at the end of this report.

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.

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 11-Months after Issuance.

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		
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	3/week	Grab
TRC	XXX	XXX	XXX	0.2	XXX	0.5	3/week	Grab

Compliance Sampling Location: Outfall 001

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: 12-Months after Issuance 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		
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	3/week	Grab
TRC	XXX	XXX	XXX	0.08	XXX	0.26	3/week	Grab

Compliance Sampling Location: Outfall 001

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	XXX	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	3/week	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60	2/month	8-Hr Composite
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	8-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	7.2	XXX	14.4	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	2.4	XXX	4.8	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	2.0	XXX	4	2/month	8-Hr Composite

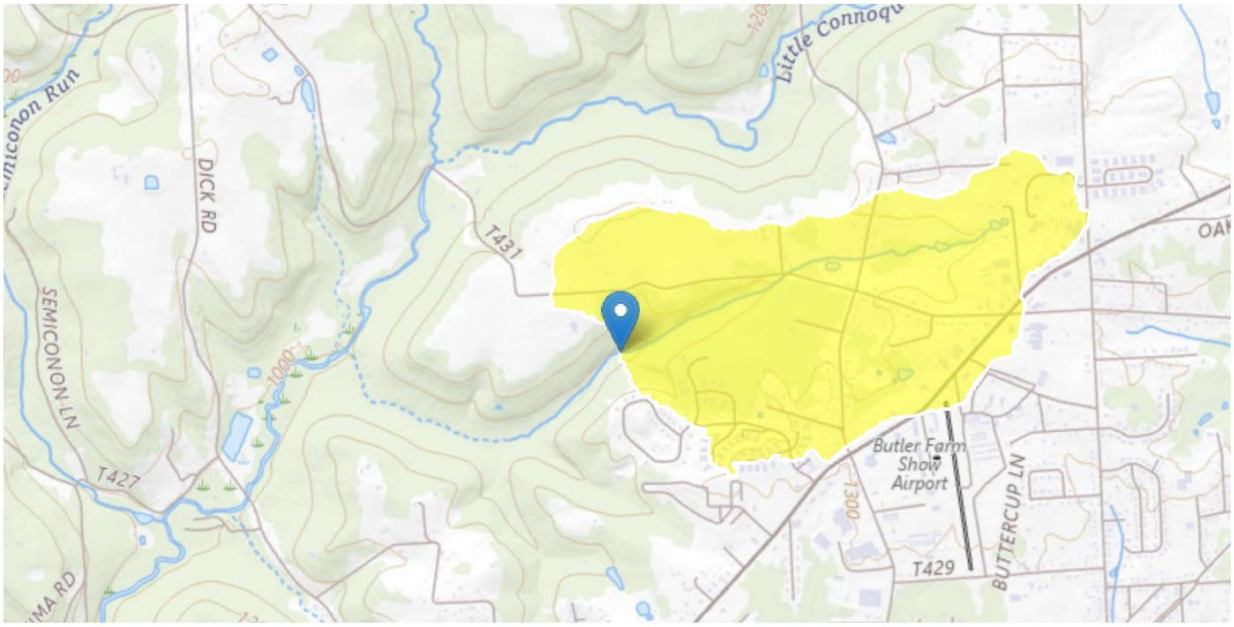
Compliance Sampling Location: Outfall 001

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:


563403 - DISCHARGE POINT
Whitestown Rd
Whitestown Rd
Whitestown Rd
Eagle Mill Rd
Sonoma Valley Dr
Brandywine Blvd
Ledonne Ln
Eagle Mill Rd
Silver Oak Dr
Kensington Ct
Winchester Ct
Napa Ct
Evans City Rd
Kriess Rd
RV Park Ln
68
Peth Ln
0
300
600ft

StreamStats Report

Region ID: PA
Workspace ID: PA20250517130034549000
Clicked Point (Latitude, Longitude): 40.85800, -79.99377
Time: 2025-05-17 09:00:57 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.84	square miles
ELEV	Mean Basin Elevation	1275	feet

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.84	square miles	2.26	1400
ELEV	Mean Basin Elevation	1275	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

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

Low-Flow Statistics Flow Report [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0242	ft^3/s
30 Day 2 Year Low Flow	0.0473	ft^3/s
7 Day 10 Year Low Flow	0.00685	ft^3/s
30 Day 10 Year Low Flow	0.015	ft^3/s
90 Day 10 Year Low Flow	0.0313	ft^3/s

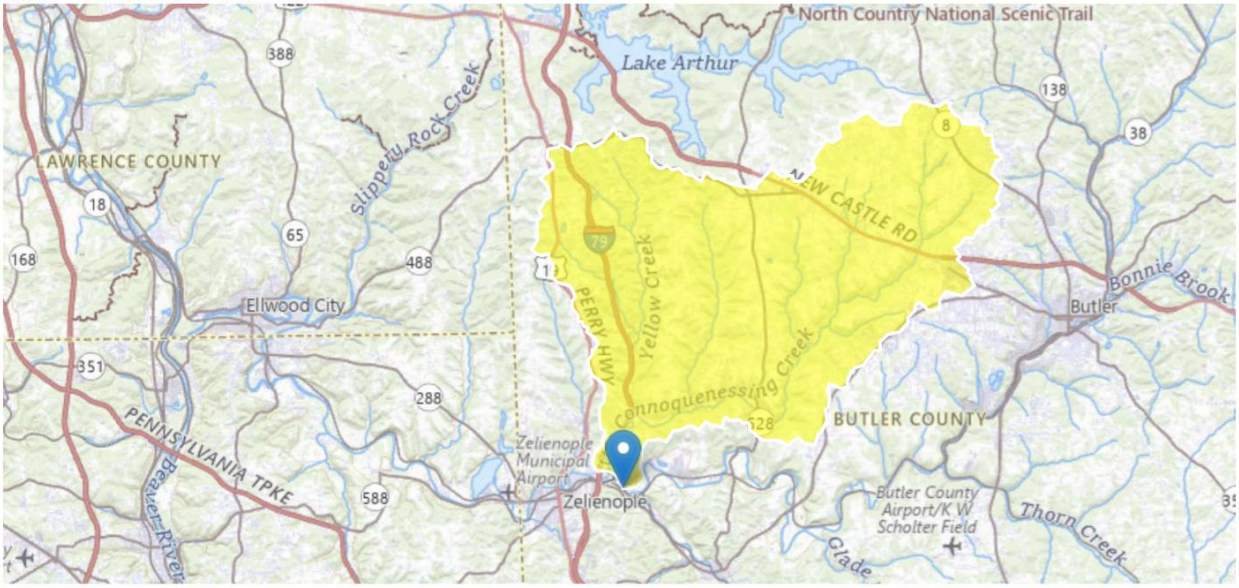
Low-Flow Statistics Citations

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/)

Application Version: 4.29.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: PA
Workspace ID: PA20250517152338647000
Clicked Point (Latitude, Longitude): 40.79942, -80.10681
Time: 2025-05-17 11:23:59 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	64.6	square miles
ELEV	Mean Basin Elevation	1230	feet

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	64.6	square miles	2.26	1400
ELEV	Mean Basin Elevation	1230	feet	1050	2580

Low-Flow Statistics Flow Report [Low Flow Region 4]

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	3.31	ft^3/s	43	43
30 Day 2 Year Low Flow	5.26	ft^3/s	38	38
7 Day 10 Year Low Flow	1.42	ft^3/s	66	66
30 Day 10 Year Low Flow	2.23	ft^3/s	54	54
90 Day 10 Year Low Flow	3.75	ft^3/s	41	41

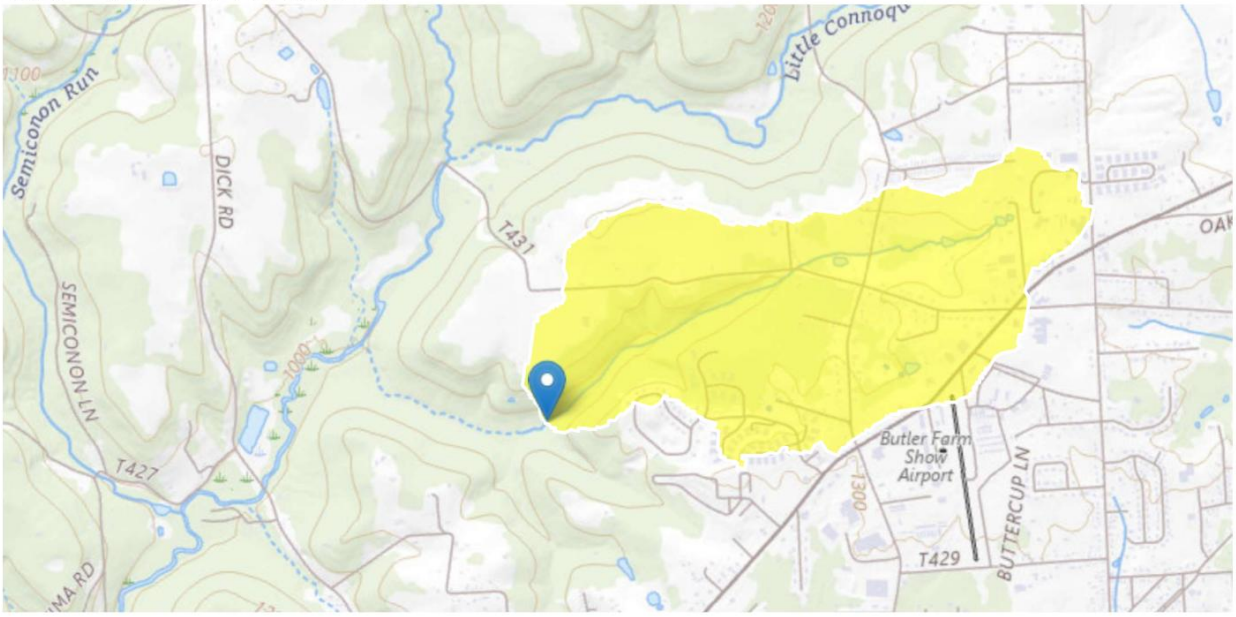
Low-Flow Statistics Citations

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: 4.29.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: PA
Workspace ID: PA20250517150415214000
Clicked Point (Latitude, Longitude): 40.85480, -79.99841
Time: 2025-05-17 11:04:38 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.95	square miles
ELEV	Mean Basin Elevation	1264	feet

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.95	square miles	2.26	1400
ELEV	Mean Basin Elevation	1264	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

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

Low-Flow Statistics Flow Report [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0277	ft^3/s
30 Day 2 Year Low Flow	0.0536	ft^3/s
7 Day 10 Year Low Flow	0.00794	ft^3/s
30 Day 10 Year Low Flow	0.0172	ft^3/s
90 Day 10 Year Low Flow	0.0356	ft^3/s

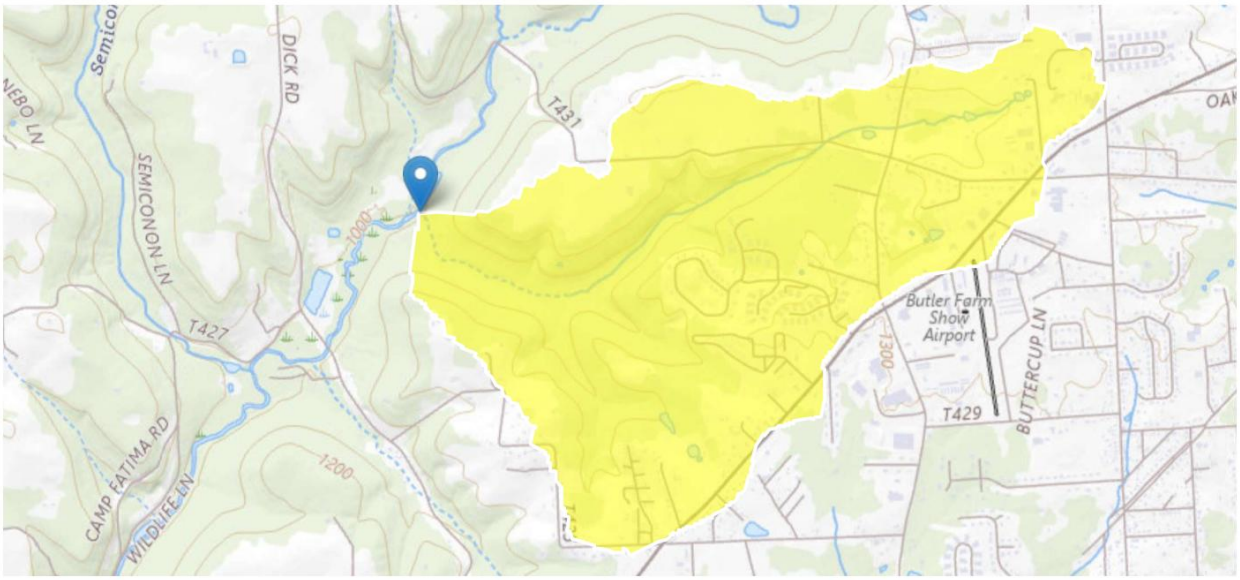
Low-Flow Statistics Citations

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/)

Application Version: 4.29.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: PA
Workspace ID: PA20250517130509532000
Clicked Point (Latitude, Longitude): 40.85798, -80.00888
Time: 2025-05-17 09:05:30 -0400



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Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1.79	square miles
ELEV	Mean Basin Elevation	1240	feet

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.79	square miles	2.26	1400
ELEV	Mean Basin Elevation	1240	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

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

Low-Flow Statistics Flow Report [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.056	ft^3/s
30 Day 2 Year Low Flow	0.105	ft^3/s
7 Day 10 Year Low Flow	0.0172	ft^3/s
30 Day 10 Year Low Flow	0.0353	ft^3/s
90 Day 10 Year Low Flow	0.0707	ft^3/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/)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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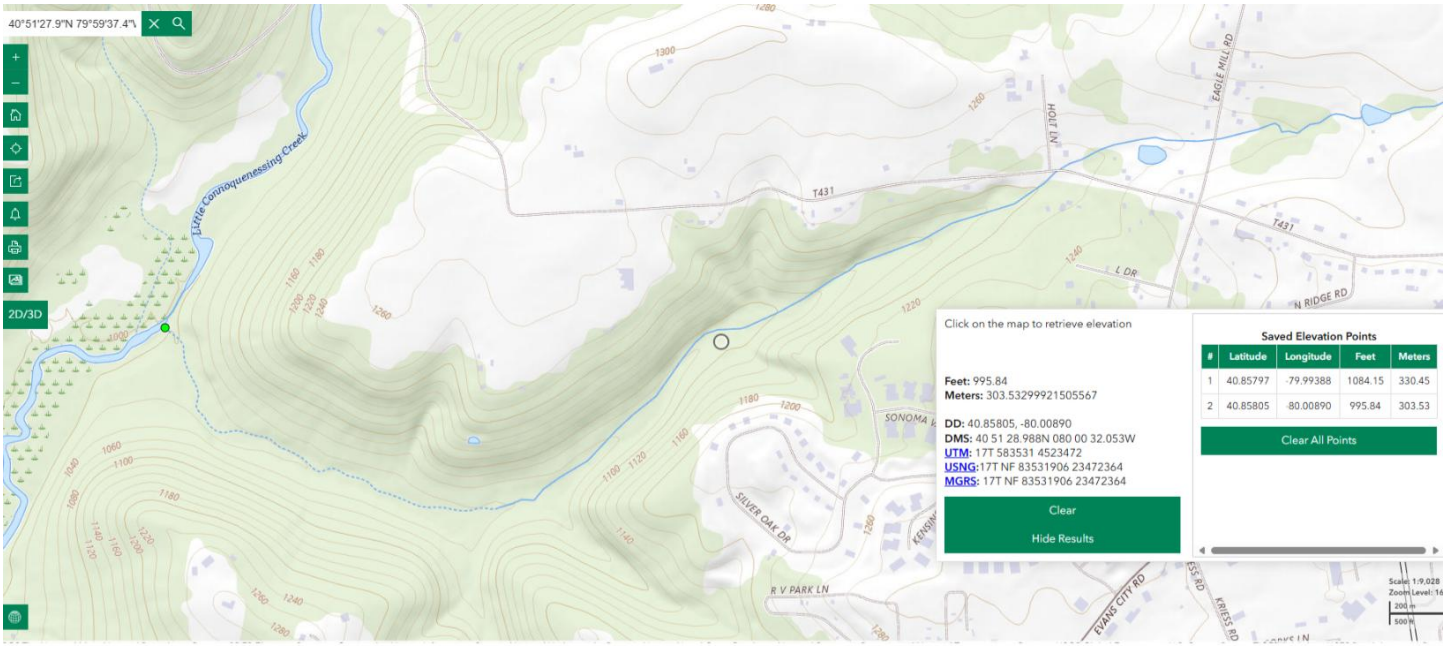
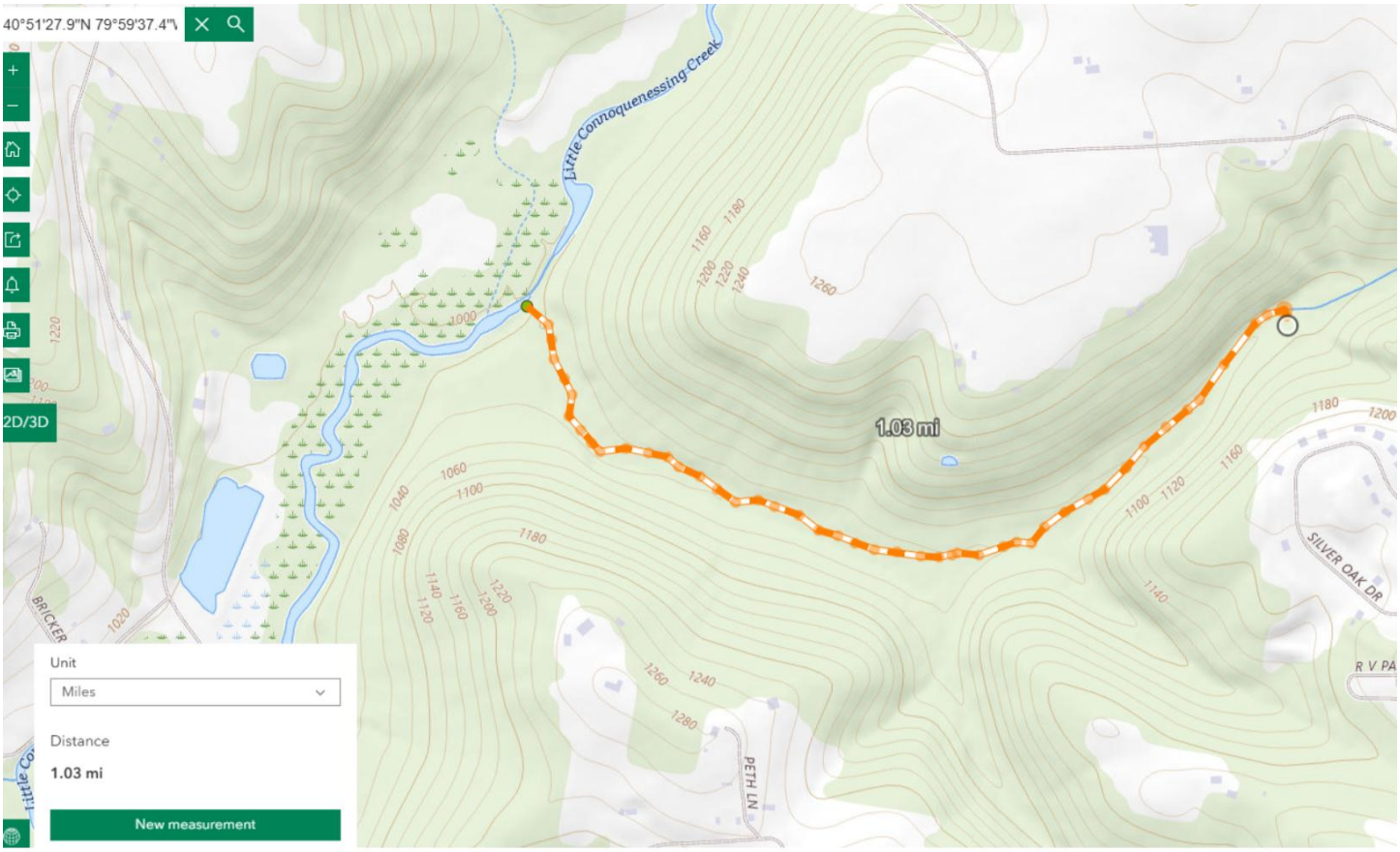
USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.29.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1




40°51'27.9"N 79°59'37.4"W
Little Connoquenessing Creek
1.03 mi
2D/3D
Unit
Miles
Distance
1.03 mi
New measurement
SILVER OAK DR
PETH LN
BRICKER

	Mar-25	Feb-25	Jan-25	Dec-24	Nov-24	Oct-24	Sep-24	Aug-24	Jul-24	Jun-24	May-24	Apr-24
Min pH:	7.2	7.2	7.3	6.7	7.1	7	7	7	7	6.8	7.2	7.5
10^ -pH	6.31E-08	6.31E-08	5.01E-08	2E-07	7.94E-08	1E-07	1E-07	1E-07	1E-07	1.58E-07	6.31E-08	3.16E-08
Max pH:	7.9	7.5	7.7	7.4	7.7	7.5	7.6	7.7	7.6	7.3	7.5	7.9
10^ -pH	1.26E-08	3.16E-08	2E-08	3.98E-08	2E-08	3.16E-08	2.51E-08	2E-08	2.51E-08	5.01E-08	3.16E-08	1.26E-08
AVG:	3.78E-08	4.74E-08	3.5E-08	1.2E-07	4.97E-08	6.58E-08	6.26E-08	6E-08	6.26E-08	1.04E-07	4.74E-08	2.21E-08
AVG pH:	7.4	7.3	7.5	6.9	7.3	7.2	7.2	7.2	7.2	7.0	7.3	7.7

Mean pH: 7.3

TRC_CALC

1A	B	C	D	E	F	G
2	**TRC EVALUATION**					
3	Input appropriate values in B4:B8 and E4:E7					
4	0.018464	= Q stream (cfs)		0.5	= CV Daily	
5	0.0239	= Q discharge (MGD)		0.5	= CV Hourly	
6	30	= no. samples		1	= AFC_Partial Mix Factor	
7	0.3	= Chlorine Demand of Stream		1	= CFC_Partial Mix Factor	
8	0	= Chlorine Demand of Discharge		15	= AFC_Criteria Compliance Time (min)	
9	0.2	= BAT/BPJ Value		720	= CFC_Criteria Compliance Time (min)	
	0	= % Factor of Safety (FOS)			=Decay Coefficient (K)	
10	Source	Reference	AFC Calculations		Reference	CFC Calculations
11	TRC	1.3.2.iii	WLA afc = 0.178		1.3.2.iii	WLA cfc = 0.166
12	PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c	LTAMULT cfc = 0.581
13	PENTOXSD TRG	5.1b	LTA_afc= 0.066		5.1d	LTA_cfc = 0.097
14						
15	Source		Effluent Limit Calculations			
16	PENTOXSD TRG	5.1f	AML MULT = 1.231			
17	PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.082		AFC	
18			INST MAX LIMIT (mg/l) = 0.267			

WLA afc	**(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))…**
	…+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	**(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))…**
	…+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	**1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)**

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
20C	34990	Trib 34990 to Ltl Connoquenes'ng Cr

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)
1.030	Brandywine Vill	PA0238686	0.024	CBOD5	25		
				NH3-N	2.4	4.8	
				Dissolved Oxygen			5

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)
0.670	Buttercup Villa	PA0091316	0.040	CBOD5	25		
				NH3-N	2.05	4.1	
				Dissolved Oxygen			6

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
20C	34990	Trib 34990 to Ltl Connoquenes'ng Cr

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
1.030	Brandywine Vill	9.95	6	9.95	6	0	0
0.670	Buttercup Villa	11.06	7.8	10.15	7.8	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
1.030	Brandywine Vill	1.5	2.76	1.5	2.4	2	13
0.670	Buttercup Villa	1.51	2.36	1.42	2.05	2	13

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)		
1.03	Brandywine Vill	25	25	2.4	2.4	5	5	0	0
0.67	Buttercup Villa	25	25	2.05	2.05	6	6	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
20C	34990	Trib 34990 to Ltl Connoquenes'ng Cr

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
1.030	0.024	23.335	7.176
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
3.580	0.318	11.252	0.049
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
17.34	1.414	1.64	0.905
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
6.080	25.793	Owens	6
Reach Travel Time (days)			
0.452			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.045	16.09	1.57	6.56
0.090	14.94	1.51	6.79
0.136	13.87	1.45	6.95
0.181	12.87	1.39	7.07
0.226	11.95	1.33	7.18
0.271	11.09	1.28	7.27
0.316	10.29	1.23	7.36
0.362	9.56	1.18	7.45
0.407	8.87	1.13	7.53
0.452	8.23	1.09	7.60

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
0.670	0.064	24.128	7.131
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
4.739	0.359	13.199	0.070
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
16.77	1.446	1.57	0.962
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
6.785	26.901	Owens	6
Reach Travel Time (days)			
0.581			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.058	15.15	1.48	6.73
0.116	13.69	1.40	6.85
0.174	12.37	1.32	6.99
0.232	11.17	1.25	7.13
0.290	10.10	1.18	7.25
0.349	9.12	1.12	7.36
0.407	8.24	1.06	7.46
0.465	7.45	1.00	7.56
0.523	6.73	0.95	7.64
0.581	6.08	0.90	7.65

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
20C	34990	Trib 34990 to Ltl Connoquenes'ng Cr

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												
1.030	0.02	0.00	0.02	.037	0.02101	.318	3.58	11.25	0.05	0.452	23.33	7.18
0.670	0.02	0.00	0.02	.0989	0.01369	.359	4.74	13.2	0.07	0.581	24.13	7.13
Q1-10 Flow												
1.030	0.01	0.00	0.01	.037	0.02101	NA	NA	NA	0.05	0.485	23.79	7.21
0.670	0.01	0.00	0.01	.0989	0.01369	NA	NA	NA	0.07	0.602	24.40	7.14
Q30-10 Flow												
1.030	0.03	0.00	0.03	.037	0.02101	NA	NA	NA	0.06	0.396	22.64	7.13
0.670	0.04	0.00	0.04	.0989	0.01369	NA	NA	NA	0.08	0.540	23.63	7.11

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
20C	34990	Trib 34990 to Ltl Connoquenes'ng Cr	**1.030**	1084.15	0.84	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	0.022	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
Brandywine Vill	PA0238686	0.0239	0.0239	0.0239	0.000	25.00	7.30

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	3.00	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
20C	34990	Trib 34990 to Ltl Connoquenes'ng Cr	**0.670**	1044.21	0.95	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	0.022	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
Buttercup Villa	PA0091316	0.0400	0.0400	0.0400	0.000	25.00	7.10

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	3.90	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
20C	34990	Trib 34990 to Ltl Connoquenes'ng Cr	**0.001**	995.84	1.79	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	0.022	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
		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

Region:
NWRO
County: All
Municipality:
All

PERMIT	MONITORING START DATE	MONITORING END DATE	REPORT FREQUENCY	OUTFALL	DISCHARGE	MONITORING LOCATION	PARAMETER CODE	PARAMETER	CONC UNITS	CONC 2 VALUE	CONC 2 LIMIT	CONC 2 SBC
PA0238686	04/01/2020	04/30/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	2.30	9.00	Average Monthly
PA0238686	05/01/2020	05/31/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.50	3.00	Average Monthly
PA0238686	06/01/2020	06/30/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.80	3.00	Average Monthly
PA0238686	07/01/2020	07/31/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.50	3.00	Average Monthly
PA0238686	08/01/2020	08/31/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	1.10	3.00	Average Monthly
PA0238686	09/01/2020	09/30/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.40	3.00	Average Monthly
PA0238686	10/01/2020	10/31/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.70	3.00	Average Monthly
PA0238686	11/01/2020	11/30/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	1.00	9.00	Average Monthly
PA0238686	12/01/2020	12/31/2020	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.40	9.00	Average Monthly
PA0238686	01/01/2021	01/31/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	26.00	9.00	Average Monthly
PA0238686	02/01/2021	02/28/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.20	9.00	Average Monthly
PA0238686	03/01/2021	03/31/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	1.00	9.00	Average Monthly
PA0238686	04/01/2021	04/30/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	5.30	9.00	Average Monthly
PA0238686	05/01/2021	05/31/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.20	3.00	Average Monthly
PA0238686	06/01/2021	06/30/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.50	3.00	Average Monthly
PA0238686	07/01/2021	07/31/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.30	3.00	Average Monthly
PA0238686	08/01/2021	08/31/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	1.00	3.00	Average Monthly
PA0238686	09/01/2021	09/30/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.40	3.00	Average Monthly
PA0238686	10/01/2021	10/31/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.60	3.00	Average Monthly
PA0238686	11/01/2021	11/30/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.90	9.00	Average Monthly
PA0238686	12/01/2021	12/31/2021	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.40	9.00	Average Monthly
PA0238686	01/01/2022	01/31/2022	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.30	9.00	Average Monthly
PA0238686	02/01/2022	02/28/2022	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.30	9.00	Average Monthly
PA0238686	03/01/2022	03/31/2022	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.60	9.00	Average Monthly
PA0238686	04/01/2022	04/30/2022	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.80	9.00	Average Monthly
PA0238686	05/01/2022	05/31/2022	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.50	3.00	Average Monthly
PA0238686	06/01/2022	06/30/2022	Monthly	001	Yes	Final Effluent	00610	Ammonia-Nitrogen	mg/L	0.40	3.00	Average Monthly