

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL INDUSTRIAL WASTE (IW)
AND IW STORMWATER**

Application No. PA0009857
APS ID 1103463
Authorization ID 1466719

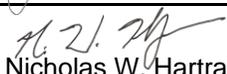
Applicant and Facility Information

Applicant Name	<u>Lamar National Fish Hatchery</u>	Facility Name	<u>US F & W Lamar National Fish Hatchery</u>
Applicant Address	<u>PO Box 75</u> <u>Lamar, PA 16848-0075</u>	Facility Address	<u>308 Washington Avenue</u> <u>Lamar, PA 16848</u>
Applicant Contact	<u>Meredith Bartron</u>	Facility Contact	<u>Meredith Bartron</u>
Applicant Phone	<u>(570) 726-7247</u>	Facility Phone	<u>(570) 726-7247</u>
Client ID	<u>78099</u>	Site ID	<u>258958</u>
SIC Code	<u>0921</u>	Municipality	<u>Porter Township</u>
SIC Description	<u>Agriculture - Fish Hatcheries And Preserves</u>	County	<u>Clinton</u>
Date Application Received	<u>December 26, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>January 4, 2024</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of NPDES permit for the discharge of treated industrial waste.</u>		

Summary of Review

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.

The permittee has applied to renew their existing NPDES permit for an aquatic species research facility owned and operated by the US Fish and Wildlife Service. The facility has 4 outfalls and an internal monitoring point (IMP) for aquaculture discharge. The maximum station biomass is limited to 40,150 pounds, but the average annual production over the previous 5 years has been 6,735 pounds. If the facility intends to increase biomass over 40,150 pounds it would require prior Department approval and an anti-degradation study with a Social and Economic Justification (SEJ).

Approve	Deny	Signatures	Date
X		 Jonathan P. Peterman / Project Manager	January 23, 2026
X		 Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	January 26, 2026

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>5.2</u>
Latitude	<u>41° 0' 20.31"</u>	Longitude	<u>-77° 32' 0.05"</u>
Quad Name	<u>Beech Creek</u>	Quad Code	<u>1025</u>
Wastewater Description: <u>Other Miscellaneous Discharges</u>			
Receiving Waters	<u>Unnamed Tributary to Fishing Creek (HQ-CWF)</u>	Stream Code	<u>22505</u>
NHD Com ID	<u>67177694</u>	RMI	<u><0.25</u>
Drainage Area	<u>n/a (source is a spring)</u>	Yield (cfs/mi ²)	<u>n/a (spring)</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.5</u>	Q ₇₋₁₀ Basis	<u>Previous BPJ (See below)</u>
Elevation (ft)	<u>832</u>	Slope (ft/ft)	<u>n/a</u>
Watershed No.	<u>9-C</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u>HQ-CWF</u>	Existing Use Qualifier	<u>n/a</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>N/A</u>		
Source(s) of Impairment	<u>N/A</u>		
TMDL Status	<u>N/A</u>	Name	<u>N/A</u>
Nearest Downstream Public Water Supply Intake	<u>PA-American Water Company at Milton, PA</u>		
PWS Waters	<u>West Branch Susquehanna River</u>	Flow at Intake (cfs)	<u>679.73</u>
PWS RMI	<u>10.66</u>	Distance from Outfall (mi)	<u>78.0</u>

-The annual average flow over the past 5 years according to the eDMR data is 5.2 MGD. Previously, the design flow was 5.4 MGD. The design flow is a factor of the water intake (from both Fishing Creek and Washington Spring) and in no way changes the facilities maximum biomass capacity of 40,150 pounds.

-The Q_{7,10} for the UNT to Fishing Creek was determined using a 10% of the recorded flow from Washington Spring from 2002 to 2012 and BPJ of the site characteristics. Washington Spring is the source water for the raceways. This is explained in further detail in previous fact sheets.

-IMP 101 is the cold water raceway effluent flow.

-Outfalls 003 and 004 are discharges from the fish culture ponds and there has been no discharge from these ponds in the past 10 years.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>002</u>	Design Flow (MGD)	<u>.09</u>
Latitude	<u>41° 0' 16.76"</u>	Longitude	<u>-77° 31' 52.60"</u>
Quad Name	<u>Beech Creek</u>	Quad Code	<u>1025</u>
Wastewater Description: <u>Aquaculture Discharge</u>			
Receiving Waters	<u>Fishing Creek (HQ-CWF)</u>	Stream Code	<u>22416</u>
NHD Com ID	<u>67177692</u>	RMI	<u>13</u>
Drainage Area	<u>75 mi²</u>	Yield (cfs/mi ²)	<u>0.78</u>
Q ₇₋₁₀ Flow (cfs)	<u>5.9</u>	Q ₇₋₁₀ Basis	<u>previous stream delineation</u>
Elevation (ft)	<u>832</u>	Slope (ft/ft)	<u>n/a</u>
Watershed No.	<u>9-C</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u>HQ-CWF</u>	Existing Use Qualifier	<u>n/a</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>N/A</u>		
Source(s) of Impairment	<u>N/A</u>		
TMDL Status	<u>N/A</u>	Name	<u>N/A</u>
Nearest Downstream Public Water Supply Intake	<u>PA-American Water Company at Milton, PA PA-American Water Company at Milton, PA</u>		
PWS Waters	<u>West Branch Susquehanna River</u>	Flow at Intake (cfs)	<u>679.73</u>
PWS RMI	<u>10.66</u>	Distance from Outfall (mi)	<u>78.0</u>

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>003</u>	Design Flow (MGD)	<u>.60</u>
Latitude	<u>41° 0' 15.87"</u>	Longitude	<u>-77° 31' 52.13"</u>
Quad Name	<u>Beech Creek</u>	Quad Code	<u>1025</u>
Wastewater Description: <u>Aquaculture Discharge</u>			
Receiving Waters	<u>Fishing Creek (HQ-CWF)</u>	Stream Code	<u>22416</u>
NHD Com ID	<u>67177692</u>	RMI	<u>13</u>
Drainage Area	<u>75 mi²</u>	Yield (cfs/mi ²)	<u>0.78</u>
Q ₇₋₁₀ Flow (cfs)	<u>5.9</u>	Q ₇₋₁₀ Basis	<u>previous stream delineation</u>
Elevation (ft)	<u>832</u>	Slope (ft/ft)	<u>n/a</u>
Watershed No.	<u>9-C</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u>HQ-CWF</u>	Existing Use Qualifier	<u>n/a</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>N/A</u>		
Source(s) of Impairment	<u>N/A</u>		
TMDL Status	<u>N/A</u>	Name	<u>N/A</u>
Nearest Downstream Public Water Supply Intake	<u>PA-American Water Company at Milton, PA</u>		
PWS Waters	<u>West Branch Susquehanna River</u>	Flow at Intake (cfs)	<u>679.73</u>
PWS RMI	<u>10.66</u>	Distance from Outfall (mi)	<u>78.0</u>

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>004</u>	Design Flow (MGD)	<u>.42</u>
Latitude	<u>41° 0' 14.58"</u>	Longitude	<u>-77° 31' 51.46"</u>
Quad Name	<u>Beech Creek</u>	Quad Code	<u>1025</u>
Wastewater Description: <u>Aquaculture Discharge</u>			
Receiving Waters	<u>Fishing Creek (HQ-CWF)</u>	Stream Code	<u>22416</u>
NHD Com ID	<u>67177692</u>	RMI	<u>13</u>
Drainage Area	<u>75 mi²</u>	Yield (cfs/mi ²)	<u>0.78</u>
Q ₇₋₁₀ Flow (cfs)	<u>5.9</u>	Q ₇₋₁₀ Basis	<u>previous stream delineation</u>
Elevation (ft)	<u>832</u>	Slope (ft/ft)	<u>n/a</u>
Watershed No.	<u>9-C</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u>HQ-CWF</u>	Existing Use Qualifier	<u>n/a</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>N/A</u>		
Source(s) of Impairment	<u>N/A</u>		
TMDL Status	<u>N/A</u>	Name	<u>N/A</u>
Nearest Downstream Public Water Supply Intake	<u>PA-American Water Company at Milton, PA</u>		
PWS Waters	<u>West Branch Susquehanna River</u>	Flow at Intake (cfs)	<u>679.73</u>
PWS RMI	<u>10.66</u>	Distance from Outfall (mi)	<u>78.0</u>

TMDL Impairment Discussion

The Department's Geographic Information System (GIS) shows that the Fishing Creek (HQ-CWF) is not impaired and a TMDL does not exist for the stream segment. No TMDL has been taken into consideration during this review.

Chesapeake Bay Requirements

In accordance with the Phase II WIP Chesapeake Bay Strategy this facility has been identified previously by DEP as "insignificant dischargers" by virtue of having gross effluent discharges that do not exceed 75 lbs/day of TN or 25 lbs/day of TP. For these non-significant facilities, monitoring and reporting of TN and TP will be required throughout the permit term in renewed or amended permits anytime the facility has the potential to introduce a net TN or TP increase to the load contained within the intake water used in processing. Given that similar hatcheries have been shown to produce a net increase in TN and TP, monitoring for nutrients would be required if it wasn't already in the permit.

Existing Effluent Limitations and Monitoring Requirements

Existing Limits – 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	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/week	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/week	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD ₅) ⁽³⁾	315	630	XXX	7.0	14.0	17.5	2/month	8-Hr Composite
Total Suspended Solids ⁽³⁾	450	900	XXX	10.0	20.0	25	2/month	8-Hr Composite
Total Nitrogen ⁽³⁾⁽⁴⁾	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Grab
Ammonia-Nitrogen ⁽³⁾	36	72	XXX	0.8	1.6	2	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/quarter	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 5.4 MGD.

Existing Limits – Outfall 002

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) ⁽³⁾	XXX	XXX	XXX	7.0	14.0	17.5	1/month	Grab
Total Suspended Solids ⁽³⁾	XXX	XXX	XXX	10.0	20.0	25	1/month	Grab
Total Nitrogen ⁽³⁾⁽⁴⁾	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Grab
Ammonia-Nitrogen ⁽³⁾	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

*The existing effluent limits for Outfall 002 were based on a design flow of 0.47 MGD.

Existing Limits – Outfall 003

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) ⁽³⁾	XXX	XXX	XXX	7.0	14.0	17.5	1/month	Grab
Total Suspended Solids ⁽³⁾	XXX	XXX	XXX	10.0	20.0	25	1/month	Grab
Total Nitrogen ⁽³⁾⁽⁴⁾	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Grab
Ammonia-Nitrogen ⁽³⁾	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

*The existing effluent limits for Outfall 003 were based on a design flow of 0.68 MGD.

Existing Limits – Outfall 004

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD ₅) ⁽³⁾	XXX	XXX	XXX	7.0	14.0	17.5	1/month	Grab
Total Suspended Solids ⁽³⁾	XXX	XXX	XXX	10.0	20.0	25	1/month	Grab
Total Nitrogen ⁽³⁾⁽⁴⁾	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Grab
Ammonia-Nitrogen ⁽³⁾	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

*The existing effluent limits for Outfall 004 were based on a design flow of 0.47 MGD.

Existing Limits – IMP 101

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD) Internal Monitoring Point	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Weir
Dissolved Oxygen Internal Monitoring Point	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/week	Grab
Total Suspended Solids Internal Monitoring Point	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Development of Effluent Limits

<p>Outfall No. <u>001</u></p> <p>Latitude <u>41° 0' 20.34"</u></p> <p>Wastewater Description: <u>Other Miscellaneous Discharges</u></p>	<p>Design Flow (MGD) <u>5.2</u></p> <p>Longitude <u>-77° 31' 59.91"</u></p>
<p>Outfall No. <u>002</u></p> <p>Latitude <u>41° 0' 16.46"</u></p> <p>Wastewater Description: <u>Aquaculture Discharge</u></p>	<p>Design Flow (MGD) <u>.09</u></p> <p>Longitude <u>-77° 31' 53.17"</u></p>
<p>Outfall No. <u>003</u></p> <p>Latitude <u>41° 0' 15.29"</u></p> <p>Wastewater Description: <u>Aquaculture Discharge</u></p>	<p>Design Flow (MGD) <u>.60</u></p> <p>Longitude <u>-77° 31' 53.23"</u></p>
<p>Outfall No. <u>004</u></p> <p>Latitude <u>41° 0' 14.31"</u></p> <p>Wastewater Description: <u>Aquaculture Discharge</u></p>	<p>Design Flow (MGD) <u>.42</u></p> <p>Longitude <u>-77° 31' 51.97"</u></p>
<p>Outfall No. <u>101</u></p> <p>Latitude <u>41° 0' 8.00"</u></p> <p>Wastewater Description: _____</p>	<p>Design Flow (MGD) <u>N/A</u></p> <p>Longitude <u>-77° 32' 6.00"</u></p>

Technology-Based Limitations

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

Parameter	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)

Water Quality-Based Limitations

To establish whether or not water-quality based effluent limitations (WQBELs) are required, the Department models in-stream conditions. In order to determine limitations for CBOD₅, ammonia-N and dissolved oxygen, the Department utilizes the WQM 7.0 v1.0b model and in order to determine limitations for toxics, the Department utilizes the PENTOXSD v2.0d model.

WQM 7.0 for Windows, Version 1.0b, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen
 The Department uses the computer model WQM 7.0 to determine water quality based effluent limitations for Carbonaceous BOD (CBOD₅), Ammonia Nitrogen (NH₃-N), and Dissolved Oxygen (DO). This model can be utilized for single and multiple point source discharges scenarios. The WQM 7.0 model determines wasteload allocations for each parameter and then derives effluent limitations in a two-part process. The model simulates the mixing (assuming complete mixing) and consumption/degradation of both DO and NH₃-N individually in the stream. The mixing and consumption of CBOD₅ and NH₃-N is calculated in the DO module and the mixing and degradation of NH₃-N is calculated for the NH₃-N module. The model then compares calculated instream concentrations for each parameter to the corresponding water quality criteria.

The WQM 7.0 model then calculates the highest pollutant loadings that the stream can assimilate while still meeting water quality criteria.

The model was run using the latest information on Q7-10 stream flow, background water quality, average annual design flow, and other discharge characteristics. The previous effluent limits for CBOD₅ (7.0 mg/l) and NH₃-N (0.8mg/l) were used as inputs for the modeling. The DO minimum daily average criterion from §93.7 (6.0 mg/L for CWF) was used for the in-stream objective for the model. The summary of the output is as follows:

Parameter	Effluent Limit		
	30 Day Average	Maximum	Minimum
CBOD₅	7.0	N/A	N/A
Ammonia-N	0.8	1.6	N/A
Dissolved Oxygen	N/A	N/A	6.0

The model did not recommend more stringent effluent limits and indicated that the existing limits are protective of water quality. The existing limits will remain.

Temperature

Given that the historical effluent temperature data was substantially lower than the criteria, the Department previously determined that the facility does not introduce a thermally heated discharge at Outfall 001. Therefore, the temperature monitoring was removed from Outfall 001. The Department feels that the review of the above data is sufficient to conclude that Outfall 001 does not violate the Department’s Chapter 93 instream criteria for temperature.

Technology Based Effluent Limitations

All of the existing permit limitations are as stringent or more stringent than the effluent limitations established in the NPDES PAG-11 (Aquatic Animal Production Facilities) and described in the PAG-11 Fact Sheet (3800-PM-BCW0006h Rev. 1/2018). Net limitations for TSS, CBOD₅, total nitrogen, and ammonia-nitrogen will remain. Consistent with the PAG-11, monitoring frequencies for total phosphorus and total nitrogen will be 1/quarter.

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

Drug and Chemical Usage for Aquaculture Facilities

The facility uses various therapeutic chemical additives throughout the facility. The previously approved chemicals were Paracide-S, Non-iodized salt, argentyne, quaternary disinfectant cleaner, calcein, terramycin 343, finquil MS-222, florfenicol, Romet 30, and terramycin 200. All of the proposed additives were approved at the same usage rates during last issuance. The Federal Drug Administration (FDA) has approved the use of Romet 30 for use in aquaculture for dosage rates of 50 mg per kg of fish per day. USFWS is proposing the FDA approved dosage rate.

The application indicates that formaldehyde (formalin) is used as a chemical additive at this facility. Formaldehyde is used as a bath treatment to control external parasitic infections of fish. Formalin effectively kills parasites on gills, skin, and fins. In addition, high concentrations of formalin are used to control fungi on fish eggs. An analysis was conducted by comparing projected concentrations of formaldehyde in the effluent to the most stringent water quality criterion contained in 25 Pa. Code Chapter 93 (Aquatic Life CCC which is 440 µg/l). This comparison reveals that there is no potential for effluent toxicity and effluent limitations and/or monitoring will not be required in the permit. A Part C condition will be added to account for the usage of this and other drugs and chemical additives (Part C 128).

The following is a summary of the proposed therapeutic chemicals and their allowable usage rate:

Therapeutic Chemical	Proposed Usage Rate	WQBEL (mg/l)	Calculated Allowable Usage Rate (lbs/day)	Max Allowable Usage Rate
35% Perox-Aid	0.48 gal/day	1.04	29	0.48 gal/day
Parasite-S (Formalin)	0.23 gal/day	0.001	0.065	0.23 gal/day
Non-Iodized Salt (Sodium Chloride)	50 lb/day	10.2	442	50 lb/day
Syncaine (MS-222)	0.0001 lb/day	39.7	1,732	0.0001 lb/day
Terramycin 200	0.44 lbs/day	1.71	74.2	0.44 lbs/day
Chloramine-T (Halamid)	0.072 lbs/day	0.59	25.8	0.072 lbs/day
Aquaflor (Florfenicol)	5.0 lbs/day	2.71	118	5.0 lbs/day
Romet 30	0.083 lb/day	0.7	30.4	0.083 lb/day
Cleaning Agents				
WC Aqualife Multipurpose Cleaner	0.045 gal/day	Cleaning Agent	-	-
Argentyne	0.02 gal/day	Fish Egg Treatment	-	-
Lysol IC Disinfectant	0.037 gal/day	Cleaning Agent	-	-
LHRHa	0.0003 lb/day	Injected into fish	-	-
Calcein	0.5 gal/day	Not Directly introduced into outfall	-	-
Viking Aquatic Disinfectant	0.024 lb/day	Not Directly introduced into outfall	-	-

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 the abovementioned 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" (362-0400-001) and/or BPJ.

Proposed Limits - 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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/week	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/week	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD ₅) ⁽³⁾	315	630	XXX	7.0	14.0	17.5	2/month	8-Hr Composite
Total Suspended Solids ⁽³⁾	450	900	XXX	10.0	20.0	25	2/month	8-Hr Composite
Total Nitrogen ⁽³⁾⁽⁴⁾	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Grab
Ammonia-Nitrogen ⁽³⁾	36	72	XXX	0.8	1.6	2	2/month	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	Daily Maximum	Instant. Maximum		
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/quarter	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 5.2 MGD.

Proposed Limits - Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) ⁽³⁾	XXX	XXX	XXX	7.0	14.0	17.5	1/month	Grab
Total Suspended Solids ⁽³⁾	XXX	XXX	XXX	10.0	20.0	25	1/month	Grab
Total Nitrogen ⁽³⁾⁽⁴⁾	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Grab
Ammonia-Nitrogen ⁽³⁾	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.09 MGD.

Proposed Limits - Outfall 003, Effective Period: Permit Effective Date through Permit Expiration Date

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) ⁽³⁾	XXX	XXX	XXX	7.0	14.0	17.5	1/month	Grab

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Suspended Solids ⁽³⁾	XXX	XXX	XXX	10.0	20.0	25	1/month	Grab
Total Nitrogen ⁽³⁾⁽⁴⁾	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Grab
Ammonia-Nitrogen ⁽³⁾	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.60 MGD.

Proposed Limits - Outfall 004, Effective Period: Permit Effective Date through Permit Expiration Date

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD ₅) ⁽³⁾	XXX	XXX	XXX	7.0	14.0	17.5	1/month	Grab
Total Suspended Solids ⁽³⁾	XXX	XXX	XXX	10.0	20.0	25	1/month	Grab
Total Nitrogen ⁽³⁾⁽⁴⁾	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Grab
Ammonia-Nitrogen ⁽³⁾	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.42 MGD.

Proposed Limits – IMP 101, Effective Period: Permit Effective Date through Permit Expiration Date

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD) Internal Monitoring Point	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Weir
Dissolved Oxygen Internal Monitoring Point	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/week	Grab
Total Suspended Solids Internal Monitoring Point	XXX	XXX	XXX	Report	Report	XXX	2/month	Grab

Flow

The existing monitoring requirements for Flow are consistent with similar permit types and shall remain from the previous issuance.

Carbonaceous Biochemical Oxygen Demand (CBOD₅)

The results of the WQM 7.0 model indicate that the previously applied water quality-based limits for CBOD₅ are still protective and will remain.

Total Suspended Solids (TSS)

The previous permits established a net average monthly technology-based limit for TSS at 10 mg/l. This is consistent with the PAG-11 general permit for Aquaculture Facilities and will remain.

pH

CFR Title 40 §133.102(c) and 25 PA Code §95.2(1) provide the basis of effluent limitations for pH. The existing limits shall remain.

Ammonia-Nitrogen (NH₃-N)

The results of the WQM 7.0 model indicate that the previously applied water quality-based limits for Ammonia-Nitrogen are still protective and will remain.

Dissolved Oxygen (DO)

The results of the WQM 7.0 model also indicate that the existing water quality-based dissolved oxygen limitation of 6.0 mg/l is still protective. A minimum limitation of 6.0 mg/l is proposed as this level represents the minimum daily average requirement under 25 Pa. Code § 93.7(a) and will remain.

Compliance History

Summary of Inspections -The last inspection of the facility was conducted on 8/21/23 by the Department which indicated that that there were no issues, and the facility was operating normally. Some TSS violations were noted due to excessive turbidity.

WMS Query Summary - A WMS Query was run at *Reports - Violations & Enforcements – Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed that there are no open violations.

Part C Conditions

Part C Conditions

The following NPDES Permit Part C conditions will be assigned:

- I. OTHER REQUIREMENTS (Standard)
- II. BEST MANAGEMENT PRACTICES (BMP) PLAN (Part C 128)
- III. MINIMUM REQUIRED BMPs (Part C 128)
- IV. DRUG AND CHEMICAL USAGE (Part C 129)

Compliance History

DMR Data for Outfall 001 (from December 1, 2024 to November 30, 2025)

Parameter	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24
Flow (MGD) Average Monthly	2.89	2.56	2.33	3.72	5.61	7.18	8.49	7.78	8.76	4.05	3.95	5.50
Flow (MGD) Daily Maximum	3.123	2.86	2.49	3.99	6.74	8.36	10.56	9.88	10.29	5.33	4.35	6.38
pH (S.U.) Instantaneous Minimum	7.64	7.7	7.64	7.9	7.74	7.37	7.2	7.37	7.27	7.81	7.9	7.61
pH (S.U.) Instantaneous Maximum	7.82	8.1	8.5	8.12	7.93	7.65	7.72	8.1	7.62	8.11	8.09	8.09
DO (mg/L) Instantaneous Minimum	12.07	10.82	9.99	8.28	7.92	8.03	9.24	9.78	11.28	12.3	12.52	11.01
CBOD5 (lbs/day) Average Monthly	< 70	< 64	< 59	< 88	< 157	< 107	< 230	< 209	< 194	< 84	< 109	< 119
CBOD5 (lbs/day) Daily Maximum	< 76	< 65	< 59	< 100	< 169	< 166	< 264	247	< 219	89	109	< 146
CBOD5 (mg/L) Average Monthly	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 2.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
CBOD5 (mg/L) Daily Maximum	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TSS (lbs/day) Average Monthly	37	< 120	47	118	219	< 172	831	173	301	103	< 138	286
TSS (lbs/day) Daily Maximum	40	207	47	133	225	265	1480	181	467	142	218	487
TSS (mg/L) Average Monthly	2.0	< 6.0	2.0	4.0	4.0	< 3.0	10.0	3.0	4.0	5.0	< 4.0	6.0
TSS (mg/L) Daily Maximum	1.6	9.6	2.4	4.0	4.4	4.8	16.8	3.2	6.4	4.8	6.0	10.0
Total Nitrogen (mg/L) Daily Maximum			< 2.520			< 2.5			< 2.5			< 2.218
Ammonia (lbs/day) Average Monthly	< 3	< 2.0	< 2.0	< 3.0	< 5.0	< 5.0	< 8.0	7.0	< 6.0	< 3.0	< 4.0	< 4.0
Ammonia (lbs/day) Daily Maximum	< 3	< 2.0	< 2.0	< 3.0	6.0	< 6.0	< 9.0	< 8.0	< 7.0	< 3.0	< 4.0	< 5.0

**NPDES Permit Fact Sheet
US F & W Lamar National Fish Hatchery**

NPDES Permit No. PA0009857

Ammonia (mg/L) Average Monthly	< 0.10	< 0.1	< 0.10	< 0.1	< 0.10	< 0.10	< 0.1	< 0.10	< 0.1	< 0.1	< 0.1	< 0.10
Ammonia (mg/L) Daily Maximum	< 0.1	< 0.1	< 0.10	< 0.1	< 0.10	< 0.10	< 0.1	< 0.10	< 0.1	< 0.1	< 0.1	< 0.10
Total Phosphorus (mg/L) Daily Maximum			0.039			0.016			0.011			0.0340

DMR Data for Outfall 002 (from December 1, 2024 to November 30, 2025)

Parameter	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24
Flow (MGD) Average Monthly	0.05	0.05	0.03	0.02	0.04	0.04	0.06	0.12	0.04	0.03	0.04	0.1
Flow (MGD) Daily Maximum	0.05	0.05	0.05	0.03	0.05	0.05	0.10	0.14	0.05	0.03	0.05	0.1
pH (S.U.) Instantaneous Minimum	7.03	7.3	7.76	7.84	7.66	7.32	7.2	7.38	7.35	7.76	7.71	7.77
pH (S.U.) Instantaneous Maximum	7.03	7.3	7.76	7.84	7.66	7.32	7.2	7.38	7.35	7.76	7.70	7.77
DO (mg/L) Instantaneous Minimum	11.8	10.8	11.2	10.5	8.4	9.6	9.9	10.7	12.3	12.20	12.30	13.77
CBOD5 (mg/L) Average Monthly	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	1.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
CBOD5 (mg/L) Daily Maximum	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 1.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TSS (mg/L) Average Monthly	< 2.0	2.0	5.0	2.0	4.0	3.0	30.0	6.0	3.0	2.0	2.0	3.0
TSS (mg/L) Daily Maximum	1.6	2.0	5.2	2.0	4.4	3.2	30.0	5.6	3.2	2.0	2.4	2.8
Total Nitrogen (mg/L) Daily Maximum			< 2.50			< 2.5			< 2.5			< 1.790
Ammonia (mg/L) Average Monthly	< 0.10	< 0.10	< 0.10	< 0.1	< 0.1	< 0.10	< 0.10	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10
Ammonia (mg/L) Daily Maximum	< 0.10	< 0.10	< 0.1	< 0.1	< 0.1	< 0.10	< 0.10	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10
Total Phosphorus (mg/L) Daily Maximum			0.042			0.01			0.011			0.03

DMR Data for Outfall 101 (from December 1, 2024 to November 30, 2025)

**NPDES Permit Fact Sheet
US F & W Lamar National Fish Hatchery**

NPDES Permit No. PA0009857

Parameter	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24
Flow (MGD) Internal Monitoring Point Average Monthly	0.58	0.54	0.58	0.8	1.0	1.06	1.0	1.08	0.97	0.75	0.7	0.88
Flow (MGD) Internal Monitoring Point Daily Maximum	0.67	0.56	0.67	1.0	1.0	1.25	1.13	1.25	1.0	0.88	0.88	0.88
DO (mg/L) Internal Monitoring Point Instantaneous Minimum	11.19	9.83	9.59	7.89	7.54	7.56	9.08	9.64	11.53	12.27	12.21	11.14
TSS (mg/L) Internal Monitoring Point Average Monthly	< 1.6	4.2	5.6	3.8	1.8	4.4	9.4	2.40	< 2.2	< 1.6	5.6	11.2
TSS (mg/L) Internal Monitoring Point Daily Maximum	1.6	4.8	6.0	5.2	2.0	5.6	12.8	2.80	2.8	< 1.6	7.6	18.0

Compliance History

Effluent Violations for Outfall 001, from: October 1, 2024 To: August 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
CBOD5	06/30/25	Avg Mo	< 1138	lbs/day	315	lbs/day
CBOD5	06/30/25	Avg Mo	< 1138	lbs/day	315	lbs/day
CBOD5	06/30/25	Daily Max	2111	lbs/day	630	lbs/day
CBOD5	06/30/25	Daily Max	2111	lbs/day	630	lbs/day
CBOD5	06/30/25	Avg Mo	< 23.0	mg/L	7.0	mg/L
CBOD5	06/30/25	Avg Mo	< 23.0	mg/L	7.0	mg/L

CBOD5	06/30/25	Daily Max	42.9	mg/L	14.0	mg/L
CBOD5	06/30/25	Daily Max	42.9	mg/L	14.0	mg/L
TSS	05/31/25	Avg Mo	831	lbs/day	450	lbs/day
TSS	05/31/25	Daily Max	1480	lbs/day	900	lbs/day

Effluent Violations for Outfall 002, from: October 1, 2024 To: August 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
CBOD5	06/30/25	Avg Mo	37.5	mg/L	7.0	mg/L
CBOD5	06/30/25	Avg Mo	37.5	mg/L	7.0	mg/L
CBOD5	06/30/25	Daily Max	37.5	mg/L	14.0	mg/L
CBOD5	06/30/25	Daily Max	37.5	mg/L	14.0	mg/L
TSS	05/31/25	Avg Mo	30.0	mg/L	10.0	mg/L
TSS	05/31/25	Daily Max	30.0	mg/L	20.0	mg/L

- (3) For CBOD₅, Total Suspended Solids, Ammonia-Nitrogen and Total Nitrogen, the specified effluent limitations are “net” limitations. The permittee may monitor and report influent and effluent results for these parameters and subtract influent concentrations from effluent concentrations in order to demonstrate compliance. If the permittee chooses to report net limitations, all influent and effluent sampling results shall also be submitted to the Department.
- (4) To estimate effluent flow rate, use any accurate measurement technique based on a technical evaluation of the sources contributing to the discharge. The use of a flow meter or similar technology to measure flow rate is preferred.

Effluent Violations for Outfall 001, from: January 1, 2025 To: November 30, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
CBOD5	06/30/25	Avg Mo	< 1138	lbs/day	315	lbs/day
CBOD5	06/30/25	Avg Mo	< 1138	lbs/day	315	lbs/day
CBOD5	06/30/25	Daily Max	2111	lbs/day	630	lbs/day
CBOD5	06/30/25	Daily Max	2111	lbs/day	630	lbs/day
CBOD5	06/30/25	Avg Mo	< 23.0	mg/L	7.0	mg/L
CBOD5	06/30/25	Avg Mo	< 23.0	mg/L	7.0	mg/L
CBOD5	06/30/25	Daily Max	42.9	mg/L	14.0	mg/L
CBOD5	06/30/25	Daily Max	42.9	mg/L	14.0	mg/L
TSS	05/31/25	Avg Mo	831	lbs/day	450	lbs/day
TSS	05/31/25	Daily Max	1480	lbs/day	900	lbs/day

Effluent Violations for Outfall 002, from: January 1, 2025 To: November 30, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
CBOD5	06/30/25	Avg Mo	37.5	mg/L	7.0	mg/L
CBOD5	06/30/25	Avg Mo	37.5	mg/L	7.0	mg/L
CBOD5	06/30/25	Daily Max	37.5	mg/L	14.0	mg/L
CBOD5	06/30/25	Daily Max	37.5	mg/L	14.0	mg/L
TSS	05/31/25	Avg Mo	30.0	mg/L	10.0	mg/L
TSS	05/31/25	Daily Max	30.0	mg/L	20.0	mg/L

Tools and References Used to Develop Permit	
<input checked="" type="checkbox"/>	WQM for Windows Model (see Attachment B)
<input checked="" type="checkbox"/>	Toxics Management Spreadsheet (see Attachment C)
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment)
<input checked="" type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input checked="" type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input checked="" type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input checked="" type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input checked="" type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input checked="" type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input checked="" type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input type="checkbox"/>	SOP:
<input type="checkbox"/>	Other:

APPENDIX A

STREAM DATA AND Q^{7-10} ANALYSIS

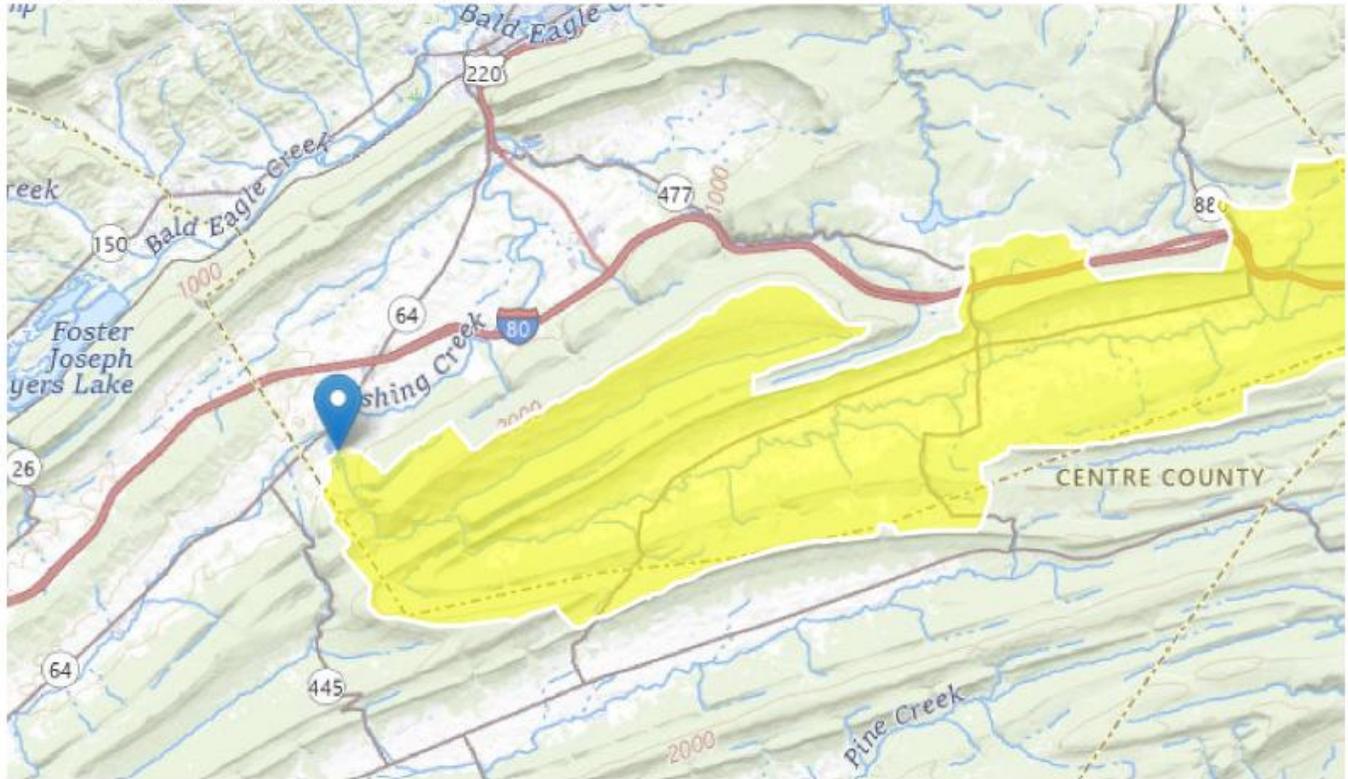
StreamStats Report

Region ID: PA

Workspace ID: PA20251202144652110000

Clicked Point (Latitude, Longitude): 41.00657, -77.53348

Time: 2025-12-02 09:47:16 -0500



[+ Collapse All](#)

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	27.9	percent
DRNAREA	Area that drains to a point on a stream	74.8	square miles
PRECIP	Mean Annual Precipitation	45	inches
ROCKDEP	Depth to rock	5.2	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	1.33	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	27.9	percent	0	99
DRNAREA	Drainage Area	74.8	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	45	inches	35	50.4
ROCKDEP	Depth to Rock	5.2	feet	3.32	5.65
STRDEN	Stream Density	1.33	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, PseudoR²: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	32.3	ft ³ /s	38	38
30 Day 2 Year Low Flow	36.7	ft ³ /s	33	33
7 Day 10 Year Low Flow	22.6	ft ³ /s	51	51
30 Day 10 Year Low Flow	24.9	ft ³ /s	46	46
90 Day 10 Year Low Flow	28.9	ft ³ /s	36	36

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)

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

APPENDIX B

WQM 7.0 MODEL RESULTS

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
09C	22505	Trib 22505 to Fishing Creek	0.250	832.00	75.00	0.00000	0.00	<input checked="" type="checkbox"/>

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		Stream	
									Temp (°C)	pH	Temp (°C)	pH
Q7-10	0.100	0.00	0.50	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
Lamar Fish Hatc	PA0009857	5.2000	5.2000	5.2000	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	7.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	0.80	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
09C	22505 Trib	22505 to Fishing Creek	0.000	824.00	76.00	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 Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.100	0.00	0.50	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	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>						
09C		22505				Trib 22505 to Fishing 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												
0.250	0.50	0.00	0.50	8.0444	0.00606	.743	41.91	56.44	0.27	0.056	24.71	7.00
Q1-10 Flow												
0.250	0.47	0.00	0.47	8.0444	0.00606	NA	NA	NA	0.27	0.056	24.72	7.00
Q30-10 Flow												
0.250	0.58	0.00	0.58	8.0444	0.00606	NA	NA	NA	0.28	0.055	24.66	7.00

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	0.94	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.17	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	90.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	6		

WQM 7.0 Wasteload Allocations

SWP Basin Stream Code Stream Name
 09C 22505 Trib 22505 to Fishing 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
0.250	Lamar Fish Hatc	11.33	1.6	11.33	1.6	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
0.250	Lamar Fish Hatc	1.4	.8	1.4	.8	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)		
0.25	Lamar Fish Hatc	7	7	.8	.8	6	6	0	0

WQM 7.0 D.O. Simulation

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>		
09C	22505	Trib 22505 to Fishing Creek		
<hr/>				
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>		<u>Analysis pH</u>
0.250	5.200	24.707		7.000
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>		<u>Reach Velocity (fps)</u>
41.912	0.743	56.438		0.275
<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>
6.71	1.472	0.75		1.006
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>		<u>Reach DO Goal (mg/L)</u>
6.131	17.676	Tsvoglou		6
<u>Reach Travel Time (days)</u>	Subreach Results			
0.056	<u>TravTime (days)</u>	<u>CBOD5 (mg/L)</u>	<u>NH3-N (mg/L)</u>	<u>D.O. (mg/L)</u>
	0.006	6.64	0.75	6.23
	0.011	6.57	0.74	6.32
	0.017	6.51	0.74	6.40
	0.022	6.44	0.74	6.48
	0.028	6.37	0.73	6.55
	0.033	6.31	0.73	6.62
	0.039	6.25	0.72	6.68
	0.045	6.18	0.72	6.73
	0.050	6.12	0.72	6.78
	0.056	6.06	0.71	6.83

WQM 7.0 Effluent Limits

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>					
09C	22505	Trib 22505 to Fishing 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)
0.250	Lamar Fish Hatc	PA0009857	5.200	CBOD5	7		
				NH3-N	0.8	1.6	
				Dissolved Oxygen			6

APPENDIX C

TOXICS MANAGEMENT SPREADSHEET



Discharge Information

Instructions Discharge Stream

Facility: Lamar Fish Hatchery NPDES Permit No.: PA0009857 Outfall No.: 001

Evaluation Type: Custom / Additives Wastewater Description: Fish Culture Effluent

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
5.2	100	7						

Discharge Pollutant	Units	Max Discharge Conc	0 if left blank		0.5 if left blank		0 if left blank			1 if left blank	
			Trib Conc	Stream Conc	Daily CV	Hourly CV	Stream CV	Fate Coeff	FOS	Criteria Mod	Chem Transl
35% Perox-Aid	mg/L	1E+10									
Parasite-S (Formalin)	mg/L	1E+10									
Non-iodized salt	mg/L	1E+10									
Syncaine (MS-222)	mg/L	1E+10									
Terramycin 200	mg/L	1E+10									
Halamid Aqua (Chloramine T)	mg/L	1E+10									
Aquaflor (Florfenicol)	mg/L	1E+10									
Romet 30	mg/L	1E+10									



Stream / Surface Water Information

Lamar Fish Hatchery, NPDES Permit No. PA0009857, Outfall 001

Instructions Discharge **Stream**

Receiving Surface Water Name: _____ No. Reaches to Model: 1

- Statewide Criteria
- Great Lakes Criteria
- ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi ²)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	022412	0.25	832	75			Yes
End of Reach 1	022412	0	824	76			Yes

Q₇₋₁₀

Location	RMI	LFY (cfs/mi ²)*	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	0.25	0.1	0.5									100	7		
End of Reach 1	0	0.1	0.5												

Q_h

Location	RMI	LFY (cfs/mi ²)*	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	0.25														
End of Reach 1	0														

Recommended WQBELs & Monitoring Requirements

No. Samples/Month: 4

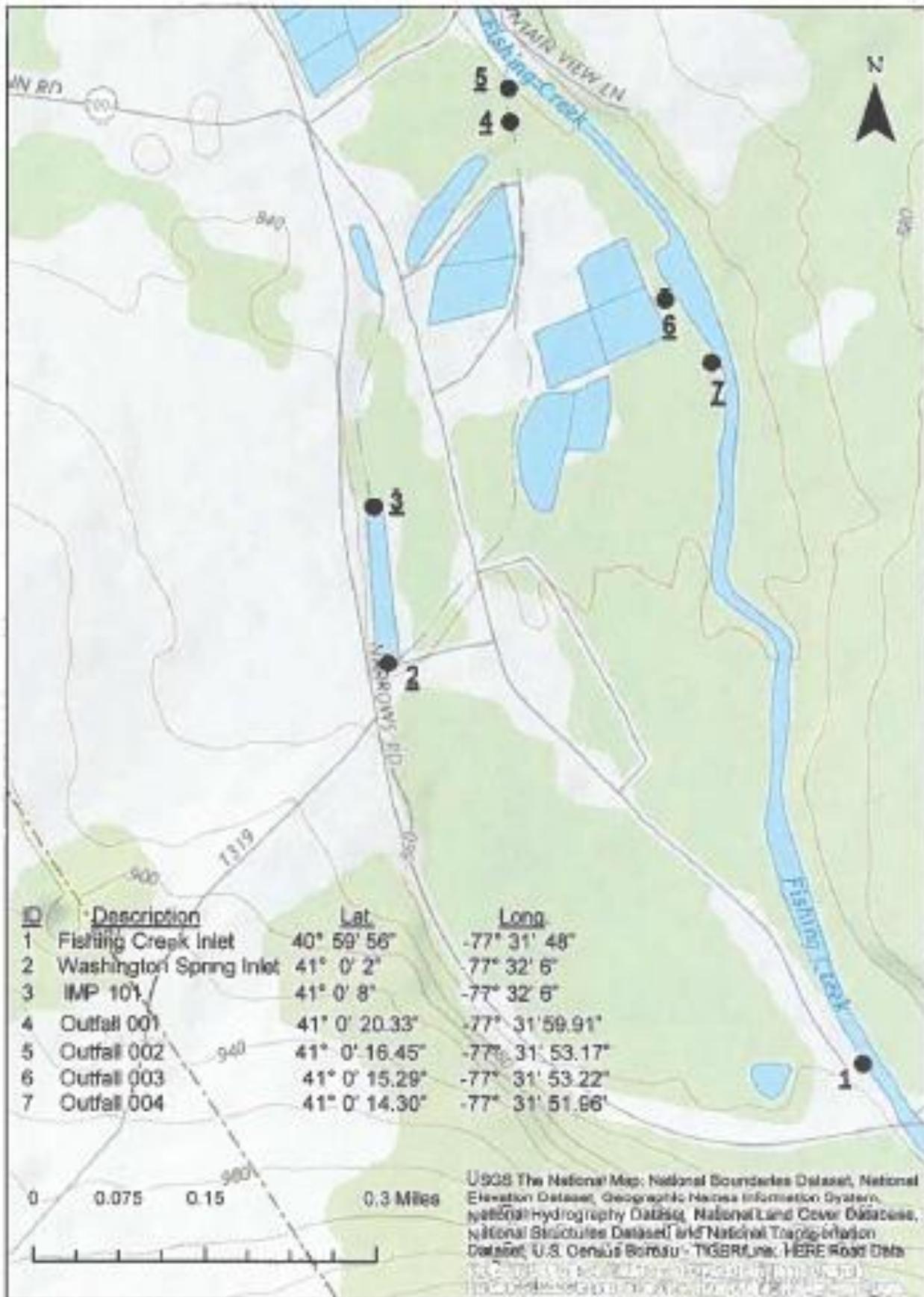
Pollutants	Mass Limits		Concentration Limits				Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units			
35% Perox-Aid	29.0	45.3	0.67	1.04	1.67	mg/L	0.67	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Parasite-S (Formalin)	0.065	0.1	0.001	0.002	0.004	mg/L	0.001	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Non-iodized salt	442	689	10.2	15.9	25.5	mg/L	10.2	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Syncaine (MS-222)	1,723	2,688	39.7	62.0	99.3	mg/L	39.7	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Terramycin 200	74.2	116	1.71	2.67	4.28	mg/L	1.71	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Halamid Aqua (Chloramine T)	25.8	40.2	0.59	0.93	1.49	mg/L	0.59	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Aquaflor (Florfenicol)	118	183	2.71	4.23	6.78	mg/L	2.71	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Romet 30	30.4	47.4	0.7	1.09	1.75	mg/L	0.7	CFC	Discharge Conc ≥ 50% WQBEL (RP)

Other Pollutants without Limits or Monitoring

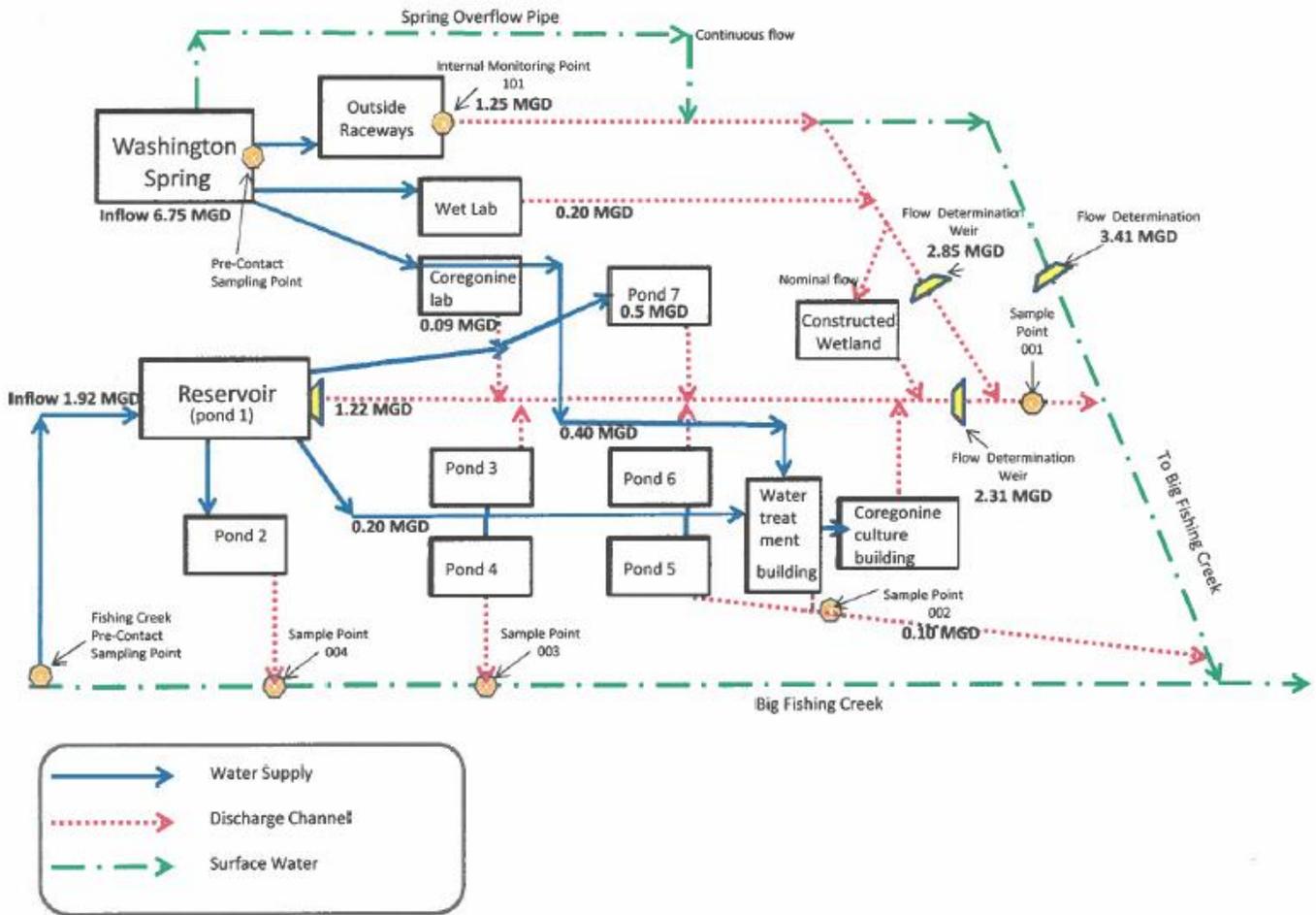
APPENDIX D

FACILITY MAP AND SCHEMATIC

Topographic map of USFWS Lamar National Fish Hatchery



Flow Budget at USFWS Lamar National Fish Hatchery - NPDES 0009857



AUTH TYPE	APPLICATION TYPE	AUTH ID	DATE RECEIVED	APS ID	CLIENT	SITE	PERMIT NUMBER	RE
CAAP1 - CAAP Individual Permit	Renewal	1263886	2/28/2019	987806	PENNSYLVANIA FISH AND BOAT COMMISSION	PLEASANT GAP FISH CULTURE STA	PA0010561	
CAAP1 - CAAP Individual Permit	Renewal	1290567	9/30/2019	1002931	PA FISH & BOAT COMM	OSWAYO FISH CULTURE STA	PA0039144	
CAAP1 - CAAP Individual Permit	Renewal	1263208	2/25/2019	987392	PENNSYLVANIA FISH AND BOAT COMMISSION	BENNER SPRINGS FSH RESEARCH STA	PA0010553	
CAAP1 - CAAP Individual Permit	Renewal	1226146	4/23/2018	966759	PENNSYLVANIA FISH AND BOAT COMMISSION	UPPER SPRING CK FCS	PA0044032	