Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0020508**
Facility Type	**Municipal**	APS ID	**16695**
Major / Minor	**Minor**	Authorization ID	**1528739**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**McConnellsburg Sewerage Authority Fulton County**	Facility Name	**McConnellsburg STP**
Applicant Address	PO Box 681	Facility Address	20789 Great Cove Road
	McConnellsburg, PA 17233-0681		McConnellsburg, PA 17233
Applicant Contact	Craig Strait	Facility Contact	Craig Strait
Applicant Phone	(717) 485-4728	Facility Phone	(717) 485-4728
Client ID	36766	Site ID	251564
Ch 94 Load Status	Not Overloaded	Municipality	Ayr Township
Connection Status	No Limitations	County	Fulton
Date Application Received	May 29, 2025	EPA Waived?	No
Date Application Accepted	May 30, 2025	If No, Reason	Significant CB Discharge
Purpose of Application	NPDES Permit Renewal.		

Summary of Review

McConnellsburg Sewerage Authority has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit. The permit was last reissued on January 14, 2021 and became effective on February 1, 2021. The permit will be expired on January 31, 2026.

The facility has an average annual design flow of 0.6 MGD that discharges to Big Cove Creek. The application states the following flow contribution sources: McConnellsburg Borough (41.3%), Ayr Township (30.2%), and Todd Township (28.5%).

WQM Part II No. 2998401 original was issued on June 25, 1999, and amendment issued on October 20, 2010. The WQM Part II extensions & pumping stations No. 2900402 was issued on December 21, 2000.

Sludge use and disposal description and location(s): N/A because sludge hauling is by facility's contractor.

Changes from the previous permit:

- The E. Coli monitoring and report requirements will be added to the proposed permit.
- TRC limit of 0.056 mg/l AML, and 0.18 mg/l IMAX will be replaced in the proposed permit.
- The Raw Sewage Influent "Daily Average" concentration (mg/L) report of BOD_5 & TSS will be added to the proposed permit which were missing in the previous 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	November 21, 2025
X		*Daniel W. Martin* Daniel W. Martin, P.E. / Environmental Engineer Manager	December 22, 2025

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.6
Latitude	39º 55' 32.97"	Longitude	-78º 0' 20.27"
Quad Name	Meadow Ground	Quad Code	
Wastewater Description:	Effluent		
Receiving Waters	Big Cove Creek (CWF)	Stream Code	60482
NHD Com ID	49470424	RMI	15.13 miles
Drainage Area	7.4 mi.^{2}	Yield (cfs/mi^2)	See comments below
Q_{7-10} Flow (cfs)	See comments below	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	848.58	Slope (ft/ft)	
Watershed No.	13-B	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Nutrients, Siltation		
Source(s) of Impairment	Grazing in Riparian or Shoreline Zones		
TMDL Status	Name		
Nearest Downstream Public Water Supply Intake	R.C. Wilson Water Treatment Plant		
PWS Waters	Potomac River	Flow at Intake (cfs)	
PWS RMI	26 miles to PA-MA border	Distance from Outfall (mi)	Approximate 38.84 miles

Changes Since Last Permit Issuance:

Drainage Area

The discharge is to Big Cove Creek at RMI 15.13 miles. A drainage area upstream of the discharge is estimated to be 7.4 mi.^{2}, according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/.

Streamflow

There are no nearby stream gages with low flow data that have extensive or recent periods of record. Since USGS PA StreamStats estimated the drainage area that is below the minimum value allowed by USGS's regression equations, the USGS StreamStats on Licking Creek at the PA/MD border will be used to calculate the Q_{7-10} at the point of discharge using a low flow yield method. The Q_{7-10} here is 6.03 cfs and the drainage area is 159 mi.^{2} which results in a Q_{7-10} low flow yield of 0.038 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):

$$\text{Low Flow Yield} = Q_{7-10} / \text{Drainage Area} = 6.03 \text{ cfs} / 159 \text{ mi.}^2 = 0.038 \text{ cfs/mi.}^2$$
$$Q_{7-10discharge} = 0.038 \text{ cfs/mi.}^2 * \text{Drainage Area}_{discharge} = 0.038 \text{ cfs/mi.}^2 * 7.4 \text{ mi.}^2 = 0.3 \text{ cfs}$$
$$Q_{30-10} = 1.36 * Q_{7-10discharge} = 1.36 * 0.3 \text{ cfs} = 0.41 \text{ cfs}$$
$$Q_{1-10} = 0.64 * Q_{7-10discharge} = 0.64 * 0.3 \text{ cfs} = 0.19 \text{ cfs}$$

The resulting Q_{7-10} dilution ratio is: $Q_{stream} / Q_{discharge}$ = 0.3 cfs / [0.6 MGD * (1.55 cfs/MGD)] = 0.32:1

Big Cove Creek

25 Pa Code § 93.9z classifies Big Cove Creek as Cold Water and Migratory Fishes (CWF, MF) surface water. Based on the 2024 Integrated Report, Big Cove Creek, assessment unit IDs 6138 & 19105, is not impaired. A TMDL currently does not exist for this stream segment, therefore, no TMDL has been taken into consideration during this review.

Public Water Supply

The closest downstream water supply intake from the discharge point is for the Hagerstown City water supply. The R.C. Wilson Water Treatment Plant near Williamsport, Maryland is the main production plant for the City of Hagerstown. The source for this facility is the Potomac River. The distance downstream from the discharge to the intake is approximately 38.84 miles. The discharge will not impact the intake because of the distance, dilution, and effluent limits.

Treatment Facility Summary				

Treatment Facility Name: Mcconnellsburg STP

WQM Permit No.	Issuance Date	Reason
2998401	6/26/1999	New
2998401 10-1	10/20/2010	Amendment
2900402	12/21/2000	New (extension & pumping station)

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage			Hypochlorite	0.6

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.6	1380	Not Overloaded		

Changes Since Last Permit Issuance:

Other Comments:
The treatment process, according to the revised application, is as follows:

Lift Station → Fine Screen/Grit Removal → EQ Tank (1) → Sludge Storage Tanks (2) → Clarifiers (2) → Chlorine Contact Tank (1) → Dechlorination (1) → Aeration Tank (1) → Outfall 001

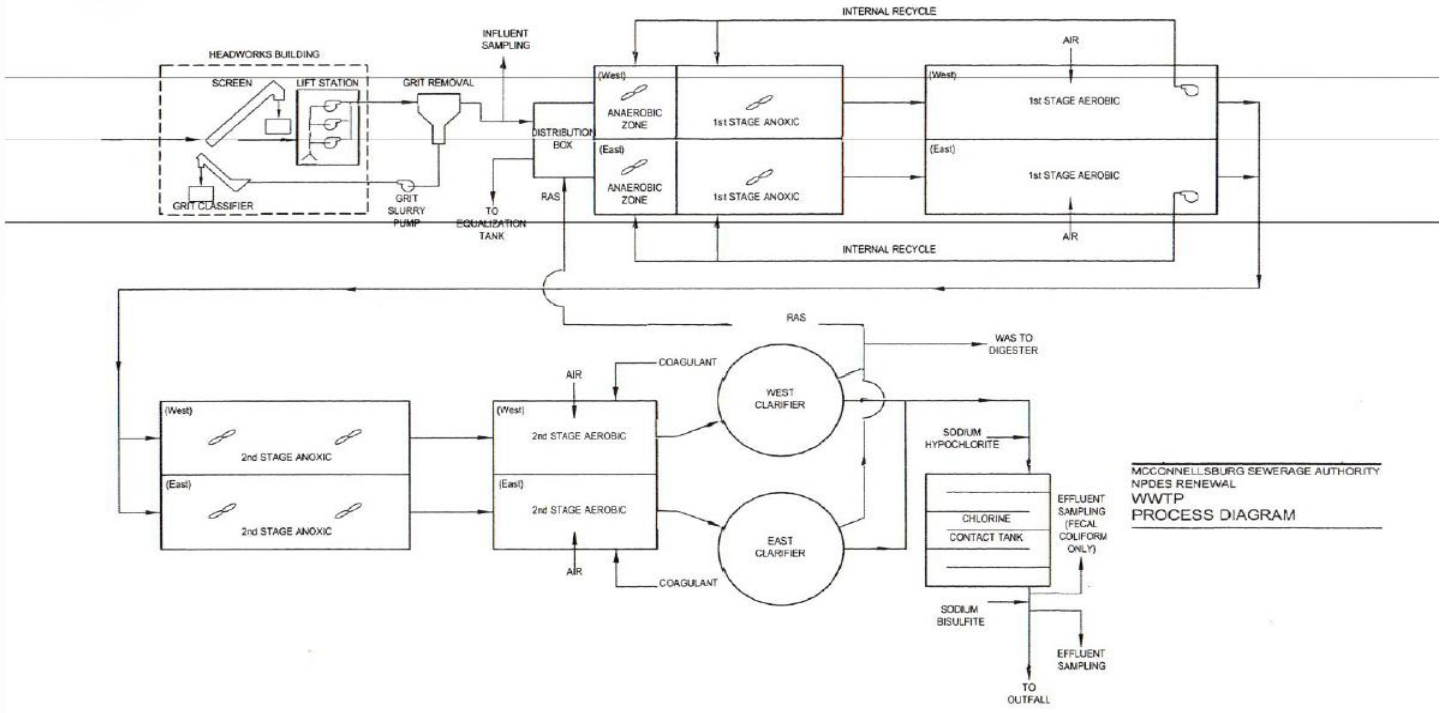
Chemical used:
The subject facility utilizes the following chemicals as part of their treatment process.

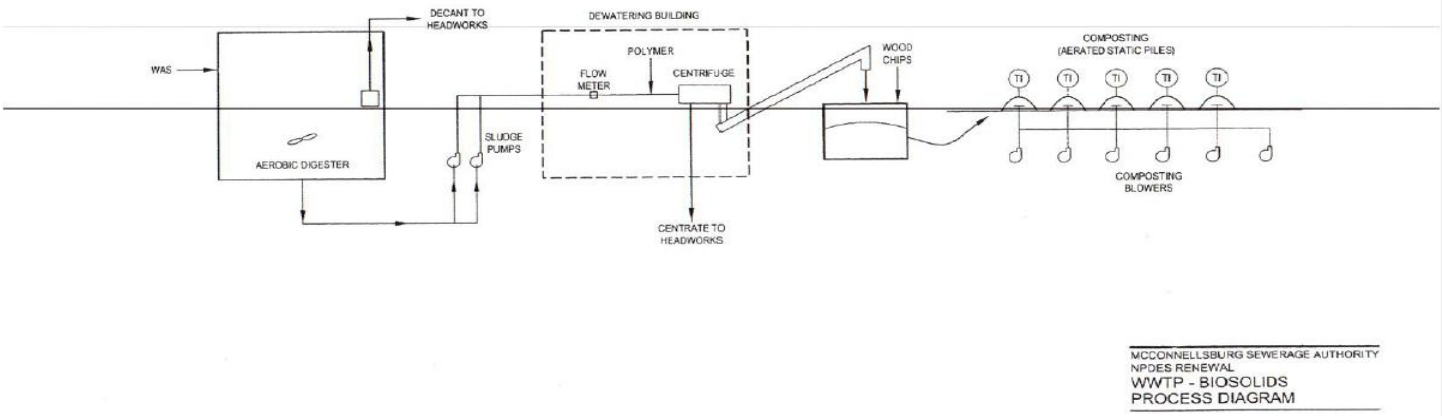
- Sodium Hypochlorite (liquid) for disinfection
- Sodium Bisulfate (liquid) for dechlorination
- Superfloc SD2081 for dewatering aid
- DelPAC 2000 for Phosphorus removal

Biosolids:
The total sewage sludge/biosolids production within the facility for the previous year was 69.8 dry tons.

Compliance History	
Summary of DMRs:	DMRs reported last 12 months are summarized in the next page.
Summary of Inspections:	10/9/2025: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. There were no violations noted during inspection. The recommendations were 1. Repair sludge centrifuge. 2. Submit influent supplemental forms with monthly DMRs. 3. Submit a Laboratory Accreditation Supplemental form with updated lab information. 4. Record all maintenance, repair, and process control test results in logbook or log sheets. The effluent looked clear. The field test results were within permit limits. 8/8/2024: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. The recommendations were calibrated the flow meter and download the newest version of the influent and daily Effluent Supplemental forms the DEP website and use them for future DMR submittals. The effluent looked clear. The field test results were within permit limits. There were no violations noted during inspection.
Other Comments:	There are no open violations associated with this facility or permittee.

Other Comments:


INTERNAL RECYCLE
HEADWORKS BUILDING
SCREEN
LIFT STATION
GRIT REMOVAL
INFLUENT SAMPLING
DISTRIBUTION BOX
(West)
ANAEROBIC ZONE
1st STAGE ANOXIC
1st STAGE AEROBIC
(East)
AIR
GRIT CLASSIFIER
GRIT SLURRY PUMP
TO EQUALIZATION TANK
RAS
INTERNAL RECYCLE
WAS TO DIGESTER
COAGULANT
2nd STAGE ANOXIC
2nd STAGE AEROBIC
WEST CLARIFIER
EAST CLARIFIER
SODIUM HYPOCHLORITE
CHLORINE CONTACT TANK
EFFLUENT SAMPLING (FECAL COLIFORM ONLY)
SODIUM BISULFITE
EFFLUENT SAMPLING
TO OUTFALL
MCCONNELLSBURG SEWERAGE AUTHORITY
NPDES RENEWAL
WWTP
PROCESS DIAGRAM


DECANT TO HEADWORKS
DEWATERING BUILDING
WAS
POLYMER
FLOW METER
CENTRIFUGE
WOOD CHIPS
COMPOSTING (AERATED STATIC PILES)
AEROBIC DIGESTER
SLUDGE PUMPS
CENTRATE TO HEADWORKS
COMPOSTING BLOWERS
MCCONNELLSBURG SEWERAGE AUTHORITY
NPDES RENEWAL
WWTP - BIOSOLIDS
PROCESS DIAGRAM

Compliance History

DMR Data for Outfall 001 (from October 1, 2024 to September 30, 2025)

Parameter	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24
Flow (MGD) Average Monthly	0.228	0.235	0.293	0.395	0.532	0.297	0.296	0.346	0.275	0.271	0.236	0.215
Flow (MGD) Daily Maximum	0.243	0.368	0.340	0.600	1.086	0.338	0.353	0.406	0.284	0.341	0.323	0.241
pH (S.U.) Instantaneous Minimum	7.4	7.3	7.4	7.3	7.3	6.7	7.1	7.1	7.0	7.1	7.2	7.2
pH (S.U.) Instantaneous Maximum	8.0	7.9	7.8	7.7	7.7	7.7	7.6	7.5	7.6	7.6	7.7	7.7
DO (mg/L) Instantaneous Minimum	8.0	7.1	7.3	7.6	8.2	8.6	9.0	9.0	8.7	8.2	7.6	6.6
TRC (mg/L) Average Monthly	< 0.02	< 0.03	0.02	0.01	0.02	< 0.03	0.03	< 0.03	0.04	0.04	0.04	0.03
TRC (mg/L) Instantaneous Maximum	0.04	0.08	0.05	0.06	0.08	0.07	0.09	0.08	0.09	0.09	0.16	0.08
CBOD5 (lbs/day) Average Monthly	4	6	9	10	17	10	8	11	9	9	7.0	8
CBOD5 (lbs/day) Weekly Average	4	6	12	13	27	19	9	18	18	14	10.0	13
CBOD5 (mg/L) Average Monthly	2	3	3.19	3	3.23	< 4.28	3.0	< 3.67	3.96	3.3	3.34	3.81
CBOD5 (mg/L) Weekly Average	2.0	3.0	3.93	3.0	3.91	8.5	3.0	5.39	7.79	4.2	4.36	7.05
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	170	259	522	495	710	589	753	603	637	650	665	497
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	281	312	843	763	1168	757	974	662	1037	949	905	630
BOD5 (mg/L) Raw Sewage Influent Average Monthly	94	129.7	193	146	139	234	296	215	277	246	309	251
TSS (lbs/day) Average Monthly	7	6	9	16	34	17	21	29	16	11	8.0	10

TSS (lbs/day) Raw Sewage Influent Average Monthly	339	243	490	625	884	710	890	599	421	433	734	762
TSS (lbs/day) Raw Sewage Influent Daily Maximum	456	295	1070	1044	1848	989	1361	791	622	483	1095	1158
TSS (lbs/day) Weekly Average	8	11	15	25	65	22	33	57	38	24	13.0	16
TSS (mg/L) Average Monthly	4	3.2	3.4	5.0	6.55	7.0	8.2	9.7	6.6	3.7	3.8	4.7
TSS (mg/L) Raw Sewage Influent Average Monthly	187	122	184	193	159	282	353	219	180	184	341	385
TSS (mg/L) Weekly Average	4	5.6	6.0	6.4	8.0	8.8	12.8	16.8	14.8	5.23	6.4	7.6
Fecal Coliform (No./100 ml) Geometric Mean	9.1	3.2	171	8.6	9.2	< 4.2	22.9	16.7	4.0	4.4	4.0	12
Fecal Coliform (No./100 ml) Instantaneous Maximum	156	15.8	1299.7	10.9	26.2	8.6	53.6	21.6	15	7.4	6.0	23
Nitrate-Nitrite (mg/L) Average Monthly	3.62	< 2.83	3.82	6.48	5.09	5.4	4.96	4.61	4.59	3.91	3.61	4.53
Nitrate-Nitrite (lbs) Total Monthly	201	171	320	648	705	405	394	372	336	290	239.0	276
Total Nitrogen (mg/L) Average Monthly	< 4.15	< 3.34	4.35	7.04	5.72	5.98	5.69	5.41	5.33	4.82	4.64	5.42
Total Nitrogen (lbs) Effluent Net Total Monthly	230	201	365	706	790	450	452	438	390	359	307	330
Total Nitrogen (lbs) Total Monthly	230	201	365	706	790	450	452	438	390	359	307.0	330
Ammonia (lbs/day) Average Monthly	0.02	0.2	0.3	0.3	0.4	0.2	0.3	0.3	0.3	0.2	0.2	0.2
Ammonia (mg/L) Average Monthly	0.1	0.1	0.1	0.1	0.09	0.1	0.1	0.1	0.11	0.1	0.1	0.1
Ammonia (lbs) Total Monthly	6	6	8	10	13	7	8	8	8	7	7.0	6
TKN (mg/L) Average Monthly	< 0.53	< 0.50	0.53	0.56	0.63	0.62	0.73	0.80	0.74	0.91	1.03	0.88
TKN (lbs) Total Monthly	29	30	44	58	85	45	58	66	54	69	68	54
Total Phosphorus (lbs/day) Average Monthly	3	2	2	6	4	3	0.5	2	3.0	4	4.0	5

Total Phosphorus (mg/L) Average Monthly	1.43	0.80	0.83	1.85	0.95	1.02	0.20	0.67	1.09	1.57	1.91	2.29
Total Phosphorus (lbs) Effluent Net Total Monthly	79	48	71	184	131	75	16	55	79	116	127	140
Total Phosphorus (lbs) Total Monthly	79	48	71	184	131	75	16	55	79	116	127.0	140

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	Daily Maximum	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report	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	0.08	XXX	0.28	1/day	Grab
$CBOD_5$ May 1 - Oct 31	75.0	113 Wkly Avg	XXX	15.0	22.5	30.0	1/week	8-Hr Composite
$CBOD_5$ Nov 1 - Apr 30	125	200 Wkly Avg	XXX	25.0	40.0	50.0	1/week	8-Hr Composite
TSS	150	225 Wkly Avg	XXX	30.0	45.0	60.0	1/week	8-Hr Composite
BOD_5 Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/week	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	1/week	Grab
Ammonia May 1 - Oct 31	10.0	XXX	XXX	2.0	XXX	4.0	2/week	8-Hr Composite

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Ammonia Nov 1 - Apr 30	30.0	XXX	XXX	6.0	XXX	12.0	2/week	8-Hr Composite
Total Phosphorus	10.0	XXX	XXX	2.0	XXX	4.0	2/week	8-Hr Composite

Existing Effluent Limitations and Monitoring Requirements

Chesapeake Bay Outfall 001,

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Maximum	Instant. Maximum		
Ammonia---N	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Kjeldahl---N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Net Total Nitrogen	Report	10,959	XXX	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	1,461	XXX	XXX	XXX	XXX	1/month	Calculation

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
D.O.	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.056	XXX	0.18	1/day	Grab
CBOD5 Nov 1 - Apr 30	125.0	200.0	XXX	25.0	40.0	50.0	1/week	8-Hr Composite
CBOD5 May 1 - Oct 31	75.0	113.0	XXX	15.0	22.5	30.0	1/week	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	Report Daily Max	XXX	1/week	8-Hr Composite
TSS	150.0	225.0	XXX	30.0	45.0	60.0	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	Report Daily Max	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Ammonia Nov 1 - Apr 30	30.0	XXX	XXX	6.0	XXX	12.0	2/week	8-Hr Composite
Ammonia May 1 - Oct 31	10.0	XXX	XXX	2.0	XXX	4.0	2/week	8-Hr Composite
Total Phosphorus	10.0	XXX	XXX	2.0	XXX	4.0	2/week	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
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Ammonia---N	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Kjeldahl---N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	Report	XXX	Report	XXX	XXX	2/week	8-Hr Composite
Net Total Nitrogen	Report	10,959	XXX	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	1,461	XXX	XXX	XXX	XXX	1/month	Calculation

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.6
Latitude 39º 55' 32.97" **Longitude** -78º 0' 20.27"
Wastewater Description: Effluent

Technology-Based Limitations

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

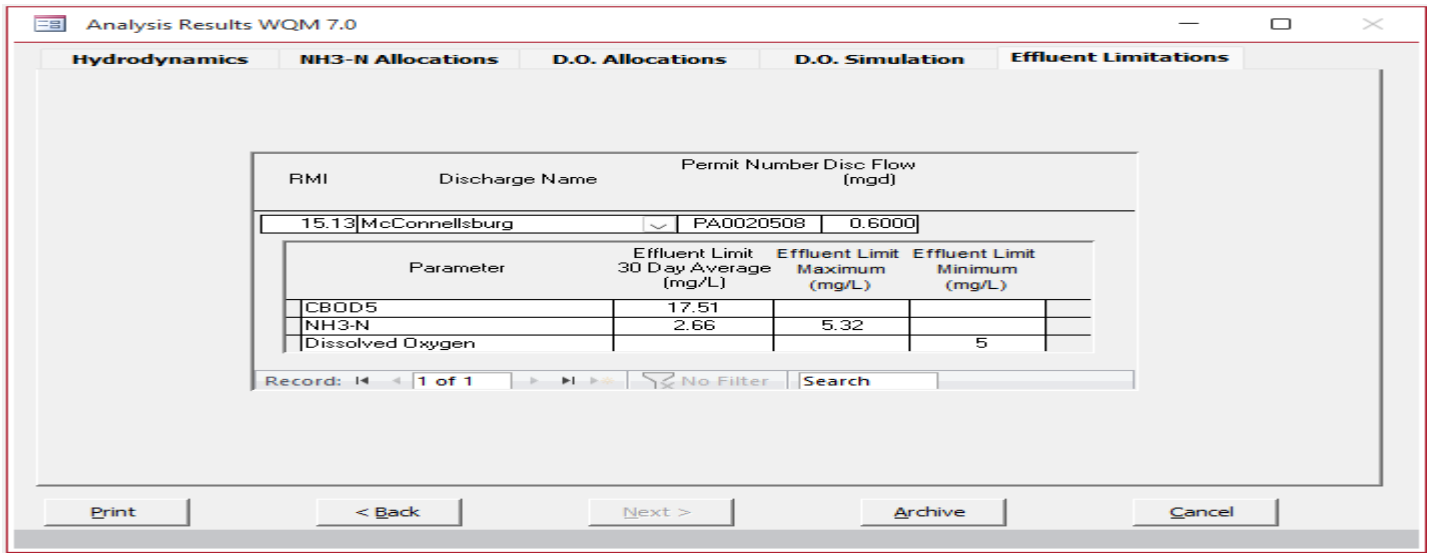
Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.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

Water Quality-Based Limitations

Ammonia (NH_3-N):
NH_3N 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)
*	Background NH_3-N	=	0 mg/L	(Default)



The model input data and results are attached. The printout of the WQM 7.0 output indicates that at a discharge of 0.6 MGD, limits (rounded according to the NPDES Technical Guidance 362-0400-001) of 2.66 mg/L as monthly average and 5.32 mg/L as instantaneous maximum limit during summer to protect water quality standards. However, the existing permit limits of 2.0 mg/L as monthly average and 4 mg/L as instantaneous maximum NH_3-N are more stringent and will remain in effect due to federal anti-backsliding policy. The winter effluent limit will be set at three-times the summer limits. Recent DMRs and inspection reports indicate that the facility has been consistently achieving these limits. Mass limits are calculated as follows:

Summer average monthly mass limit: 2.0 mg/L x 0.6 MGD x 8.34 = 10.0 lbs/day
Winter average monthly mass limit: 10.0 lbs/day x 3 = 30.0 lbs/day

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 renewal and current Department criteria.

Carbonaceous Biochemical Oxygen Demand ($CBOD_5$):
The attached WQM 7.0 modeling results show that secondary treatment is adequate to protect the water quality of the stream. Recent DMRs and inspection reports show that the facility has been consistently achieving concentrations below this existing limit. The WQM 7.0 model suggests a monthly average $CBOD_5$ limit may be 17.48 mg/l, however, the existing summer limit of 15.0 mg/l is more stringent and will remain in place. Mass limits are calculated as follows:

Average monthly mass limit: 15.0 mg/L x 0.6 MGD x 8.34 = 75.06 (75.0) lbs/day
Average weekly mass limit: 22.5 mg/L x 0.6 MGD x 8.34 = 112.59 (113.0) lbs/day

The winter season average monthly limit of 25.0 mg/L, average weekly limit of 40.0 mg/L, and instantaneous maximum limit of 50.0 mg/l will also remain in place. Mass limits are calculated as follows:

Average monthly mass limit: 25.0 mg/L x 0.6 MGD x 8.34 = 125.1 (125.0) lbs/day
Average weekly mass limit: 40.0 mg/L x 0.6 MGD x 8.34 = 200.16 (200.0) lbs/day

Recent DMRs and inspection reports show that the facility has been consistently achieving these limits.

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 1,000/100ml and 25 Pa. Code § 92a.47.(a)(5) requires a winter limit of 2,000/100ml as a geometric mean and an instantaneous maximum not greater than 10,000/100ml. Therefore, instantaneous maximum limits for summer and winter seasons will be introduced in this renewal to be consistent with regulations. Inspection reports are showing that the permittee is capable of meeting this requirement.

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/quarter 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, 45.0 mg/L average weekly, and 60.0 mg/L instantaneous maximum will remain in the permit based on the minimum level of effluent quality attainable by secondary treatment based on 25 Pa. Code § 92a.47 47 and 40CFR 133.102(b). Recent DMRs and inspection reports show that the facility has been consistently achieving these limits. Mass limits are calculated as follows:

Average monthly mass limit: 30.0 mg/L x 0.6 MGD x 8.34 = 150.12 (150.0) lbs/day
Average weekly mass limit: 45.0 mg/L x 0.6 MGD x 8.34 = 225.18 (225.0) lbs/day

Total Phosphorus:
The discharge from this facility is located on Big Cove Creek which is impaired due to nutrients and siltation approximately 0.4 miles downstream from the discharge point. In order to prevent, the effluent phosphorus level must be controlled in accordance with 25 Pa Code § 96.5(c). The Department has determined that limits specified in the existing permit are appropriate (i.e., 2.0 mg/L (average monthly), 4.0 mg/L (instantaneous maximum)) as these limits have been assigned to other facilities with similar technology. Accordingly, existing TP limits will remain in the proposed permit. See the EPA guidance, Nutrient Criteria Technical Guidance Manual – Rivers and Streams, 07/2000 EPA-822-B-00-002, for more information about nutrient impacts on streams. Mass limits are calculated as follows:

Average monthly mass limit: 2.0 mg/L x 0.6 MGD x 8.34 = 10.0 lbs/day

Total Residual Chlorine (TRC):
The attached TRC_CALC printout utilizes the equations and calculations as presented in the Department's 2003 Implementation Guidance for Total Residual Chlorine (TRC) (Document ID#391-2000-015) for developing chlorine limitations. The attached printout indicates average monthly limit of 0.056 mg/L and instantaneous maximum limit of 0.18 mg/L that would be needed to prevent toxicity concerns. The existing permit limits were 0.08 mg/L average monthly and 0.28 mg/L IMAX. However, recent DMRs and inspection reports were 0.04 mg/L average monthly & 0.16 mg/L IMAX that the facility has been consistently achieving these limits. Therefore, a limit of 0.056 mg/l AML, and 0.18 mg/l IMAX are more stringent and recommended for this permit cycle.

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.3	= Q stream (cfs)	0.5	= CV Daily
0.6	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.122	1.3.2.iii	WLA cfc = 0.112
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.045	5.1d	LTA_cfc = 0.065

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.056	AFC
		INST MAX LIMIT (mg/l) = 0.183	

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)

pH:
The effluent discharge pH should remain above 6.0 and below 9.0 standard units according to 25 Pa. Code § 95.2(2).

Temperature:
The facility temperature is not of concern at this time and no monitoring or limitation is necessary.

Toxics:

☑ *Recommended WQBELs & Monitoring Requirements*

No. Samples/Month: 4

Pollutants	Mass Limits AML (lbs/day)	Mass Limits MDL (lbs/day)	Concentration Limits AML	Concentration Limits MDL	Concentration Limits IMAX	Concentration Limits Units	Governing WQBEL	WQBEL Basis	Comments

The data was analyzed based on the guidelines found in DEP's Water Quality Toxics Management Strategy (Document No. 361-0100-003) and DEP's SOP No. BPNPSM-PMT-033. Spreadsheet results are attached to this fact sheet (page 32-41). The Toxics Management Spreadsheet uses the following logic:

a. Establish average monthly and IMAX limits in the draft permit where the maximum reported concentration exceeds 50% of the WQBEL.

b. For non-conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 25% - 50% of the WQBEL.
c. For conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 10%-50% of the WQBEL.

Pollutant testing results on the current (2021) application were reviewed in comparison with DEP's Toxic Management Spreadsheet, version 1.4, May 2023, output no recommends a routine monitoring and/or effluent limit requirements for any pollutants. Therefore, no monitoring requirements need in this proposed permit.

Total Dissolved Solids (TDS):
Total Dissolved Solids and its major constituents including Bromide, Chloride, and Sulfate have become statewide pollutants of concern and threats to DEP's mission to prevent violations of water quality standards. The requirement to monitor these pollutants must be considered under the criteria specified in 25 Pa. Code § 95.10 and the following January 23, 2014 DEP Central Office Directive:

For point source discharges and upon issuance or reissuance of an individual NPDES permit:

- Where the concentration of TDS in the discharge exceeds 1,000 mg/L, or the net TDS load from a discharge exceeds 20,000 lbs/day, and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for TDS, sulfate, chloride, and bromide. Discharges of 0.1 MGD or less should monitor and report for TDS, sulfate, chloride, and bromide if the concentration of TDS in the discharge exceeds 5,000 mg/L.

- Where the concentration of bromide in a discharge exceeds 1 mg/L and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for bromide. Discharges of 0.1 MGD or less should monitor and report for bromide if the concentration of bromide in the discharge exceeds 10 mg/L.

- Where the concentration of 1,4-dioxane (CAS 123-91-1) in a discharge exceeds 10 µg/L and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for 1,4-dioxane. Discharges of 0.1 MGD or less should monitor and report for 1,4-dioxane if the concentration of 1,4-dioxane in the discharge exceeds 100 µg/L.

McConnellsburg Sewage Authority reported the maximum effluent TDS concentration of 448 mg/L, chloride concentration of 89.7 mg/L, sulfate concentration of 90.1 mg/L, and Bromide concentration of <0.011 mg/L. Based upon the data provided in the application, monitor requirements for TDS, Sulfate, Chloride, and Bromide are not needed in the permit.

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

Oil and Grease:
The facility historically had no issues in regard to the presence of Oil and Grease in the effluent (also no visible film on the surface of the receiving water). Therefore, no monitoring of Oil and Grease is necessary.

Hauled-in wastes:
According to the permit renewal application, the hauled-in wastes are as follows:

Source Name	Gallons received	Location received	% Solids
Todd Township WWTP Sludge	15,000	Wasting at pit at Sludge Pumping Facility	1.6%
Hustontown Joint Sewer Auth WWTP Sludge	25,000	Wasting at pit at Sludge Pumping Facility	1.17%
Guest Farm Village Sewer Auth WWTP Sludge	20,000	Wasting at pit at Sludge Pumping Facility	1.34%

PAG073522 general permit was issued on March 6, 2018 to the permittee to handle Exceptional Quality Biosolids.

Chesapeake Bay:
In the Phase 3 WIP Wastewater Supplement revised on July 29, 2022, Table 5 of this document shows that McConnellsburg Borough has been allocated 10,959 lbs/year of TN and 1,461 lbs/year of TP. This approach is consistent with the Chesapeake Bay TMDL was based on the actual performance data previously evaluated by the Department. Since the permittee is easily capable of achieving compliance with these loads, the Department determines that no "compliance schedule" for the requirements associated with the Chesapeake Bay Strategy is necessary. Accordingly, the Chesapeake Bay nutrient existing limitations and monitoring requirements will remain in the proposed permit.

Phase 3 WIP Wastewater Supplement
Revised, July 29, 2022

Table 5: Significant Chesapeake Bay Sewage NPDES Permits Issued

NPDES Permit No.	Phase	Facility	Latest Permit Issuance Date	Permit Expiration Date	Cap Load Compliance Start Date	TN Cap Load (lbs/yr)	TN Offsets Included in Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0020036	3	Blossburg Borough	6/2/2022	6/30/2027	10/1/2012	7,306	-	974	0.521	0.339
PA0020214	3	Mount Union Borough	4/17/2017	4/30/2022	10/1/2013	20,091	-	2,679	0.790	0.351
PA0020249	3	Roaring Spring Borough	1/31/2020	1/31/2025	1/1/2016	12,785	-	1,705	0.713	0.519
PA0020273	2	Milton Regional Sewage Authority	9/25/2017	9/30/2022	10/1/2009	72,217	-	10,049	0.816	.0461
PA0020320	1	Lititz Sewer Authority	7/19/2019	6/30/2023	10/1/2010	70,319	-	9,376	0.593	0.581
PA0020338	3	Kulpmont-Marion Heights Joint Municipal Authority	6/29/2022	6/30/2027	10/1/2011	9,132	-	1,218	0.693	0.386
PA0020486	1	Bellefonte Borough	6/1/2019	5/31/2024	10/1/2010	58,812	-	7,842	0.647	0.333
PA0020508	3	McConnellsburg Borough	1/14/2021	1/30/2026	10/1/2012	10,959	-	1,461	0.700	0.550
PA0020567	3	Northumberland Borough	1/17/2018	9/31/2023	10/1/2012	20,548	-	2,740	0.807	0.462
PA0020583	2	Middleburg Municipal Authority	7/16/2020	7/31/2025	10/1/2012	8,219	-	1,096	0.768	0.322
PA0020621	2	Waynesboro Borough	9/14/2018	9/30/2023	10/1/2013	29,223	-	3,896	0.864	0.725
PA0020664	1	Middletown STP	2/16/2021	2/28/2026	10/1/2011	40,182	-	5,358	0.837	0.503
PA0020800	3	White Deer Township	2/10/2021	2/28/2026	10/1/2011	10,959	-	1,461	0.789	0.448
PA0020818	2	Glen Rock Sewer Authority	9/29/2021	9/30/2026	10/1/2012	10,959	-	1,461	0.750	0.397
PA0020826	1	Dover Township Sewer Authority	6/2/2017	6/30/2022	10/1/2010	146,117	-	19,482	0.543	0.185
PA0020834	2	Franklin County Authority – Greencastle	5/21/2021	5/31/2026	10/1/2012	17,351	-	2,314	0.971	0.742
PA0020885	1	Mechanicsburg Borough Municipal Authority	4/27/2017	4/30/2022	10/1/2012	37,990	-	5,065	0.831	0.492
PA0020893	1	Manheim Borough Authority	3/16/2022	3/31/2027	10/1/2011	20,822	-	2,776	0.819	0.477
PA0020915	2	Pine Grove Borough Authority	3/21/2022	3/31/2027	10/1/2012	27,397	-	3,653	0.511	0.403
PA0020923	1	New Oxford Municipal Authority	11/15/2021	11/30/2026	10/1/2011	32,657	-	4,354	0.631	0.189
PA0021067	1	Mount Joy Borough	2/18/2021	2/28/2026	10/1/2010	27,945	-	3,726	0.698	0.477
PA0021229	3	Littlestown Borough	7/21/2020	7/31/2025	10/1/2014	18,265	-	2,435	0.570	0.720

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Anti-Degradation Requirement

Chapter 93.4a(b) of the Department's rules and regulations require that "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." The discharge is into Big Cove Creek which is classified as Cold-Water Fishes (CWF) and Migratory Fishes (MF.) No High Quality (HQ) Waters are impacted by this discharge. No Exceptional Value (EV) Waters are impacted by this discharge.

Class A Wild Trout Streams:

No Class A Wild Trout Fishery will be impacted by this discharge.

303d Listed Streams:

The discharge from this facility is to Big Cove Creek. This creek is impaired due to nutrients and siltation approximately 0.4 miles downstream from the discharge point, after the confluence with tributary 60577 to Big Cove Creek. The previous permit engineer mentioned that the permittee is aware about the future TMDL and was planning a design for phosphorous removal that can be expanded to meet more stringent limits in future based on the outcome of the TMDL.

WQM 7.0 Data:

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

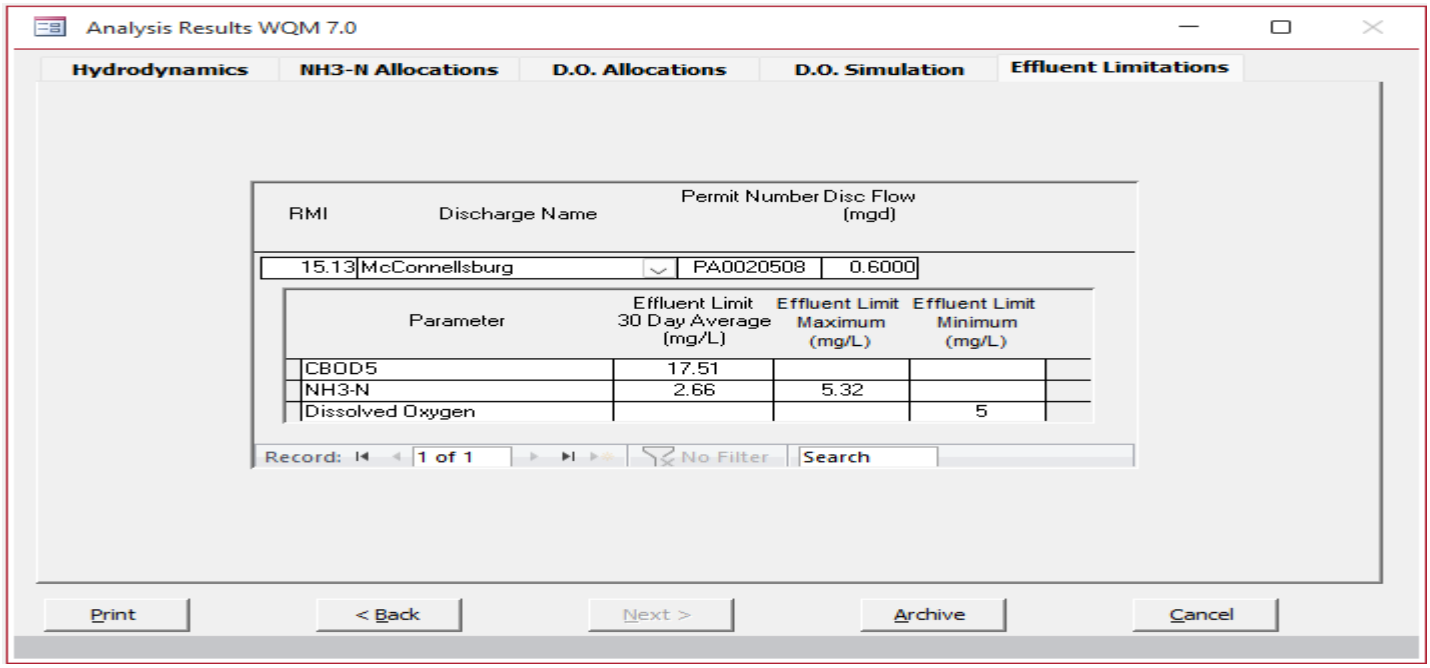
The following two nodes were used in modeling:

Node 1: Outfall 001 on Big Cove Creek (60482)

Elevation:	848.58 ft (USGS National Map Viewer)
Drainage Area:	7.4 $mi.^2$ (USGS PA StreamStats)
River Mile Index:	15.13 (PA DEP eMapPA)
Low Flow Yield:	0.038 $cfs/mi.^2$
Discharge Flow:	0.6 MGD

Node 2: At the confluence with Tributary 60674 to Big Cove Creek

Elevation:	815.2 ft (USGS National Map Viewer)
Drainage Area:	11.1 $mi.^2$ (USGS PA StreamStats)
River Mile Index:	13.645 (PA DEP eMapPA)
Low Flow Yield:	0.038 $cfs/mi.^2$
Discharge Flow:	0.0 MGD



rptEffLimits

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
13B	60482	BIG COVE CREEK

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Eff. Limit 30-day Ave. (mg/L)	Eff. Limit Maximum (mg/L)	Eff. Limit Minimum (mg/L)
15.130	McConnellsburg	PA0020508	0.800	CBOD5	17.51		
				NH3-N	2.66	5.32	
				Dissolved Oxygen			5

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rpt_WLA

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
13B	60482	BIG COVE 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
15.130	McConnellsburg	16.76	20.01	16.76	20.01	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
15.130	McConnellsburg	1.89	2.66	1.89	2.66	0	0

Dissolved Oxygen Allocations

		CBOD5		NH3-N		Dissolved Oxygen			
RMI	Discharge Name	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Critical Reach	Percent Reduction
15.13	McConnellsburg	17.51	17.51	2.66	2.66	5	5	0	0

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rptDOSim

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
13B	60482	BIG COVE CREEK

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
15.130	0.800	20.000	7.000
Reach Width (ft)	Reach Depth (ft)	Reach WD Ratio	Reach Velocity (fps)
15.528	0.525	29.600	0.148
Reach CBOD5 (mg/L)	Reach Kc (1/days)	Reach NH3-N (mg/L)	Reach Kn (1/days)
13.910	1.002	2.04	0.700
Reach DO (mg/L)	Reach Kr (1/days)	Kr Equation	Reach DO Goal (mg/L)
5.754	6.006	Tsivoglou	5
Reach Travel Time (days)			
0.611			

Subreach Results

Trav Time (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.061	13.08	1.96	5.44
0.122	12.30	1.88	5.29
0.183	11.57	1.80	5.27
0.245	10.88	1.72	5.31
0.306	10.24	1.65	5.41
0.367	9.63	1.58	5.53
0.428	9.06	1.52	5.68
0.489	8.52	1.45	5.83
0.550	8.01	1.39	5.99
0.611	7.54	1.33	6.14

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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	0.84	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

SWP Basin	Stream Code	Stream Name
13B	60482	BIG COVE CREEK

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
Q7-10 Flow												
15.130	0.28	0.00	0.28	9282	0.00426	.525	15.53	29.6	0.15	0.811	20.00	7.00
Q1-10 Flow												
15.130	0.18	0.00	0.18	9282	0.00426	NA	NA	NA	0.14	0.642	20.00	7.00
Q30-10 Flow												
15.130	0.38	0.00	0.38	9282	0.00426	NA	NA	NA	0.16	0.584	20.00	7.00

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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
13B	60482	BIG COVE CREEK	15.130	848.58	7.40	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	0.038	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
McConnellsburg	PA0020508	0.6000	0.6000	0.6000	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

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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
13B	60482	BIG COVE CREEK	13.645	815.20	11.10	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	0.038	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
McConnellsburg	PA0020508	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

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Toxic:

- Discharge pH = 7.2 (average 2025 renewal application)
- Discharge Hardness = 100 mg/L (Default)
- Stream pH = 7.0 (Default)
- Stream Hardness = 100 mg/L (Default)
- Background NH_3-N = 0 mg/L (Default)

Node 1: Outfall 001 on Big Cove Creek (60482)
Elevation: 848.58 ft (USGS National Map Viewer)
Drainage Area: 7.4 $mi.^2$ (USGS PA StreamStats)
River Mile Index: 15.13 (PA DEP eMapPA)
Low Flow Yield: 0.038 $cfs/mi.^2$
Discharge Flow: 0.6 MGD

Node 2: At the confluence with Tributary 60674 to Big Cove Creek
Elevation: 815.2 ft (USGS National Map Viewer)
Drainage Area: 11.1 $mi.^2$ (USGS PA StreamStats)
River Mile Index: 13.645 (PA DEP eMapPA)
Low Flow Yield: 0.038 $cfs/mi.^2$
Discharge Flow: 0.0 MGD

☑ ***Recommended WQBELs & Monitoring Requirements***

No. Samples/Month: 4

Pollutants	Mass Limits AML (lbs/day)	Mass Limits MDL (lbs/day)	Concentration Limits AML	Concentration Limits MDL	Concentration Limits IMAX	Concentration Limits Units	Governing WQBEL	WQBEL Basis	Comments

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Discharge Information

Instructions | Discharge | Stream

Facility: McConnellsburg Sewerage Authority NPDES Permit No.: PA0020508 Outfall No.: 001

Evaluation Type: Custom / Additives Wastewater Description: Big Cove Creek

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q_{7-10}	Q_h
0.6	100	7.2						

Discharge Pollutant	Units	Max Discharge Conc		0 if left blank: Trib Conc	0 if left blank: Stream Conc	0.5 if left blank: Daily CV	0.5 if left blank: Hourly CV	0 if left blank: Strea m CV	0 if left blank: Fate Coeff	0 if left blank: FOS	1 if left blank: Criteri a Mod	1 if left blank: Chem Transl
Total Dissolved Solids (PWS)	mg/L		448									
Chloride (PWS)	mg/L		89.7									
Bromide	mg/L	<	0.011									
Sulfate (PWS)	mg/L		90.1									
Total Copper	mg/L		0.0122									
Total Lead	mg/L		0.00059									
Total Zinc	mg/L		0.0576									
Total Chromium	mg/L	<	0.00199									
Total Nickel	mg/L		0.00351									

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Stream / Surface Water Information

McConnellsburg Sewerage Authority, NPDES Permit No. PA0020508, Outfall 001

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **Big Cove Creek**

No. Reaches to Model: **1**

- (●) Statewide Criteria
- ( ) Great Lakes Criteria
- ( ) ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi²)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	060482	15.13	848.58	7.4			Yes
End of Reach 1	060482	13.645	815.2	11.1			Yes

$Q_{7\text{-}10}$

Location	RMI	LFY (cfs/mi²)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	15.13	0.038										100	7		
End of Reach 1	13.645	0.038													

Q_h

Location	RMI	LFY (cfs/mi²)	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	15.13														
End of Reach 1	13.645														

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Model Results

McConnellsburg Sewerage Authority, NPDES Permit No. PA0020508, Outfall 001

Instructions | *Results* | RETURN TO INPUTS | SAVE AS PDF | PRINT | (●) All ( ) Inputs ( ) Results ( ) Limits

☐ ***Hydrodynamics***

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 0.721 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.14

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	13.439	14.0	18.2	Chem Translator of 0.96 applied
Total Lead	0	0		0	64.581	81.6	106	Chem Translator of 0.791 applied
Total Zinc	0	0		0	117.180	120	156	Chem Translator of 0.978 applied
Total Nickel	0	0		0	468.236	469	611	Chem Translator of 0.998 applied

☑ ***CFC*** CCT (min): 0.721 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.14

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	8.956	9.33	12.2	Chem Translator of 0.96 applied
Total Lead	0	0		0	2.517	3.18	4.15	Chem Translator of 0.791 applied
Total Zinc	0	0		0	118.139	120	156	Chem Translator of 0.986 applied
Total Nickel	0	0		0	52.007	52.2	68.0	Chem Translator of 0.997 applied

☑ ***THH*** CCT (min): 0.721 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	

Chloride (PWS)	0	0		0	250,000	250,000	N/A	
Sulfate (PWS)	0	0		0	250,000	250,000	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	
Total Nickel	0	0		0	610	610	795	

☑ *CRL* CCT (min): 3.560 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	
Total Nickel	0	0		0	N/A	N/A	N/A	

☑ ***Recommended WQBELs & Monitoring Requirements***

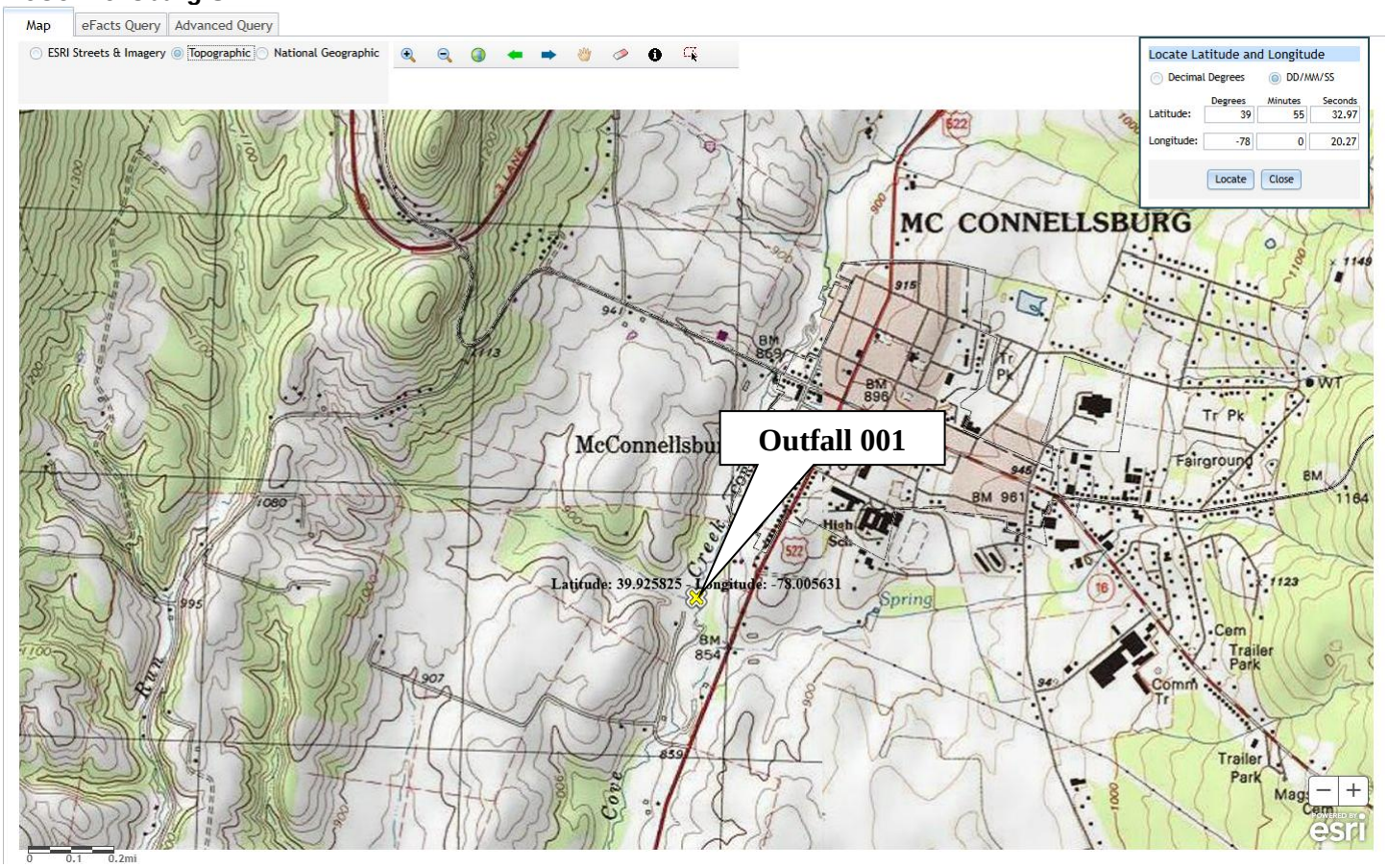
No. Samples/Month: 4

	Mass Limits		*Concentration Limits*						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments

☑ ***Other Pollutants without Limits or Monitoring***

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments
Total Dissolved Solids (PWS)	N/A	N/A	PWS Not Applicable
Chloride (PWS)	N/A	N/A	PWS Not Applicable
Bromide	N/A	N/A	No WQS
Sulfate (PWS)	N/A	N/A	PWS Not Applicable
Total Copper	12.2	µg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	4.15	µg/L	Discharge Conc ≤ 10% WQBEL
Total Zinc	120	µg/L	Discharge Conc ≤ 10% WQBEL
Total Chromium	N/A	N/A	No WQS
Total Nickel	68.0	µg/L	Discharge Conc ≤ 10% WQBEL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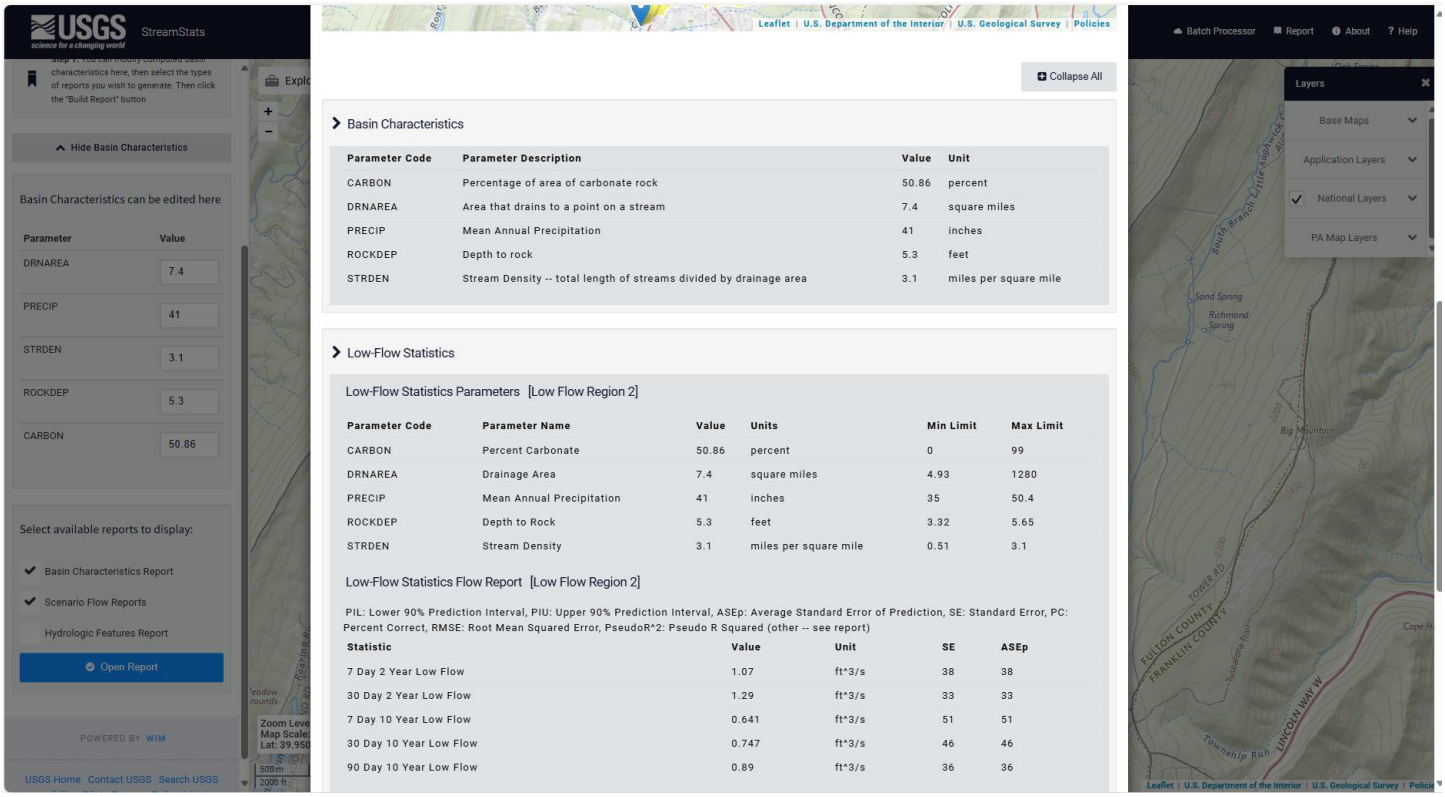
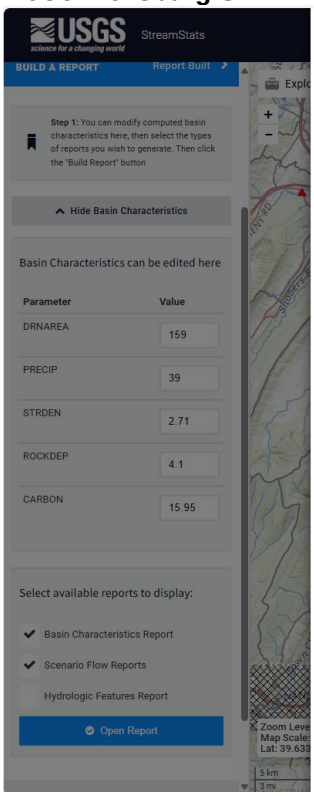
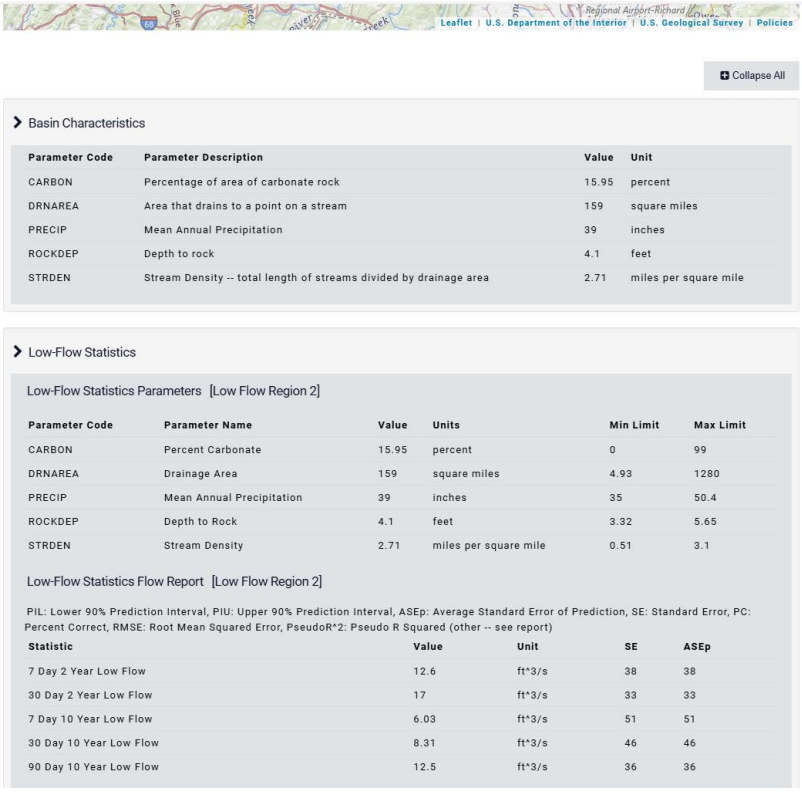
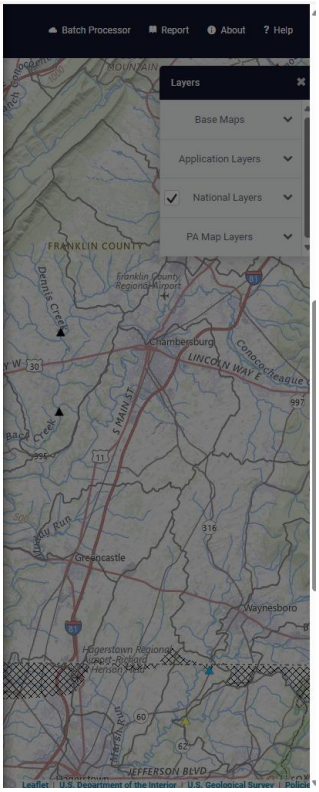
eFacts Query
Advanced Query
ESRI Streets & Imagery
Topographic
National Geographic
Locate Latitude and Longitude
Decimal Degrees
DD/MM/SS
Degrees Minutes Seconds
Latitude: 39 55 32.97
Longitude: -78 0 20.27
Locate
Close
MC CONNELLSBURG
Outfall 001
Latitude: 39.925825 , Longitude: -78.005631
Fairground
Trailer Park
Spring
0 0.1 0.2mi
esri


USGS StreamStats
Hide Basin Characteristics
Basin Characteristics can be edited here
Parameter Value
DRNAREA 7.4
PRECIP 41
STRDEN 3.1
ROCKDEP 5.3
CARBON 50.86
Select available reports to display:
Basin Characteristics Report
Scenario Flow Reports
Hydrologic Features Report
Open Report
Collapse All
Basin Characteristics
Parameter Code | Parameter Description | Value | Unit
CARBON | Percentage of area of carbonate rock | 50.86 | percent
DRNAREA | Area that drains to a point on a stream | 7.4 | square miles
PRECIP | Mean Annual Precipitation | 41 | inches
ROCKDEP | Depth to rock | 5.3 | feet
STRDEN | Stream Density -- total length of streams divided by drainage area | 3.1 | 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 | 50.86 | percent | 0 | 99
DRNAREA | Drainage Area | 7.4 | square miles | 4.93 | 1280
PRECIP | Mean Annual Precipitation | 41 | inches | 35 | 50.4
ROCKDEP | Depth to Rock | 5.3 | feet | 3.32 | 5.65
STRDEN | Stream Density | 3.1 | 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 | 1.07 | ft^3/s | 38 | 38
30 Day 2 Year Low Flow | 1.29 | ft^3/s | 33 | 33
7 Day 10 Year Low Flow | 0.641 | ft^3/s | 51 | 51
30 Day 10 Year Low Flow | 0.747 | ft^3/s | 46 | 46
90 Day 10 Year Low Flow | 0.89 | ft^3/s | 36 | 36
Batch Processor
Report
About
Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers


USGS
StreamStats
BUILD A REPORT
Report Built
Step 1: You can modify computed basin characteristics here, then select the types of reports you wish to generate. Then click the "Build Report" button
Hide Basin Characteristics
Basin Characteristics can be edited here
Parameter
Value
DRNAREA
159
PRECIP
39
STRDEN
2.71
ROCKDEP
4.1
CARBON
15.95
Select available reports to display:
Basin Characteristics Report
Scenario Flow Reports
Hydrologic Features Report
Open Report


Leaflet | U.S. Department of the Interior | U.S. Geological Survey | Policies
Collapse All
Basin Characteristics
Parameter Code | Parameter Description | Value | Unit
CARBON | Percentage of area of carbonate rock | 15.95 | percent
DRNAREA | Area that drains to a point on a stream | 159 | square miles
PRECIP | Mean Annual Precipitation | 39 | inches
ROCKDEP | Depth to rock | 4.1 | feet
STRDEN | Stream Density -- total length of streams divided by drainage area | 2.71 | 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 | 15.95 | percent | 0 | 99
DRNAREA | Drainage Area | 159 | square miles | 4.93 | 1280
PRECIP | Mean Annual Precipitation | 39 | inches | 35 | 50.4
ROCKDEP | Depth to Rock | 4.1 | feet | 3.32 | 5.65
STRDEN | Stream Density | 2.71 | 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 | 12.6 | ft^3/s | 38 | 38
30 Day 2 Year Low Flow | 17 | ft^3/s | 33 | 33
7 Day 10 Year Low Flow | 6.03 | ft^3/s | 51 | 51
30 Day 10 Year Low Flow | 8.31 | ft^3/s | 46 | 46
90 Day 10 Year Low Flow | 12.5 | ft^3/s | 36 | 36


Batch Processor
Report
About
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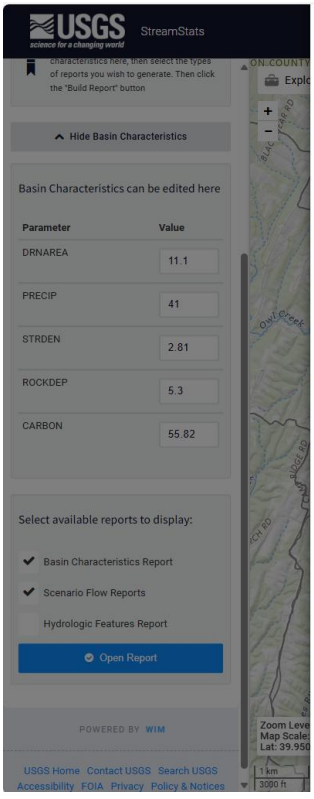
Layers
Base Maps
Application Layers
National Layers
PA Map Layers
FRANKLIN COUNTY
Chambersburg
Greencastle
Waynesboro
JEFFERSON BLVD


USGS
StreamStats
Hide Basin Characteristics
Basin Characteristics can be edited here
Parameter
Value
DRNAREA
11.1
PRECIP
41
STRDEN
2.81
ROCKDEP
5.3
CARBON
55.82
Select available reports to display:
Basin Characteristics Report
Scenario Flow Reports
Hydrologic Features Report
Open Report
POWERED BY WIM
USGS Home Contact USGS Search USGS
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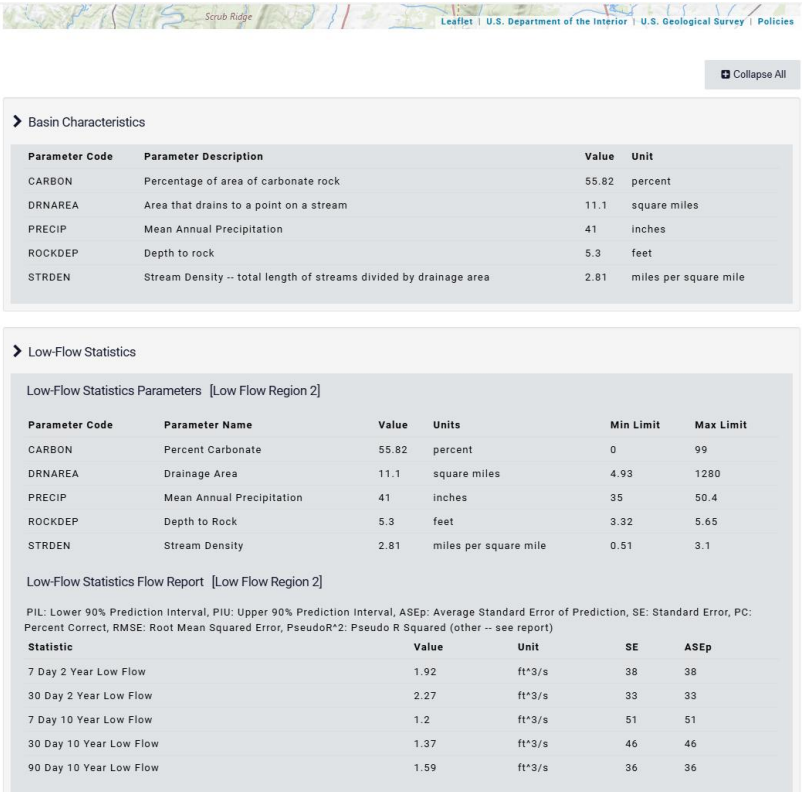
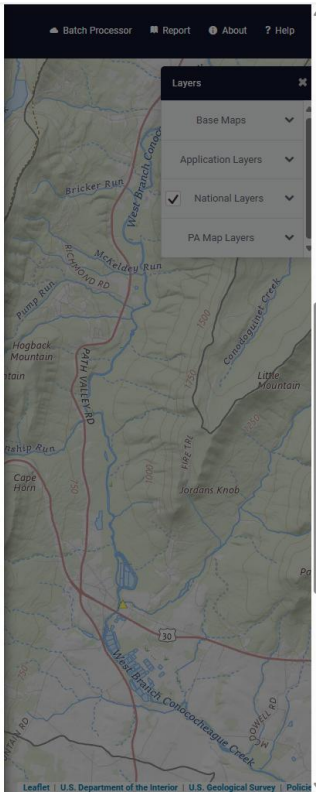

Leaflet | U.S. Department of the Interior | U.S. Geological Survey | Policies
Collapse All
Basin Characteristics
Parameter Code | Parameter Description | Value | Unit
CARBON | Percentage of area of carbonate rock | 55.82 | percent
DRNAREA | Area that drains to a point on a stream | 11.1 | square miles
PRECIP | Mean Annual Precipitation | 41 | inches
ROCKDEP | Depth to rock | 5.3 | feet
STRDEN | Stream Density -- total length of streams divided by drainage area | 2.81 | 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 | 55.82 | percent | 0 | 99
DRNAREA | Drainage Area | 11.1 | square miles | 4.93 | 1280
PRECIP | Mean Annual Precipitation | 41 | inches | 35 | 50.4
ROCKDEP | Depth to Rock | 5.3 | feet | 3.32 | 5.65
STRDEN | Stream Density | 2.81 | 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 | 1.92 | ft^3/s | 38 | 38
30 Day 2 Year Low Flow | 2.27 | ft^3/s | 33 | 33
7 Day 10 Year Low Flow | 1.2 | ft^3/s | 51 | 51
30 Day 10 Year Low Flow | 1.37 | ft^3/s | 46 | 46
90 Day 10 Year Low Flow | 1.59 | ft^3/s | 36 | 36


Batch Processor
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Base Maps
Application Layers
National Layers
PA Map Layers
Bricker Run
West Branch Conococheague Creek
Hogback Mountain
Little Mountain
Jordans Knob
Cape Horn

McConnellsburg Sewerage Authority
Renewal of NPDES Permit No. PA0020508
Industrial / Commercial Wastewater Contributors

Business Name	Type of Business	Average Wastewater Flow (MGD)
Peck Insurance Agency	Office	0.00017
Countryside Coin Laundry	Laundromat	0.00119
Quick 'n Easy Auto Wash	Car Wash	0.00085
Door of Hope Church	Church	0.00017
Giant	Grocery Store	0.00119
Wine & Spirits Store #2901	Retail Store	0.00017
Arch Telecom	Retail Store	0.00017
Sheetz	Gas Station and Convenience Store	0.00051
A & M Fitness	Fitness Center	0.00017
A to Z Land Consulting Services LLC	Office	0.00017
Wells Fargo	Office	0.00017
Bedford/Fulton Head Start	Childcare	0.00017
Saint Stephen Catholic Church	Church	0.00034
Antietam Iron Center	Offices	0.00017
Clugston's Market	Retail Store	0.00017
AutoZone	Auto Parts Store	0.00017
Fulton Pub	Restaurant	0.00034
Dorothy Berry Beauty Salon	Beauty Salon	0.00017
Main Moon Chinese Restaurant	Restaurant	0.00017
Krazy Rays BBQ	Restaurant	0.00051
Save-A-Lot	Grocery Store	0.00051
McLaughlin Drug Store	Retail Store	0.00017
Family Dollar	Retail Store	0.00017
Buchanan Trail Sportsters	Retail Store	0.00017
Eddy's Engraving	Retail Store	0.00017
Area Agency on Aging	Office	0.00017
Boost Mobile	Retail Store	0.00017
PA Health Department	Office	0.00017
Vape Kings	Retail Store	0.00017
Fendley Financial	Office	0.00017
Michael Binder Garage	Auto Repair	0.00017
Ridgelined	Auto Body Shop	0.00017
Michael Binder Office Building	Offices	0.00051
Borough of McConnellsburg	Office	0.00017
Randy Bunch Rentals	Beauty Salon/Spa	0.00051
Fulton Post American Legion	Civic/Social Hall	0.00136
Center for Community Action	Offices	0.00085
Central Fulton School District	Public School	0.01445
William Clevenger Rentals	Food Stands	0.00034
Agway	Retail Store	0.00017
Community State Bank of Orbisonia	Bank	0.00017
Conair Corporation / Waring Products	Manufacturer of electric housewares	0.00204
Kelso-Cornelius Funeral Home	Funeral Home	0.00017
County of Fulton	County Agency Offices	0.00289
Fulton County Senior Center	Community Hall	0.00017
Great Cove Road Partership	Office	0.00017

Business Name	Type of Business	Average Wastewater Flow (MGD)
Great Cove Road Partership	Auto Repair	0.00017
P & H Flooring	Retail Store	0.00017
Kwality Karpets	Retail Store	0.00017
Flawless Roots by Alena Everts	Beauty Salon	0.00017
Evangel Assembly of God	Church	0.00017
F & M Trust Company	Bank	0.00068
F & M Trust Company	Community Hall	0.00017
Olde Town Kitchen	Restaurant	0.00017
Fulton County Historical Society	Museum	0.00017
Fulton County Library Inc	Library	0.00017
Fulton Precision Industries	Precision Machining	0.00238
Gerald R Peck Transportation	Office	0.00017
CG Racing Engines	Auto Repair	0.00017
Fulton County News	Newspaper Office	0.00017
McConnellsburg True Value	Retail Store	0.00017
McConnellsburg Veterinary Clinic	Veterinarian	0.00017
Howard Sipes, Inc	Funeral Home	0.00017
Missy's Outlet	Retail Store	0.00017
JLG Industries Inc	Manufacturer of access equipment	0.02686
Dollar General	Retail Store	0.00017
Fulton County Chiropractic	Chiropractor Office	0.00017
Junction Motel	Motel	0.00136
John A Kelso Garage	Auto Repair	0.00017
Dr. Rachel Kendall, DMD	Dentist Office	0.00017
Travis Kendall	Office	0.00017
Law Office of Stanley Kerlin	Law Office	0.00017
Joey L. Lane, OD	Eye Doctor Office	0.00017
Lake Insurance	Office	0.00017
Souders Garage	Auto Repair	0.00017
Ed Lininger Plumbing, Heating & AC	Office - Plumbing & HVAC Contractor	0.00017
Marmon/Keystone LLC	Distributor of pipe, tubing, and speciality bar	0.00017
McConnellsburg Alumni Building	Community Hall	0.00017
McConnellsburg Citgo	Gas Station and Repair Shop	0.00034
McConnellsburg United Presbyterian Church	Church	0.00017
McConnellsburg Volunteer Fire Co	Fire Company	0.00034
McDonald's	Restaurant	0.00051
Keystone Electric	Office - Electrical Contractor	0.00017
Dick's Home Care	Retail Store	0.00017
Edward Jones	Office	0.00017
McConnellsburg Motor & Implement	Retail - Agricultural equipment and supplies	0.00017
Mountain View Mennonite Church	Church	0.00017
Mount Zion Masonic Temple	Church	0.00017
Palmer Realty	Office	0.00017
Palmers Construction Company	Commercial Construction Company	0.00017
Peckwood Inc	Restaurant	0.00017
Donald L. Peck Enterprises	Office	0.00017
Peckies Auto Body	Auto Repair	0.00017
USPS	Post Office	0.00017
PA State Police	State Agency	0.00017
Mamma's Pizza	Restaurant	0.00017
Tickle Your Fancy Gifts and Tea	Retail Store	0.00017
Town & Country Real Estate	Office	0.00017

Business Name	Type of Business	Average Wastewater Flow (MGD)
Tangles Hair Salon	Beauty Salon	0.00017
Ronald Richards Rental	Office	0.00017
Rock Kwest Rental	Beauty Salon	0.00017
PennDOT Photo License Center	Office	0.00017
Tractor Supply	Retail Store	0.00017
GM Shearer	Office - Plumbing & HVAC Contractor	0.00017
Shoemaker's Insurance	Office	0.00017
Sister Suds LLC	Retail Store	0.00017
Robert Snyder Insurance Agency	Office	0.00034
St Paul Evangelical Lutheran Church	Church	0.00017
St Paul's United Church of Christ	Church	0.00017
Jack D. Steele DMD	Dentist Office	0.00017
Rep. Jesse Topper	Office	0.00017
Fulton County Medical Center	Medical Center	0.02295
The Garlic Knot	Restaurant	0.00034
Edward Jones	Office	0.00017
Tri State Community Health Center	Medical Center	0.00068
TrueNorth Wellness Services	Office	0.00017
Mendy Ulsh Rental	Auto Repair	0.00017
United Methodist Church	Church	0.00017
Brightspeed / CenturyLink	Office	0.00017
Veterans of Foreign Wars Post 655	Civic/Social Hall	0.00051
DA Washabaugh Enterprises	Office	0.00017
Dave's Putting a New Leash on Life	Retail Store	0.00017
Family Behavorial Resources	Office	0.00017
McConnellsburg Borough Municipal Authority	Municipal Water Authority	0.00034
First Energy/West Penn Power	Office and Truck Staging Area	0.00068
Dana Signs & Graphics	Signage Company	0.00017
Ashman's Cozy Nest	Retail Store	0.00017
Prime Time Capital Rental	Retail Store	0.00017
	Total =	0.10336

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: