pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0221848**
Facility Type	**Non-Municipal**	APS ID	**1023884**
Major / Minor	**Minor**	Authorization ID	**1328137**

Applicant and Facility Information

Applicant Name	**USDA Forest Service**	Facility Name	**Willow Bay Recreation Area STP**
Applicant Address	4 Farm Colony Drive	Facility Address	4001 W Washington Street
	Warren, PA 16365-5206		Bradford, PA 16701
Applicant Contact	Jamie Davidson	Facility Contact	Jamie Davidson
Applicant Phone	(814) 728-6299	Facility Phone	(814) 728-6299
Client ID	134954	Site ID	727424
Ch 94 Load Status	Not Overloaded	Municipality	Corydon Township
Connection Status	No Limitations	County	McKean
Date Application Received	September 1, 2020	EPA Waived?	Yes
Date Application Accepted	September 30, 2020	If No, Reason	-
Purpose of Application	NPDES permit renewal application for a campground.		

Summary of Review

Act 14 – Proof of notification were submitted and received.

There are numerous open violations for subject client no. 134954 as of 11/03/2021 for the safe drinking water program in the northwest regional office. The NWRO Clean Water Program is currently reviewing this with SDW Program to determine if there is a plan in place to resolve these violations.

This facility is currently submitting eDMR reports.

There has been no change to the discharge or receiving stream since the last permit issuance.

This seasonal facility is offline by November and re-starts in April.

Sludge use and disposal description and location(s): Septage must be pumped and hauled off-site by a septage hauler for land application under a general permit authorized by DEP or disposal at an STP.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
X		Jon F. Bucha Jonathan F. Bucha / Civil Engineer General	November 3, 2021
X		Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	November 4, 2021

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.015
Latitude	41º 59' 23.37"	Longitude	-78º 54' 54.3"
Quad Name	Cornplanter Run	Quad Code	0314
Wastewater Description:	Treated Sewage Effluent		
Receiving Waters	Willow Creek (Allegheny Reservoir)	Stream Code	56875
NHD Com ID	112383507	RMI	1.7
Drainage Area	23.2 mi^2	Yield (cfs/mi^2)	0.1072
Q_{7-10} Flow (cfs)	2.49	Q_{7-10} Basis	Brokenstraw Creek (USGS# 03015500)
Elevation (ft)	1328	Slope (ft/ft)	-
Watershed No.	16-B	Chapter 93 Class.	HQ-CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Not Assessed		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Aqua PA, Inc - Emlenton		
PWS Waters	Allegheny River	Flow at Intake (cfs)	1376
PWS RMI	90	Distance from Outfall (mi)	120.78

Changes Since Last Permit Issuance: N/A

Other Comments: This treatment facility is capable of meeting effluent requirements.

There are no proposed changes to the effluent quality or quantity. Therefore, there should not be any anti-degradation issues associated with the discharge being to an HQ watershed based on the information presented in this Fact Sheet. JCD

Treatment Facility Summary				
Treatment Facility Name: Willow Bay Recreation Area STP				
WQM Permit No.	**Issuance Date**			
4295405	January 8, 1996			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Secondary	Septic Tank Sand Filter	Hypochlorite	0.015
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.015	30	Not Overloaded	Anaerobic Digestion	

Changes Since Last Permit Issuance: N/A

Other Comments: The treatment system serves 3 campsites (Hemlock, Oak, and Aspen). Treatment system consists of septic tanks, pump stations, force mains, dosing tank, 3 sand filters, recirculation tank, and chlorination.

Solids from the septic tank are pumped out bi-annually by J&J Honey Dipping and disposed of at Bradford Ranger Station Lagoon System (WQM# 4208404). Septic tanks were last pumped in July 2021, and removed 4,000-gallons, and 2,500-gallons from septic tanks.

Compliance History	
Summary of DMRs:	A review of the past 3 years of eDMR data shows only one effluent violation in September 2021 for $CBOD_5$, which was caused by a heavy rain event.
Summary of Inspections:	An inspection occurred on 5/27/2020, where no violations were noted. All equipment was operational except for the flow chart recorder.

Other Comments: **N/A**

Compliance History

DMR Data for Outfall 001 (from October 1, 2020 to September 30, 2021)

Parameter	SEP-21	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20
Flow (MGD) Average Monthly	0.001863	0.003102	0.002903	0.004991	0.00054	0.001462						0.0011
Flow (MGD) Daily Maximum	0.00328	0.015087	0.007394	0.0095	0.002709	0.019962						0.004164
pH (S.U.) Minimum	6.82	6.6	6.17	6.17	6.9	7.0						6.48
pH (S.U.) Maximum	7.37	7.04	7.28	6.94	7.44	8.5						6.91
DO (mg/L) Minimum	7.26	6.39	6.49	7.68	8.03	10.88						8.61
TRC (mg/L) Average Monthly	0.28	0.25	0.15	0.2	0.3	0.3						0.2
CBOD5 (mg/L) Average Monthly	14	2	2	3	4	< 2						2
TSS (mg/L) Average Monthly	3	3	3	3	3	< 2						4
Fecal Coliform (CFU/100 ml) Geometric Mean	1	1	< 1	1	1	< 1						1.4
Total Nitrogen (mg/L) Average Monthly	41	50.5	42.5	45	20.5	16						66
Ammonia (mg/L) Average Monthly	3.74	0.8	0.8	0.5	0.1	0.1						0.3
Total Phosphorus (mg/L) Average Monthly	7.6	8.04	7.01	3.9	4.13	3.6						6.3

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .015
Latitude 41º 59' 23.37" **Longitude** -78º 54' 54.30"
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: This permit renewal will be adding 1,000 mg/L imax for fecal coliform in order comply with the technology-based limits listed in the above table and Ch. 92a.47(a)(4). Wintertime fecal coliform limits will not be incorporated due to the facility not being in operation from November until April.

Water Quality-Based Limitations

No water quality modeling was necessary due to significant dilution being available in the Allegheny Reservoir.

Best Professional Judgment (BPJ) Limitations

Comments: Monitoring for Total Nitrogen, Total Phosphorus, and E. Coli is based on Ch. 92a.61 and the Departments SOP for Establishing Effluent Limitations for Individual Sewage Permits (SOP No. BPNPSM-PMT-033). E. Coli monitoring is a new addition to this permit renewal. Monitoring frequencies are from Table 6-3 of the Permit Writers Manual.

Ammonia Nitrogen will remain at year-round reporting due to this facility demonstrating low effluent concentrations in the eDMR report.

$CBOD_5$ and TSS limits will both remain at 10 mg/L and 20 mg/L for average monthly and imax respectively in order to continue to protect the designated stream uses.

TRC IMAX will remain at 1.2 mg/L based on the facility demonstrating its ability to comply with this effluent limit and to continue protecting the streams designated uses.

Anti-Backsliding

Anti-Backsliding considerations do not apply since the effluent limitations have not been relaxed from the previous permit renewal.

Proposed Effluent Limitations and Monitoring Requirements

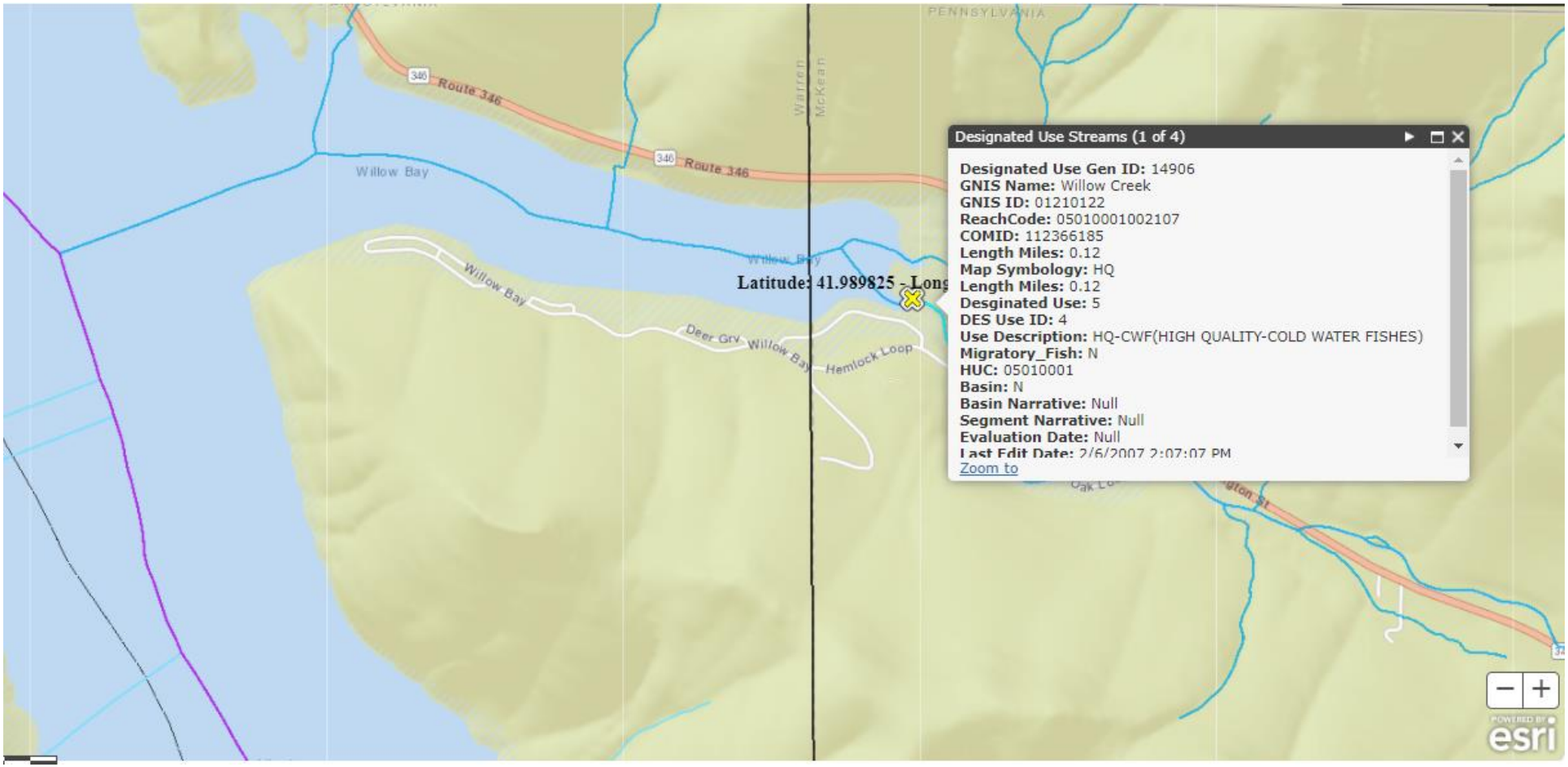
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	Grab
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	2/month	Grab

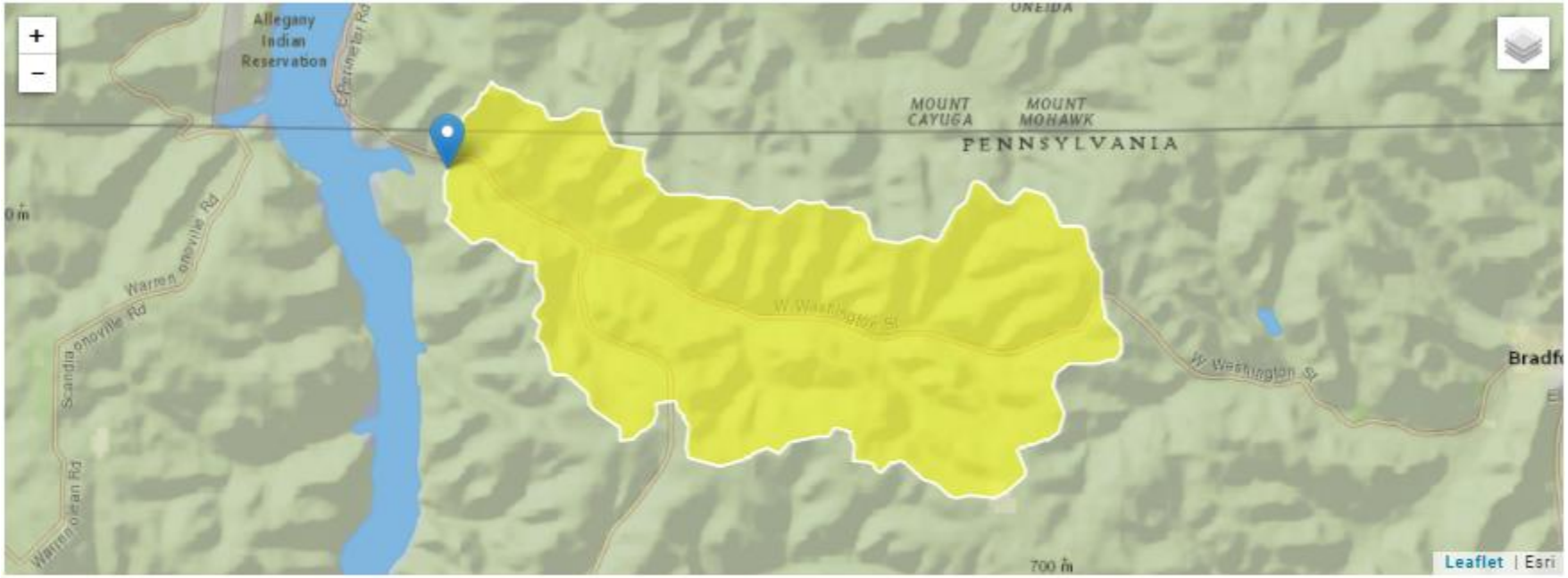
Compliance Sampling Location: Outfall 001 after disinfection.

Attachment A – eMAP Stream Designation



Attachment B – Streamstats Drainage Area (Discharge Point)

Region ID:	PA
Workspace ID:	PA20211103132304205000
Clicked Point (Latitude, Longitude):	41.99098, -78.92080
Time:	2021-11-03 09:23:24 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	23.2	square miles
ELEV	Mean Basin Elevation	1906	feet
PRECIP	Mean Annual Precipitation	45	inches