

Application Type

Renewal

Facility Type

Non-Municipal

Major / Minor

Minor

Application No.

PA0061913

APS ID

577097

Authorization ID

1474869

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Applicant and Facility Information

Applicant Name	<u>Elk Mountain Ski Resort Inc.</u>	Facility Name	<u>Elk Mountain Ski Resort</u>
Applicant Address	<u>344 Elk Mountain Road</u>	Facility Address	<u>Vauter Road</u>
	<u>Union Dale, PA 18470-9552</u>		<u>Herrick Township, PA 18470</u>
Applicant Contact	<u>Gregg Confer</u>	Facility Contact	<u>Gregg Confer</u>
Applicant Phone	<u>(570) 679-4400</u>	Facility Phone	<u>(570) 679-4400</u>
Client ID	<u>33474</u>	Site ID	<u>251049</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Herrick Township</u>
Connection Status		County	<u>Susquehanna</u>
Date Application Received	<u>February 28, 2024</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>March 4, 2024</u>	If No, Reason	
Purpose of Application	<u>Renewal of existing NPDES permit to discharge treated sewage effluent.</u>		

Summary of Review

Applicant is requesting a new NPDES permit to discharge up to .100mgd of treated sewage effluent to East Branch Tunkhannock Creek, a Cold-Water Fishes (CWF) receiving water in State Water Plan Basin 4-F (Tunkhannock Creek). As per the Department's current existing use list, the receiving stream has an existing use classification that is more protective than its designated use. The existing use classification is High-Quality, Cold-Water Fishery, Migratory Fish (HQ-CWF, MF). The stream is a designated Class A Wild Trout stream. This stream segment is also designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

The system for this facility consists of primary treatment, secondary treatment, and uses a chlorine contact tank for disinfection. Primary treatment is performed using a comminutor. Secondary treatment is via an aerated facultative lagoon. Treated sewage leaves the facility through Outfall 001 and discharges into the receiving water.

Facility contact Gregg Confer indicated in summer of 2024 some minor refurbishment work that included the lagoon liner and aeration components. On August 5, 2024, an email from Gregg Confer indicated the lagoon was lowered and sludge was being pumped to accommodate this plan. This scope of work was not expected to impact discharge of treated sewage.

Limitations for pH, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit. Limitations for CBOD₅, Dissolved Oxygen, and Ammonia-Nitrogen are water quality-based and carried over from the previous permit.

TRC modeling resulted in limitations more stringent than the limitations of the previous permit. Previous permit limitations were 0.27mg/L (Average Monthly) and 0.8mg/L (IMAX). Modeling based on parameters listed below resulted in a new limitation of .257mg/L (Average Monthly) and the same IMAX. New TRC limitations will go into effect three (3) years after permit issuance. TRC limitations from the previously issued permit are in effect for the first three years after the permit effective date.

Approve	Deny	Signatures	Date
X		<i>William Hon</i> William Hon / Environmental Engineer Specialist	January 9, 2025
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Acting Engineer Manager	1-31-25

Summary of Review

Quarterly monitoring requirements for Total Nitrogen, Total Kjeldahl Nitrogen, and Nitrate-Nitrite as N will be carried over from previous permit. Monitoring requirements for Total Phosphorus has been carried over from previous permit, but monitoring frequency has been changed from 1/quarter to 1/week in accordance with table 6-3 of the "Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits" manual. E. Coli monitoring requirements will be introduced into new permit according to PA DEP policy for individual sewage effluent limitations. E. Coli requirements for a treatment plant with design flows between .05 and 1MGD discharge is found in the SOP for establishing effluent limitations for individual sewage and is reported 1/quarter.

There were no representative stream gages in the vicinity of the outfall. The state-wide default low flow yield (LFY) of 0.1 cfs/mi² was used to model the discharge. RMI values were obtained using the Department's eMapPA, drainage areas were delineated using USGS's StreamStats interactive map, and elevations were obtained using the elevation profile tool on StreamStats.

According to the previous four (4) sludge disposal forms uploaded to WMS for the Elk Mountain WWTP, no solids have been removed from the treatment system. The system only receives significant wastewater flow during the winter ski season. The flow is retained in the lagoon during the winter months with discharge typically beginning in June. Sludge depth in the lagoon has been measured periodically.

The previous permit expired on April 30, 2024 and was administratively extended on March 4, 2024 due to a late renewal package submission.

The most recent inspection conducted at this facility was a routine/partial inspection that occurred on December 12, 2024 and resulted in zero (0) NOVs. There are no open violations that would warrant the withholding of the issuance of this permit. Recommend approval.

Modeling Inputs:

PT 1 @ Outfall
Stream: 29019 East Branch Tunkhannock Creek
RMI: .60

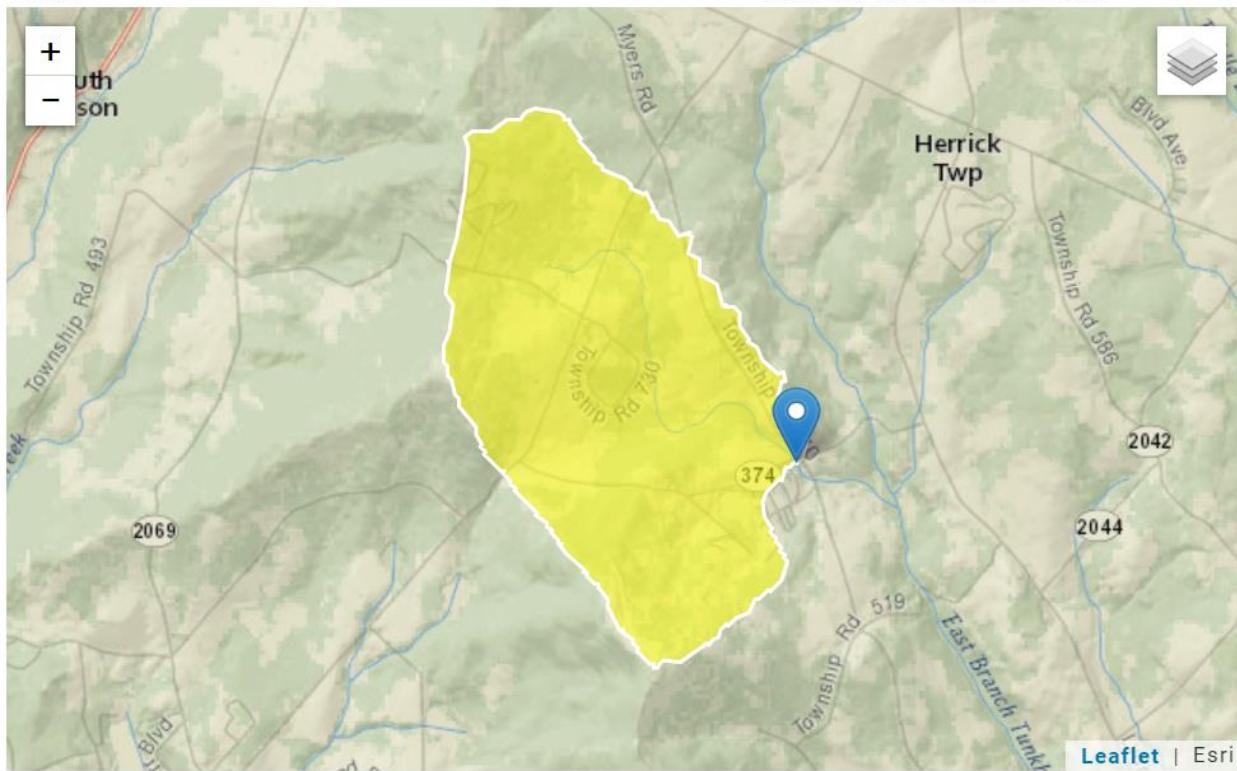
Summary of Review

Clicked Point (Latitude, Longitude):

41.72892, -75.54852

Time:

2025-01-06 14:38:47 -0500



Parameter

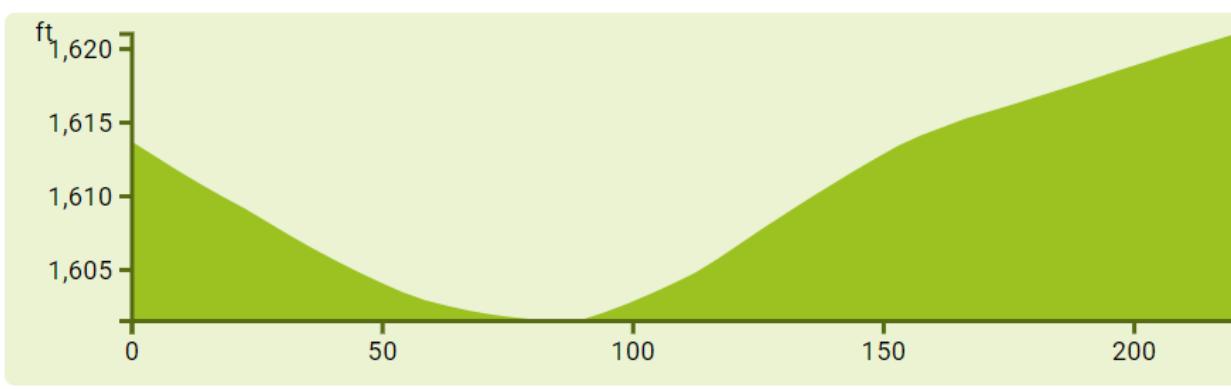
Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	2.63	square miles

Low-Flow Statistics Flow Report [Low Flow Region 5]

Statistic

	Value	Unit
7 Day 2 Year Low Flow	0.236	ft^3/s
30 Day 2 Year Low Flow	0.35	ft^3/s
7 Day 10 Year Low Flow	0.0762	ft^3/s

Summary of Review



41.72897 -75.54857 1601.53 85.37

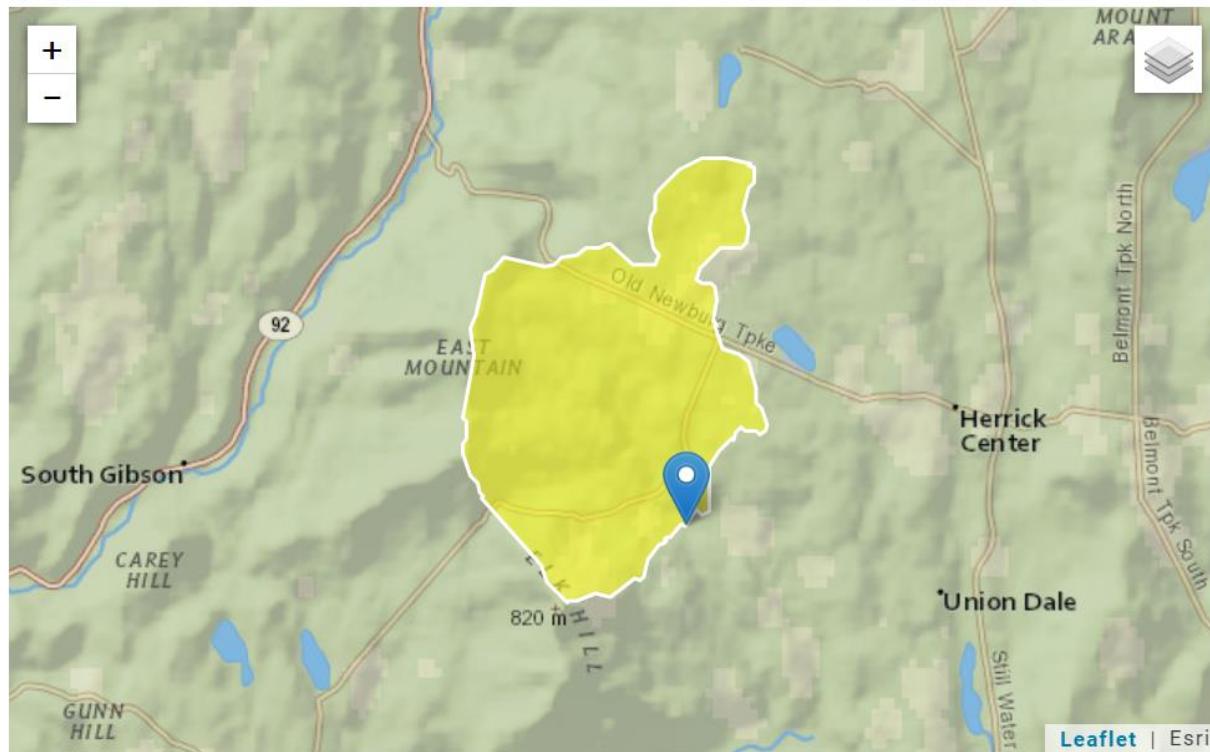
Pt2 @ conflux with East Branch Tunk Creek streams approx. .6 miles away
RMI: .01

Clicked Point (Latitude, Longitude):

41.72583, -75.53929

Time:

2025-01-06 15:10:55 -0500



Parameter

Code

Parameter Description

Value

Unit

DRNAREA

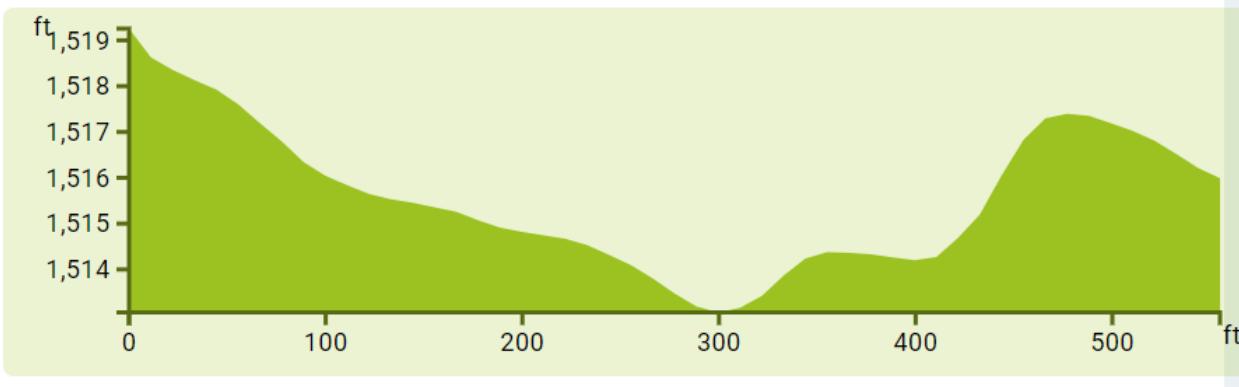
Area that drains to a point on a stream

7.47

square miles

Summary of Review

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	0.72	ft ³ /s	38	38
30 Day 2 Year Low Flow	1.04	ft ³ /s	33	33
7 Day 10 Year Low Flow	0.256	ft ³ /s	57	57



RMI	Discharge Name	Permit Number	Disc Flow (mgd)
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0.60	Elk Mountain	PA0061913	0.1000
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Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	5.67	11.34	
Dissolved Oxygen			5

Record: |◀◀| 1 of 1 |▶▶| ⌂ No Filter | Search |

LFY = .1 cfs/mi² (state guidelines)

Drainage area = 2.63mi²

.1cfs/mi² * 2.63mi² = .263cfs for TRC and WQM modeling

Summary of Review

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.263	= Q stream (cfs)	0.5	= CV Daily
0.1	= 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 = 0.561	1.3.2.iii	WLA_cfc = 0.540
PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373	5.1c	LTAMULT_cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.209	5.1d	LTA_cfc = 0.314

Source	Effluent Limit Calculations		
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.257	INST MAX LIMIT (mg/l) = 0.842

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		<i>William Hon</i> William Hon / Environmental Engineer Specialist	January 9, 2025
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Acting Engineer Manager	1-31-25