Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0032000**
Facility Type	**Non-Municipal**	APS ID	**1957**
Major / Minor	**Minor**	Authorization ID	**1472019**

Applicant and Facility Information

Applicant Name	**PA DCNR Gifford Pinchot State Park**	Facility Name	**Gifford Pinchot State Park STP**
Applicant Address	2200 Rosstown Road	Facility Address	2200 Rosstown Road
	Lewisberry, PA 17339-9787		Lewisberry, PA 17339-9787
Applicant Contact	William Rosevear	Facility Contact	William Rosevear
Applicant Phone	(717) 432-5011	Facility Phone	(717) 432-5011
Client ID	91847	Site ID	3732
Ch 94 Load Status	Not Overloaded	Municipality	Warrington Township
Connection Status	No Limitations	County	York
Date Application Received	February 6, 2024	EPA Waived?	Yes
Date Application Accepted	February 13, 2024	If No, Reason	
Purpose of Application	NPDES Renewal		

Summary of Review

PA DCNR has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit for the Gifford Pinchot State Park STP. The permit was last reissued to PA DCNR on June 19, 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. A file review of documents associated with the discharge or permittee may be available at the PA DEP southcentral regional office (SCRO), 909 Elmerton Avenue, Harrisburg, PA 17110. To make an appointment for file reviews, contact the SCRO file review coordinator at 717.705.4700.

Sludge use and disposal description and location(s): Springettsbury STP

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	February 7, 2025
x		*Daniel W. Martin* Daniel W. Martin, P.E. / Environmental Engineer Manager	February 10, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.216
Latitude	40º 05' 00.0"	Longitude	-76º 51' 56.00"
Quad Name	Wellsville	Quad Code	1830
Wastewater Description:	Sewage Effluent		

Receiving Waters	Conewago Creek (WWF)	Stream Code	08303
NHD Com ID	57465925	RMI	17.86
Drainage Area	389 sq. mi.	Yield (cfs/mi^2)	0.0676
Q_{7-10} Flow (cfs)	26.3	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	324.44	Slope (ft/ft)	
Watershed No.	7-F	Chapter 93 Class.	WWF
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		Name	

Nearest Downstream Public Water Supply Intake	Wrightsville Water Supply Co.		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	28.51	Distance from Outfall (mi)	30.52

Changes Since Last Permit Issuance:

There have been no changes since the last permit issuance.

Drainage Area

The discharge is to Conewago Creek at RMI 17.86. A drainage area upstream of the discharge point is determined to be 389 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 26.3 cfs. This information was used to obtain a LFY, 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} = 26.3 cfs
Q_{30-10} = 1.36 * 26.3 cfs = 35.768 cfs
Q_{1-10} = 0.64 * 26.3 cfs = 16.832 cfs
LFY = 26.3 cfs/1.63 mi^2 = 0.0676 cfs/mi^2

Conewago Creek

25 Pa Code §93.9 classifies the receiving water, Conewago Creek, with a WWF existing use designation. No special protection waters are impacted by this discharge. The discharge is in a stream segment listed as attaining all uses in the 2024 Integrated Report. 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 Department notes that the 2019 NPDES permit erroneously lists the receiving waters as Beaver Creek. After researching the issue, it appears that the original coding of the NHD Datum for Outfall 001 was created with the

latitude and longitude for Outfall 001 of Gifford Pinchot's Water Treatment Facility erroneously. The NHD entry is protected by the system, and the consequences of erasing the record to rebuild it are unknown, so the erroneous datum was left intact. The restoration of the receiving water as Conewago Creek in this permit is an administrative correction only.

Local Watershed Total Maximum Daily Loads (TMDLs)

According to PA's 2024 Integrated Water Quality Monitoring and Assessment Report, Conewago Creek in the vicinity of the point of discharge is listed as supporting all uses. The water way is listed as supporting aquatic life and recreation with a Category 2 classification, indicating that some but not all uses are met.

Public Water Supply Intake

The nearest downstream public water supply intake is the Wrightsville Water Supply Co. intake located on the Susquehanna River approximately 31 miles from the discharge. Considering the distance and nature, the discharge is not expected to significantly affect 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: Gifford Pinchot St Pk STP

WQM Permit No.	Issuance Date

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Hypochlorite	0.216

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.216		Not Overloaded	Aerobic Digestion	Other WWTP

The PA DCNR owns and operates the sanitary wastewater treatment facility located in Warrington Township, York County. This NPDES permit covers discharges of sewage treated by the Gifford Pinchot State Park STP. The facility serves the state park and the Wellsville Sewer Authority; all sewer systems are 100% separated. With an annual average design flow 0.216 MGD, this facility utilizes an extended aeration system consisting of:

Comminutor (1) ⇒ Screening (1) ⇒ EQ Tank (1) ⇒ Aeration Tank (1) ⇒ Clarifier (2) ⇒ Chlorine Contact Tank (1) ⇒ Effluent Pump Station (1) ⇒ Discharge

The facility utilizes a sludge holding tank. Sodium hypochlorite is utilized for disinfection and ferrous sulfate is added to facilitate phosphorus precipitation. Sludge is sent the Springettsbury STP for treatment. There is one industrial/commercial user contributing industrial wastewater to the sewer system (PENEX/Aluminum Extrusion/0.0050 mgd).

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: February 7, 2020: A CEI was conducted by Austen Randecker. No violations were noted. Recommendations were made to set up effluent composite sampling to be flow proportioned and to submit past-due DMRs on Greenport.. June 11, 2020: An administrative inspection was conducted by phone by Austen Randecker. No violations were noted. September 16, 2020: A CEI was conducted by Michael Benham. A violation was issued for failure to use a format or process required by DEP for self-monitoring results. Recommendations were made to follow up with Wellsville to eliminate slug loads of septic and/or grease trap wastes from entering the collection system, contacting the eDMR Help Desk to assist with eDMR submission issues, and submitting past due eDMR reports. July 7, 2021: A CEI was conducted by Brandon Bettinger. Violations were issued for failure to monitor pollutants as required by the NPDES permit and for failure to properly document monitoring activities and results. Recommendations were made to ensure restoring power to the facility's composite sampler or exploring temporary options in order to meet the sampling requirements, to submit the missing DMRs and supplemental forms, and to ensure all expired pH buffers are replaced with current buffers. July 19, 2021: An incidence inspection was conducted by Brandon Bettinger. A violation was issued for an unauthorized discharge due to a hose break at the main influent pump station. November 3, 2021: A CEI was conducted by Brandon Bettinger. No violations were noted. A recommendation was made to re-evaluate the 1975 agreement with Wellsville to determine if revisions or updates are necessary based on current discharges. January 12, 2023: A CEI was conducted by Shawn Lesitsky. Violations were issued for failure to collect representative samples, failure to maintain all facilities, and failure to monitor pollutants as required by the NPDES permit. Recommendations were made to install an influent sampler at the lift station, to repair the walkway between the EQ tank and the aeration tank, and to collect grab samples from the EQ tank before the aeration tank. November 13, 2019, 2019: An incidence inspection was conducted by Kevin Buss. A violation was issued for an unauthorized discharge at the Summer Drive Pumping Station. September 17, 2020: A CEI was conducted by Austen Randecker. No violations were noted. A recommendation was made to complete the transfer of the STP's NODES and WQM permits January 21, 2021: An administrative inspection was conducted by phone by Kevin Buss. No violations were noted. Requests were made for an identification of responsible person in charge of the facility and an Annual Chesapeake Bay Supplemental Report for 2020. August 10, 2021: A NOV was issued for various NPDES discharge violations.

	May 31, 2023: A CO&A was executed. Corrective actions included completing an evaluation of the STP and submitting a schedule of planned corrective actions. October 31, 2024: A CEI was conducted by Shawn Lesitsky. No violations were noted. Recommendations were made to prioritize the replacement of the EQ tank, provide timelines for future work to be completed in order to satisfy the CO&A, continue to submit quarterly progress reports, provide a summary of collection system work, provide a plan to address I&I, run fecal samples to the permit limit in winter, replace the DO cap and replace the sampler tubing.

Other Comments: As of February 7, 2025, there are three open violations associated with this facility. The final permit will not be issued until these violations have been resolved.

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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	45.0	72.0	XXX	25.0	40.0	50	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS	54.0	81.0	XXX	30.0	45.0	60	1/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Nitrate-Nitrite	XXX	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Nitrate-Nitrite (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	Calculation
Total Nitrogen (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	Report	1/week	24-Hr Composite
Ammonia May 1 - Oct 31	41.0	XXX	XXX	23.0	XXX	Report	1/week	24-Hr Composite

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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
TKN	XXX	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TKN (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	3.6	XXX	XXX	2.0	XXX	4	1/week	24-Hr Composite
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Bromide (ug/L)	Report	XXX	XXX	Report	XXX	Report	1/week	24-Hr Composite

Compliance Sampling Location: Outfall 001

Compliance History

DMR Data for Outfall 001 (from January 1, 2024 to December 31, 2024)

Parameter	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24
Flow (MGD) Average Monthly	0.049	0.042	0.051	0.046	0.061	0.051	0.056	0.064	0.075	0.082	0.07	0.093
Flow (MGD) Daily Maximum	0.102	0.066	0.069	0.06	0.025	0.08	0.097	0.113	0.158	0.137	0.115	0.226
pH (S.U.) Instantaneous Minimum	6.58	6.5	6.3	6.0	6.3	6.2	5.9	6.6	6.5	6.8	7.0	7.0
pH (S.U.) Instantaneous Maximum	7.30	7.2	6.7	6.7	7.0	7.2	7.0	7.1	7.3	7.5	7.5	7.4
DO (mg/L) Instantaneous Minimum	5.1	8.2	8.9	9.0	8.0	8.7	7.8	9.0	9.6	10.1	9.7	10.0
TRC (mg/L) Average Monthly	0.4	0.40	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

TRC (mg/L) Instantaneous Maximum	1.08	0.52	0.53	0.53	0.53	0.55	0.57	0.57	0.65	0.59	0.58	0.54
CBOD5 (lbs/day) Average Monthly	2.1	0.5	2.2	3.2	7.2	4.9	3.4	7.0	1.0	1.6	2.7	2.9
CBOD5 (lbs/day) Weekly Average	2.5	1.8	6.9	3.9	23.8	5.5	5.0	15.8	1.2	3.5	6.0	7.0
CBOD5 (mg/L) Average Monthly	4.9	1.5	4.9	9.6	9.6	11.1	9.0	10.6	1.9	2.8	4.5	4.6
CBOD5 (mg/L) Weekly Average	7.1	5.1	14.9	13.5	26.5	14.1	15.1	27.0	2.5	6.0	9.8	14.3
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	95	225.69	95	67	98	119	88	168	80	72	63	99
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	243	347.35	133	114	149	166	103	247	109	87	88	219
BOD5 (mg/L) Raw Sewage Influent Average Monthly	187.77	80	226	183	186	268	232	258	146	111	105	122
TSS (lbs/day) Average Monthly	6.8	3.4	< 3.5	< 3.6	4.2	< 3.8	< 8.0	< 5.5	< 4.7	< 5.7	< 5.7	7.5
TSS (lbs/day) Raw Sewage Influent Average Monthly	88	109	111	71	139	123	98	239	96	74	61	148
TSS (lbs/day) Raw Sewage Influent Daily Maximum	272	216	253	98	248	255	148	441	122	104	104	434
TSS (lbs/day) Weekly Average	16.5	4.4	5.1	5.7	7.2	5.5	< 8.0	8.8	< 8.2	7.7	< 7.7	15.1
TSS (mg/L) Average Monthly	16.0	10.0	< 8.6	10.3	< 8	< 8.6	< 3.1	< 9.5	< 8.0	< 9.0	< 9.5	10.0
TSS (mg/L) Raw Sewage Influent Average Monthly	157	318	263	197	308	267	256	348	170	112	96	140
TSS (mg/L) Weekly Average	44.0	13.0	11	17.0	8	11.0	< 3.5	10.0	< 8.0	10.0	11.0	15.0
Fecal Coliform (No./100 ml) Geometric Mean	223	7.0	< 7	< 10	< 14	< 24	< 7	< 21	< 9	< 12	< 10	21

Fecal Coliform (No./100 ml) Instantaneous Maximum	3550	10.0	< 10	< 10	< 27	450	< 10	40	10	20	< 10	100
Nitrate-Nitrite (mg/L) Average Monthly	31.75	41.27	43.39	48.76	39.89	37	38.47	30.47	27.17	15.52	18.64	18.73
Nitrate-Nitrite (lbs) Total Monthly	476	426	542	529	703	500	441	539	466	287	270	535
Total Nitrogen (mg/L) Average Monthly	34.88	45.43	47.99	52.4	42.32	40.69	39.51	31.64	27.23	17.03	21.25	21.58
Total Nitrogen (lbs) Total Monthly	522	16.0	601	570	739	555	454	560	468	316	390	586
Total Nitrogen (lbs) Total Annual				6326								
Ammonia (lbs/day) Average Monthly	0.1	0.04	0.5	0.1	0.02	0.7	< 0.03	< 0.05	0.02	0.09	0.06	0.51
Ammonia (mg/L) Average Monthly	0.34	0.20	< 8.6	< 0.1	0.01	1.0	< 0.2	< 0.1	< 0.02	< 1	< 0.1	1.0
Ammonia (mg/L) Instantaneous Maximum	0.97	0.37	11	1.22	0.04	7.24	0.17	< 0.2	0.04	< 0.02	0.33	4.58
Ammonia (lbs) Total Monthly	4.0	1.0	15	3	0.6	23	< 0.9	< 1	0.5	< 3	2.0	14
Ammonia (lbs) Total Annual				< 62								
TKN (mg/L) Average Monthly	1.64	1.07	< 2	< 1.46	< 1.0	< 2.99	< 1.01	< 1.06	< 1	< 1.08	< 1.02	1.0
TKN (lbs) Total Monthly	22	11.0	< 27	< 15	16	< 45	< 12	< 19	< 18	< 21	< 21	29
Total Phosphorus (lbs/day) Average Monthly	1.4	0.50	0.6	0.4	0.9	1.6	0.5	0.05	1.0	0.9	1.0	1.0
Total Phosphorus (mg/L) Average Monthly	1.4	1.4	1.4	1.2	1.5	3.6	1.3	1.0	1.5	1.4	1.5	1.2
Total Phosphorus (mg/L) Instantaneous Maximum	2.991	2.2	2.162	1.859	2.986	7.758	2.792	1.635	2.181	1.762	1.893	1.776
Total Phosphorus (lbs) Total Monthly	19.1	14.9	17.5	12.5	166.2	51.0	15.2	16.1	28.7	26.9	29.1	31.6
Total Phosphorus (lbs) Total Annual				318								
Bromide (lbs/day) Average Monthly	0.09	0.07	< 0.08	< 0.00007	< 0.1	< 0.09	< 0.08	< 0.1	< 0.08	< 0.04	< 0.1	0.2

Bromide (ug/L) Average Monthly	200	0.20	< 0.0002	< 0.0002	< 0.000214	< 0.215	< 0.211	< 0.2	0.00016	< 0.091	< 0.000203	0.261
Bromide (ug/L) Instantaneous Maximum	200	0.20	< 0.0002	< 0.0002	0.000254	0.263	0.243	< 0.2	0.0002	0.303	0.000212	0.367

Compliance History

Effluent Violations for Outfall 001, from: February 1, 2024 To: December 31, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	06/30/24	Inst Min	5.9	S.U.	6.0	S.U.
Total Phosphorus	07/31/24	Avg Mo	3.6	mg/L	2.0	mg/L
Total Phosphorus	07/31/24	IMAX	7.758	mg/L	4.0	mg/L

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .216
Latitude 40º 5' 0.00" **Longitude** -76º 51' 56.00"
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, and the model output indicated that existing WQBEL for CBOD5 and ammonia are still appropriate and protective of water quality.

A minimum of 5.0 mg/L for DO is an existing effluent limit and will remain unchanged in the draft permit as recommended by DEP's SOP. This requirement has also been assigned to other sewage facilities in the region. 5.0 mg/L is taken directly from 25 Pa. Code § 93.7(a) and it is also determined to be appropriate according to water quality modeling.

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 0.5 mg/L (average monthly) and 1.6 mg/L (IMAX) are still protective of water quality.

Toxics

The last two NPDES Permits issued for the facility included a monitor and report requirement for Bromide. Bromide data collected at the facility between January 2023 and December 2024 was evaluated using the Department's Toxic Management Spreadsheet Model (version 1.4); results show that Bromide is not presently expressing reasonable potential. Therefore, the monitoring requirement for Bromide is proposed to be eliminated in this permit.

The Department notes that an industry that performs aluminum extrusion discharges industrial wastewater to the STP. Given the potential for toxic discharges of aluminum to the facility, the Department is proposing a monitor and report requirement for Total Aluminum (1x weekly via 24-hour composite sampling at Outfall 001) to establish if reasonable potential exists for future action on this parameter.

Best Professional Judgment (BPJ) Limitations

Total Phosphorus & Total Nitrogen

DEP's SOP no. BPNPSM-PMT-033 recommends monitoring requirements for Total Phosphorus and Total Nitrogen for all sewage facilities. Therefore, routine monitoring for TKN, Nitrate-Nitrite, Total Nitrogen and Total Phosphorus are recommended to be continued in this permit renewal weekly.

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).

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, quarterly E. Coli monitoring has been proposed in this permit. The collection method will be via grab sample.

Chesapeake Bay TMDL

The Department formulated a strategy in April 2007, to comply with the EPA's and Chesapeake Bay Foundation's requirements to reduce point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP) to the Bay. In the Strategy, sewage dischargers have been prioritized by Central Office based on their delivered TN loadings to the Bay. The highest priority (Phases 1, 2, and 3) dischargers received 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. Phase 4 (0.2 -0.4mgd) and Phase 5 (below 0.2mdg) facilities were required to monitor and report TN and TP during permit renewal at a monitoring frequency following Table 6-3 of DEP's Technical Guidance for Development and Specification of effluent Limitations (No. 362-0400-001).

EPA published the Chesapeake Bay Total Maximum Daily Load (TMDL) in December of 2010. Despite extensive restoration efforts during the past 25 years, the TMDL was prompted by insufficient progress and continued poor water quality in the Chesapeake Bay and its tidal tributaries.

In order to address the TMDL, Pennsylvania developed, in addition to the Bay Strategy, a Chesapeake Watershed Implementation Plan (WIP) Phase 1 in January 2011, Phase 2 in March 2012 and Phase 3 in December 2019. In accordance with the Phase 3 WIP, re-issuing permits for significant dischargers follow the same phased approach formulated in the original Bay strategy, whilst Phase 4 and Phase 5 will be required to monitor and report TN and TP during permit renewal.

The Phase 3 WIP categorizes this facility as a phase 4 non-significant sewage facility that has a design flow less than 0.4 MGD but greater than or equal to 0.2 MGD. Phase 4 renewed or amended permits that include an increase in design flow will contain Cap Loads based on the lesser of a) existing TN and TP concentrations at current design average annual flow or b) 7,306 lbs/yr TN and 974 lbs/yr TP. The existing facility was never assigned Cap Loads; no change is proposed in this permit.

Monitoring Frequency and Sample Type

Extraneous reporting requirements for max daily raw influent BOD5 and TSS, and instantaneous max ammonia listed in the previous permit are proposed to be eliminated in this renewal.

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. This approach is in accordance with 40 CFR §122.44(l(1).

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
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Total Nitrogen (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Ammonia (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation

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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	45.0	72.0	XXX	25.0	40.0	50	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS	54.0	81.0	XXX	30.0	45.0	60	1/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Nitrate-Nitrite	XXX	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Nitrate-Nitrite (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	Calculation

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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Total Nitrogen (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Ammonia May 1 - Oct 31	41.0	XXX	XXX	23.0	XXX	XXX	1/week	24-Hr Composite
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
TKN	XXX	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TKN (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	3.6	XXX	XXX	2.0	XXX	4	1/week	24-Hr Composite
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Aluminum (ug/L)	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite

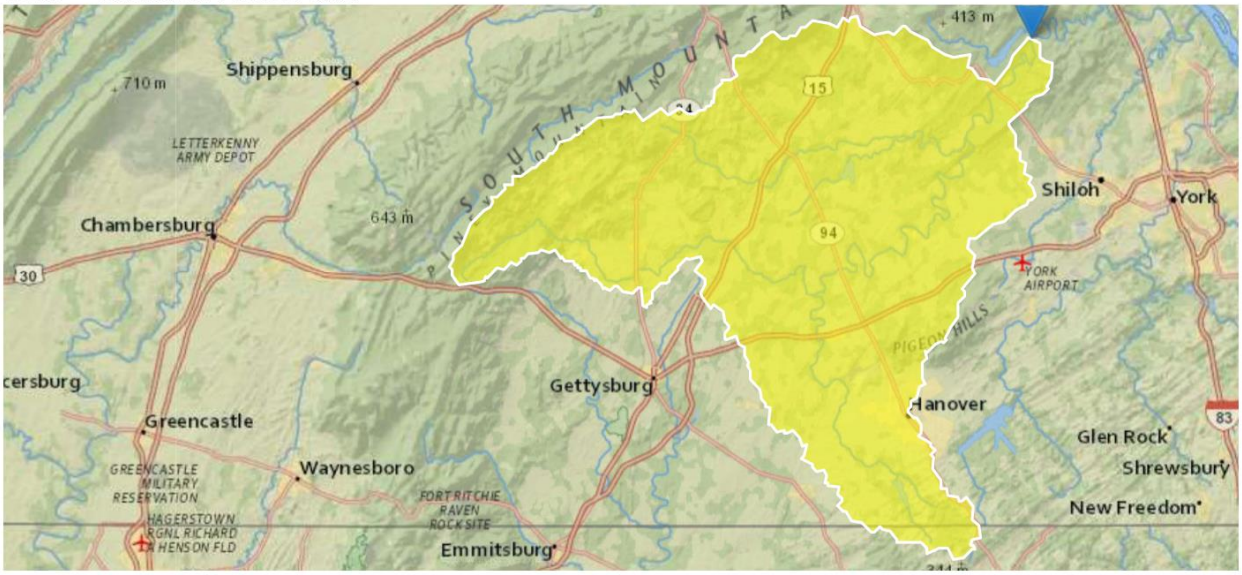
Compliance Sampling Location: Outfall 001

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:


14665 DISCHARGE POINT
Fortney
Alpine
Gifford
Pinchot
State Park
Mt Airy Rd
Rossiown Rd
Beaver Creek
Boring Bridge Rd
Alpine Rd
New Bethel Rd
Spangler Rd
Fory's Court Rd
Rainbow Tr
Bluebird Ln
Blackbird Ln
Burt Rd
Rohlers Church Rd
177

StreamStats Report

Region ID: PA
Workspace ID: PA20250205191808606000
Clicked Point (Latitude, Longitude): 40.08329, -76.86503
Time: 2025-02-05 14:18:40 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	3.6188	degrees
DRNAREA	Area that drains to a point on a stream	389	square miles
ROCKDEP	Depth to rock	4.6	feet
URBAN	Percentage of basin with urban development	2.5692	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
BSLOPD	Mean Basin Slope degrees	3.6188	degrees	1.7	6.4
DRNAREA	Drainage Area	389	square miles	4.78	1150
ROCKDEP	Depth to Rock	4.6	feet	4.13	5.21
URBAN	Percent Urban	2.5692	percent	0	89

Low-Flow Statistics Flow Report [Low Flow Region 1]

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	52.8	ft^3/s	46	46
30 Day 2 Year Low Flow	71.6	ft^3/s	38	38
7 Day 10 Year Low Flow	26	ft^3/s	51	51
30 Day 10 Year Low Flow	35.2	ft^3/s	46	46
90 Day 10 Year Low Flow	59	ft^3/s	41	41

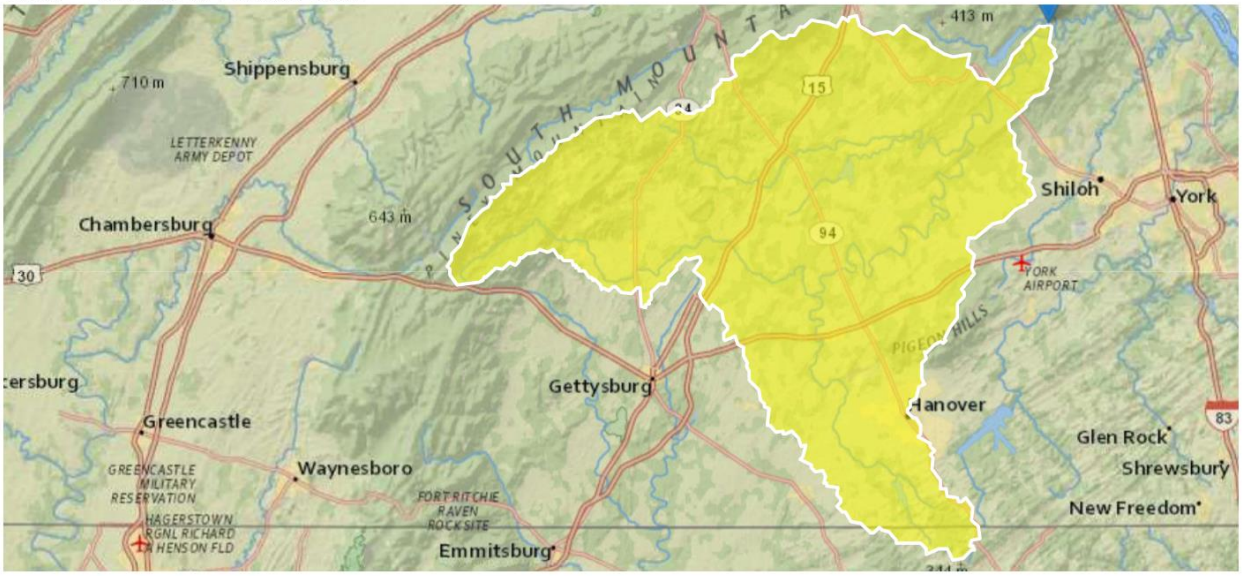
Low-Flow Statistics Citations

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: 4.26.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: PA
Workspace ID: PA20250205192110279000
Clicked Point (Latitude, Longitude): 40.09373, -76.84773
Time: 2025-02-05 14:21:36 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	3.6327	degrees
DRNAREA	Area that drains to a point on a stream	391	square miles
ROCKDEP	Depth to rock	4.6	feet
URBAN	Percentage of basin with urban development	2.5602	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
BSLOPD	Mean Basin Slope degrees	3.6327	degrees	1.7	6.4
DRNAREA	Drainage Area	391	square miles	4.78	1150
ROCKDEP	Depth to Rock	4.6	feet	4.13	5.21
URBAN	Percent Urban	2.5602	percent	0	89

Low-Flow Statistics Flow Report [Low Flow Region 1]

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	53.4	ft^3/s	46	46
30 Day 2 Year Low Flow	72.3	ft^3/s	38	38
7 Day 10 Year Low Flow	26.3	ft^3/s	51	51
30 Day 10 Year Low Flow	35.5	ft^3/s	46	46
90 Day 10 Year Low Flow	59.5	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: 4.26.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
07F	8303	CONEWAGO CREEK

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)
17.860	Gifford Pinchot	PA0032000	0.216	CBOD5	25		
				NH3-N	23	46	
				Dissolved Oxygen			5

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
07F	8303	CONEWAGO CREEK

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
17.860	Gifford Pinchot	11.07	46	11.07	46	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
17.860	Gifford Pinchot	1.37	23	1.37	23	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)		
17.86	Gifford Pinchot	25	25	23	23	5	5	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
07F	8303	CONEWAGO CREEK

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
17.860	0.216	25.000	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
93.719	0.978	95.807	0.287
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
2.29	0.155	0.29	1.029
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
8.202	0.624	Tsivoglou	6
Reach Travel Time (days)			
0.372			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.037	2.28	0.28	7.54
0.074	2.26	0.27	7.54
0.112	2.24	0.26	7.54
0.149	2.23	0.25	7.54
0.186	2.21	0.24	7.54
0.223	2.19	0.23	7.54
0.261	2.18	0.22	7.54
0.298	2.16	0.21	7.54
0.335	2.15	0.21	7.54
0.372	2.13	0.20	7.54

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	6		

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
07F	8303	CONEWAGO CREEK

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												
17.860	26.00	0.00	26.00	.3342	0.00041	.978	93.72	95.81	0.29	0.372	25.00	7.00
Q1-10 Flow												
17.860	16.64	0.00	16.64	.3342	0.00041	NA	NA	NA	0.22	0.476	25.00	7.00
Q30-10 Flow												
17.860	35.36	0.00	35.36	.3342	0.00041	NA	NA	NA	0.34	0.314	25.00	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
07F	8303	CONEWAGO CREEK	**17.860**	324.44	389.00	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	0.100	0.00	26.00	0.000	0.000	0.0	0.00	0.00	25.00	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
Gifford Pinchot	PA0032000	0.2160	0.2160	0.2160	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	5.00	8.24	0.00	0.00
NH3-N	23.00	0.00	0.00	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
07F	8303	CONEWAGO CREEK	**16.110**	320.62	391.00	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	0.100	0.00	26.30	0.000	0.000	0.0	0.00	0.00	25.00	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	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	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70