

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0218103
APS ID 1038302
Authorization ID 1353841

Applicant and Facility Information

Applicant Name	<u>Worthington West Franklin Joint Municipal Authority</u>	Facility Name	<u>Worthington West Franklin Joint Municipal Authority</u>
Applicant Address	<u>102 West Main Street Worthington, PA 16262</u>	Facility Address	<u>Race Street Extension Worthington, PA 16262</u>
Applicant Contact	<u>David Johns, Plant Operator (westfranklinwo@aol.com)</u>	Facility Contact	<u>David Johns, Plant Operator (westfranklinwo@aol.com)</u>
Applicant Phone	<u>(724) 297-5630</u>	Facility Phone	<u>(724) 297-5630</u>
Client ID	<u>63398</u>	Site ID	<u>714195</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>West Franklin Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Armstrong</u>
Date Application Received	<u>April 23, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>May 12, 2021</u>	If No, Reason	<u>-</u>
Purpose of Application	<u>Renewal of an NPDES Permit for an existing discharge of treated sanitary wastewater.</u>		

Summary of Review

Act 14 - Proof of Notification was submitted and received.
A Part II Water Quality Management permit is not required at this time.
The applicant should be able to meet the limits of this permit, which will protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

- A. Stormwater into Sewers
- B. Right of Way
- C. Solids Handling

SPECIAL CONDITIONS:

- II. Solids Management

There is 1 open violation in effects associated with the subject Client ID (63398) as of 9/21/2023 (see Attachment 2). [9/22/2023 CWY](#)

Approve	Deny	Signatures	Date
X		Stephen A. McCauley Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	9/21/2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	9/22/2023

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.25</u>
Latitude	<u>40° 50' 8.00"</u>	Longitude	<u>-79° 38' 58.00"</u>
Quad Name	<u>-</u>	Quad Code	<u>-</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Buffalo Creek (HQ-TSF)</u>	Stream Code	<u>42557</u>
NHD Com ID	<u>123973813</u>	RMI	<u>20.1</u>
Drainage Area	<u>78.1</u>	Yield (cfs/mi ²)	<u>0.027</u>
Q ₇₋₁₀ Flow (cfs)	<u>2.1</u>	Q ₇₋₁₀ Basis	<u>calculated</u>
Elevation (ft)	<u>979</u>	Slope (ft/ft)	<u>0.00266</u>
Watershed No.	<u>18-F</u>	Chapter 93 Class.	<u>HQ-TSF*</u>
Existing Use	<u>-</u>	Existing Use Qualifier	<u>-</u>
Exceptions to Use	<u>-</u>	Exceptions to Criteria	<u>-</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>-</u>		
Source(s) of Impairment	<u>-</u>		
TMDL Status	<u>-</u>	Name	<u>-</u>
Background/Ambient Data			
		Data Source	
pH (SU)	<u>-</u>	<u>-</u>	
Temperature (°F)	<u>-</u>	<u>-</u>	
Hardness (mg/L)	<u>-</u>	<u>-</u>	
Other:	<u>-</u>	<u>-</u>	
Nearest Downstream Public Water Supply Intake		<u>Harrison Township Water Authority</u>	
PWS Waters	<u>Allegheny River</u>	Flow at Intake (cfs)	<u>2,250</u>
PWS RMI	<u>24.2</u>	Distance from Outfall (mi)	<u>24.6</u>

* - This is an existing discharge to a stream that is designated as High Quality. The discharge has been previously approved to flow to this stream and that approval will be continued with this renewal.

Sludge use and disposal description and location(s): Sludge is land applied under permit no. PAG086116 by Atkinson Hauling to the Claypoole Farm in Armstrong County.

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.

Narrative: This Fact Sheet details the determination of draft NPDES permit limits for an existing discharge of 0.25 MGD of treated sewage from a municipal STP in West Franklin Township, Armstrong County.

Treatment permitted under WQM Permit 0305402 consists of the following: A comminutor, micro-strainer, grit removal, 2 SBR tanks, post equalization, and ultraviolet (UV) light disinfection. Sludge is handled through an aerobic digester and sludge drying beds.

1. Streamflow:

Buffalo Creek near Freeport, PA - USGS Gage No. 03049000 (1942-2008):

Q ₇₋₁₀ :	<u>3.8</u>	cfs	(USGS StreamStats)
Drainage Area:	<u>137</u>	sq. mi.	(USGS StreamStats)
Yieldrate:	<u>0.027</u>	cfs/m	(Calculated)

Buffalo Creek at Outfall 001:

Yieldrate:	<u>0.027</u>	cfs/m	(Calculated above)
Drainage Area:	<u>78.1</u>	sq. mi.	(USGS StreamStats)
% of stream allocated:	<u>100%</u>	Basis:	<u>No nearby discharges</u>
Q ₇₋₁₀ :	<u>2.1</u>	cfs	(Calculated)

2. Wasteflow:

Maximum discharge: 0.25 MGD = 0.38 cfs

Runoff flow period: 24 hours Basis: Runoff flow for municipal STPs

The calculated stream flow (Q₇₋₁₀) is greater than 3 times the permitted discharge flow. In accordance with the SOP, since this is an existing discharge, the treatment requirements in document number 391-2000-014, titled, "Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers", dated April 12, 2008, were not evaluated for this facility.

Flow will be required to be monitored as authorized under Chapter 92a.61, and as recommended in the SOP.

3. Parameters:

The following parameters were evaluated: pH, Total Suspended Solids, Fecal Coliform, E. Coli, Total Phosphorus, Total Nitrogen, NH₃-N, CBOD₅, Dissolved Oxygen, and Disinfection.

a. pH

Between 6.0 and 9.0 at all times

Basis: Application of Chapter 93.7 technology-based limits.

The measurement frequency was previously set to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001), and will be retained.

b. Total Suspended Solids

Limits are 30.0 mg/l as a monthly average and 60.0 as an instantaneous maximum.

Basis: Application of Chapter 92a47 technology-based limits. However, the previous, more restrictive, TSS limits will be retained with this renewal since they are attainable.

c. Fecal Coliform

05/01 - 09/30: 200/100ml (monthly average geometric mean)
1,000/100ml (instantaneous maximum)

10/01 - 04/30: 2,000/100ml (monthly average geometric mean)
10,000/100ml (instantaneous maximum)

Basis: Application of Chapter 92a47 technology-based limits

d. E. Coli

Monitoring was added for E. Coli at a frequency of 1/quarter.

Basis: Application of Chapter 92a.61 as recommended by the SOP for flows greater than 0.05 MGD and less than 1.0 MGD.

e. Phosphorus

Chapter 96.5 does not apply. Therefore, the previous monitoring for Total Phosphorus will be retained in accordance with the SOP, based on Chapter 92a.61.

f. Total Nitrogen

The previous monitoring for Total Nitrogen will be retained in accordance with the SOP, based on Chapter 92a.61.

g. Ammonia-Nitrogen (NH₃-N)

Median discharge pH to be used: 7.6 Standard Units (S.U.)

Basis: eDMR data from previous 12 months

Discharge temperature: 25°C (default value used in the absence of data)

Median stream pH to be used: 7.0 Standard Units (S.U.)

Basis: default value used in the absence of data

Stream Temperature: 25°C (default value used for TSF modeling)

Background NH₃-N concentration: 0.0 mg/l

Basis: Default value

Calculated NH₃-N Summer limits: 11.3 mg/l (monthly average)
22.6 mg/l (instantaneous maximum)

Calculated NH₃-N Winter limits: 25.0 mg/l (monthly average)
50.0 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the summer NH₃-N limits above (see Attachment 1). The winter limits are calculated as three times the summer limits, but since the technology-based limits would

govern, they will be used. The calculated limits are less restrictive than in the previous permit. Based on eDMR data, the previous limits are attainable so they will be retained.

h. CBOD₅

Median discharge pH to be used: 7.6 Standard Units (S.U.)

Basis: eDMR data from previous 12 months

Discharge temperature: 25°C (default value used in the absence of data)

Median stream pH to be used: 7.0 Standard Units (S.U.)

Basis: default value used in the absence of data

Stream Temperature: 25°C (default value used for TSF modeling)

Background CBOD₅ concentration: 2.0 mg/l

Basis: Default value

Calculated CBOD₅ limits: 25.0 mg/l (monthly average)

50.0 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the calculated CBOD5 limits above (see Attachment 1). These limits are less restrictive than the previous permit. The previous, more restrictive, summer CBOD5 limits will be set as year round and will be retained with this renewal since they are attainable.

i. Influent Total Suspended Solids and BOD₅

Monitoring for these two parameters will be retained as recommended in the SOP for POTWs, as authorized under Chapter 92a.61.

j. Dissolved Oxygen (DO)

The technology-based minimum of 4.0 mg/l is recommended by the WQ Model (see Attachment 1) and the SOP based on Chapter 93.7, under the authority of Chapter 92a.61. The previous, more restrictive, DO limit of 5.0 mg/l will be retained with this renewal since it is attainable.

The measurement frequency was previously set to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001), and will be retained.

k. Disinfection

Ultraviolet (UV) light monitoring

Total Residual Chlorine (TRC) limits: _____ mg/l (monthly average)
_____ mg/l (instantaneous maximum)

Basis: Monitoring for UV Transmittance (%) will be retained with this renewal.

The measurement frequency was previously set to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001), and will be retained.

4. Reasonable Potential Analysis for Receiving Stream:

A Reasonable Potential Analysis was not performed in accordance with State practices for Outfall 001 using the Department's Toxics Management Spreadsheet since no sampling other than sewage-related parameters was performed for this facility with the renewal application.

5. Reasonable Potential for Downstream Public Water Supply (PWS):

The Department's Toxics Management Spreadsheet does not calculate limits for parameters that are based on PWS criteria (TDS, Chloride, Bromide, and Sulfate).

Nearest Downstream potable water supply (PWS): Harrison Township Water Authority
 Distance downstream from the point of discharge: 24.6 miles (approximate)

Parameter	PWS Criteria (mg/l)	Discharge Maximum (mg/l)
TDS	500	20,400
Chloride	250	85.6
Bromide	1.0	0.161
Sulfate	250	42.0

Since the TDS concentration is much greater than the PWS criteria, a mass-balance calculation was performed:

PWS Evaluation:

Stream flow (sf) at the PWS intake = 2,250 cfs
 Waste flow (wf) from the STP = 0.25 MGD = 0.38 cfs
 Total flow = 2,250.38 cfs
 Background Concentrations: Default of 150 mg/l for TDS

Mass balance for TDS at the PWS intake:

$$(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)$$

$$(2250 cfs)(150 mg/l) + (0.38 cfs)(x) = (2250.38 cfs)(500 mg/l)$$

$$x = 2,072,868 mg/l \text{ (renewal application maximum was 20,400 mg/l - ok)}$$

Result: Since none of the parameters are discharged at a concentration greater than the criteria at the PWS, no limits or monitoring are necessary as significant dilution is available.

6. Flow Information:

This facility receives 52% of flow from the West Franklin Township, 45% of flow from the Worthington Borough, and 3% of flow from the East Franklin Township. All the sewers are separate sewers.

7. Anti-Backsliding:

Since all the permit limits in this renewal are the same or more restrictive than the previous NPDES Permit, anti-backsliding is not applicable.

8. Attachment List:

- Attachment 1 - WQ Modeling Printouts
- Attachment 2 - WMS Open Violations by Client

(The Attachments above can be found at the end of this document)

Compliance History

DMR Data for Outfall 001 (from August 1, 2022 to July 31, 2023)

Parameter	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22	AUG-22
Flow (MGD) Average Monthly	0.07	0.07	0.08	2.21	0.10	0.079	0.11	0.08	0.08	0.07	0.08	0.07
Flow (MGD) Daily Maximum	0.1	0.09	0.1	0.11	0.20	0.107	0.19	0.15	0.23	0.13	0.1	0.09
pH (S.U.) Minimum	7.6	7.5	7.4	7.4	7.0	7.4	7.4	7.2	7.4	7.6	7.8	7.7
pH (S.U.) Maximum	8.0	7.9	7.9	8.0	7.9	7.9	7.9	7.8	7.9	8.0	8.1	8.1
DO (mg/L) Minimum	6.1	6.0	7.0	6.0	9.0	7.4	7.2	5.7	7.2	6.1	6.1	6.7
CBOD5 (lbs/day) Average Monthly	< 2.0	2.0	3.0	3.0	3.0	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 3.0	< 2.0
CBOD5 (lbs/day) Weekly Average	2.0	3.0	3.0	3.0	3.0	2.0	3.0	2.0	4.0	< 2.0	6.0	< 2.0
CBOD5 (mg/L) Average Monthly	2.98	< 3.2	3.87	4.22	3.5	3.46	< 2.26	< 2.73	< 3.55	< 3.0	< 5.27	< 3.0
CBOD5 (mg/L) Weekly Average	3.99	5.61	4.16	5.4	3.78	4.21	3.16	3.88	5.73	< 3.0	9.31	< 3.0
TSS (lbs/day) Average Monthly	< 3.0	< 3.0	3.0	4.0	< 5.0	< 3.0	< 6.0	< 3.0	< 1.0	< 13.0	< 1.0	< 1.0
TSS (lbs/day) Weekly Average	< 4.0	< 3.0	4.0	6.0	7.0	< 4.0	< 8.0	< 4.0	2.0	48.0	< 2.0	2.0
TSS (mg/L) Average Monthly	< 5.0	< 5.0	5.0	6.0	< 7.0	< 5.0	< 6.0	< 5.0	< 2.1	< 22.4	< 2.07	< 2.1
TSS (mg/L) Weekly Average	< 5.0	< 5.0	5.0	10.0	11.0	< 5.0	9.0	6.0	3.6	82.0	< 2.67	4.0
Fecal Coliform (No./100 ml) Geometric Mean	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 2.0	< 1.0	1.0	< 3.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	2.0	1.0	1.0	5.2
UV Transmittance (%) Minimum	17.9	14.1	9.1	8.9	9.8	8.5	10.2	16.2	22.1	18.2	26.3	22.8
UV Transmittance (%) Average Monthly	25	21.0	17.0	15	11.0	13.0	15.0	21.0	28.0	29.0	41.0	45.0
Total Nitrogen (mg/L) Daily Maximum								15.42				
Ammonia (lbs/day) Average Monthly	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	< 0.4	< 0.3	< 0.1	< 0.07	< 0.07	< 0.08
Ammonia (mg/L) Average Monthly	< 0.2	< 0.2	0.2	0.2	< 0.2	< 0.2	< 0.6	< 0.48	< 0.229	< 0.18	< 0.114	< 0.13
Total Phosphorus (mg/L) Daily Maximum								2.3				

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	Daily Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Daily Max	XXX	1/day	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
CBOD5	20.9	31.3	XXX	10.0	15.0	20	1/week	8-Hr Composite
TSS	41.7	62.6	XXX	20.0	30.0	40	1/week	8-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
UV Transmittance (%)	XXX	XXX	Report	Report	XXX	XXX	1/day	Recorded
Total Nitrogen	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	8-Hr Composite
Ammonia Nov 1 - Apr 30	9.4	XXX	XXX	4.5	XXX	9	1/week	8-Hr Composite
Ammonia May 1 - Oct 31	3.1	XXX	XXX	1.5	XXX	3	1/week	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	8-Hr Composite

Compliance Sampling Location: at Outfall 001, after Ultraviolet (UV) light disinfection.

Flow and Ultraviolet light transmittance are monitor only based on Chapter 92a.61. The limits for pH and Dissolved Oxygen are technology-based on Chapter 93.7. The limits for CBOD₅, Total Suspended Solids, and Fecal Coliforms are technology-based on Chapter 92a.47. Monitoring for influent BOD₅ and influent TSS is based on Chapter 92a.61. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. Monitoring for Total Nitrogen and Total Phosphorus is based on Chapter 92a.61.

Attachment 1

WQM 7.0 Effluent Limits

<u>SWP Basin</u>		<u>Stream Code</u>		<u>Stream Name</u>			
18F		42557		BUFFALO 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)
20.100	Worthington	PA0218103	0.250	CBOD5	25		
				NH3-N	11.32	22.64	
				Dissolved Oxygen			4

WQM 7.0 D.O.Simulation

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>		
18F	42557	BUFFALO CREEK		
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>		<u>Analysis pH</u>
20.100	0.250	25.000		7.054
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>		<u>Reach Velocity (fps)</u>
29.955	0.653	45.866		0.128
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>	<u>Reach NH3-N (mg/L)</u>		<u>Reach Kn (1/days)</u>
5.56	0.748	1.75		1.029
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>		<u>Reach DO Goal (mg/L)</u>
6.991	3.632	Tsivoglou		5
<u>Reach Travel Time (days)</u>	Subreach Results			
0.886	<u>TravTime (days)</u>	<u>CBOD5 (mg/L)</u>	<u>NH3-N (mg/L)</u>	<u>D.O. (mg/L)</u>
	0.089	5.12	1.60	6.21
	0.177	4.71	1.46	5.74
	0.266	4.33	1.33	5.48
	0.355	3.99	1.22	5.38
	0.443	3.67	1.11	5.39
	0.532	3.37	1.02	5.46
	0.620	3.10	0.93	5.57
	0.709	2.86	0.85	5.71
	0.798	2.63	0.77	5.86
	0.886	2.42	0.71	6.02

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	<input checked="" type="checkbox"/>
WLA Method	EMPR	Use Inputted W/D Ratio	<input type="checkbox"/>
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	90.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	5		

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
18F	42557	BUFFALO CREEK	20.100	979.00	78.10	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary		Stream	
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	Temp (°C)	pH	Temp (°C)	pH
Q7-10	0.027	0.00	0.00	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
Worthington	PA0218103	0.2500	0.0000	0.0000	0.000	25.00	7.60

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	4.00	7.54	0.00	0.00
NH3-N	25.00	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
18F	42557	BUFFALO CREEK	18.250	953.00	82.20	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary		Stream	
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	Temp (°C)	pH	Temp (°C)	pH
Q7-10	0.027	0.00	0.00	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
		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

WQM 7.0 Hydrodynamic Outputs

<u>SWP Basin</u>		<u>Stream Code</u>				<u>Stream Name</u>						
18F		42557				BUFFALO 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												
20.100	2.11	0.00	2.11	.3868	0.00266	.653	29.95	45.87	0.13	0.886	25.00	7.05
Q1-10 Flow												
20.100	1.35	0.00	1.35	.3868	0.00266	NA	NA	NA	0.10	1.086	25.00	7.08
Q30-10 Flow												
20.100	2.87	0.00	2.87	.3868	0.00266	NA	NA	NA	0.15	0.764	25.00	7.04

WQM 7.0 Wasteload Allocations

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>
18F	42557	BUFFALO 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
20.100	Worthington	10.29	46.2	10.29	46.2	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
20.100	Worthington	1.35	11.32	1.35	11.32	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	<u>CBOD5</u>		<u>NH3-N</u>		<u>Dissolved Oxygen</u>		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
20.10	Worthington	25	25	11.32	11.32	4	4	0	0

Attachment 2



**WATER MANAGEMENT SYSTEM
 OPEN VIOLATIONS BY CLIENT**

Client ID: 63398
 Client: All

Open Violations: 1

CLIENT ID	CLIENT	PF ID	FACILITY	PF KIND	PF STATUS	INSP PROGRAM	PROGRAM SPECIFIC ID
63398	WORTHINGTON W FRANKLIN JT MUNI AUTH	263709	WORTHINGTON WEST FRANKLIN JMA	Community	Active	Safe Drinking Water	5030027

INSP ID	VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR	INSP REGION
3464657	976990	PF	11/15/2022	B6A	OTHER VIOLATIONS DEEMED TO BE SIGNIFICANT DEFICIENCIES	DUTKO,EUGENE	NWRO