STREAM BIOLOGICAL CONDITIONS
ENVIRONMENTAL AUDITOR REPORT

Version 2.3

Wetland Studies and Solutions, Inc.® a DAVEY company

Stream ID: S-D23	**Crossing Start Date:** 02/26/2025	**Crossing Completion Date:** 02/27/2025
Milepost: 261	**Pre-Con Assessment Date:** 02/05/2025	**Post-Con Assessment Date:** 02/27/2025
Station: 13790+68	**Stream Classification:** Perennial **(Perennial, Intermittent, Ephemeral)**	**Bankfull Width (ft.):** 20
County: Franklin	**303(d) Impairment Listing:** Impaired	**Riffle:Pool Complexes Present?** Yes

Item #	Resource Crossing Conditions	N/A	YES	NO
1.	Were all applicable resource specific crossing conditions satisfied? Time of Year Restrictions (TOYR)? N/A Fish Relocation? Yes Mussel Relocation? N/A		X	
2.	Is this resource designated a wild or stockable trout stream?			X
3.	Which crossing methods were utilized during the stream crossing? *(Select one or more)* Dam & Pump, Flume, Cofferdam, Conventional Bore, Horizontal Directional Drill (HDD) Bore?	Cofferdam		
4.	Was the top 1-foot (12-inches) of streambed substrate segregated and stockpiled separate from trench spoils?	X		
5.	Was excess material not needed for backfill removed and disposed of in an upland area?		X	
6.	Was the top 12-inches of backfill made with clean native stream substrate?	X		
7.	Was the pre-construction survey data provided and utilized during restoration in attempt to re-establish pre-construction contours?			X
8.	Were any field modifications to the stream implemented by project or regulatory personnel to address potential drainage or bank restoration limitations?			X
9.	Were impervious trench breakers/plugs properly installed within 25-feet of top-of-bank to prevent subsurface erosion to or from the resource area?	X		
10.	Was permanent seed and stabilization material (straw or matting) applied to riparian areas and stream banks prior to re-establishing flow to the impact area of the channel?		X	
11.	Was the time of disturbance minimized by conducting resource work continuously to completion?		X	
12.	Have civil surveys been scheduled to verify as-built conditions meet pre-construction conditions in accordance with the project Mitigation Framework and federal/state permit requirements?	X		
13.	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 – 4/30)?		X	
14.	Did any unauthorized discharges to unpermitted resources occur during the crossing? If so, explain the corrective actions implemented in the Comments section and include additional photos.			X

Item #	Biological Conditions	Pre-Con	Post-Con
15.	**Predominant Substrate Type (select one):** *Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay*	Sand (<0.1")	Sand (<0.1")
16.	**Channel Conditions:** **Rating:** *1-Optimal (80-100% stable banks), 2-Sub-optimal (60-80% stable banks), 3-Marginal (40-60% stable banks), 4-Poor (20-40% stable banks), 5-Severe (0-20% stable banks, highly eroded or unvegetated banks)*	3 - Marginal	1 - Optimal
17.	**Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank:** **Rating:** *1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (30-60% mixed vegetated coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetated coverage, etc.)*	2 - Suboptimal	1 - Optimal
18.	**Instream Habitat Conditions:** **Examples:** *Varied substrate sizes, varied combination of water velocities/depths, presence of woody/leafy debris, stable substrate with low amount of mobile particles, low embeddedness, shade protection, undercut banks, root mats, submerged aquatic vegetation.* **Rating:** *1-Optimal (Habitat conditions present in >50% of resource), 2-Suboptimal (Habitat conditions in 30-50% of resource), 3-Marginal (Habitat conditions in 10-30% of resource), 4-Poor (Habitat conditions in 0-10% of resource)*	3 - Marginal	3 - Marginal
19.	**Channel Alterations:** **Examples:** *Straightened channel, non-MVP stream crossings, non-native riprap/rock along banks, concrete/gabions/concrete block, manmade embankments, constrictions w/in channel, livestock or agricultural impacts.* **Rating:** *1-Negligible (unaltered/natural stream), 2-Minor (20-40% of resource disrupted by channel alterations), 3-Moderate (40-80% of resource disrupted), 4-Severe (>80% of resource disrupted)*	1 - Negligible	1 - Negligible

Comments/Remarks

2-5-2025: Preconstruction meeting with PPL crew. Stream bank repair on the left bank due to accelerated erosion. Crew plans to regrade the bank in three sections, utilizing a cofferdam at each section to isolate the workspace from the stream. Topsoil stockpile locations and dewatering operation to be set up in upland area on the GAS. Anticipated start date is 2/7/2025 depending on weather conditions. PPL foreman is Shane. -S. Fisher

2-26-2025: The bank repair will be completed in two sections. The bank repair will not involve any work within the streambed itself, therefore, no substrate will be removed. The cofferdam was built on the first part of the bank repair. Fish relocation was conducted within the cofferdam and a dewatering structure was built. When pumps were turned on, it was discovered that the cofferdam was not sealed properly and water was seeping in. The dewatering structure was overtopped, and operations were temporarily halted while a new strategy was formed. A layer of Geotech and visqueen plastic was installed on the slope between S-D22 and S-D23 to prevent scouring and erosion from forming from the concentrated flow from the dewatering structure. The cofferdam was redone and a seal was established before the pumps were turned back on and dewatering operations continued. Topsoil was removed and properly segregated from subsoil. Subsoil was removed as the banks were laid back to establish a more gradual grade. Once grade was established, topsoil was restored and seeded and ECM was installed. The cofferdam was removed and sandbags temporarily staged on other side of the bank for use on the second section of the bank restoration tomorrow. -A. Breeding

2-27-2025: The same dewatering structure was utilized for the second section of the bank repair. The new cofferdam was built and fish relocation was conducted within the cofferdam. Dewatering operations continued. Topsoil was removed and the banks were laid back to establish the new grade. Once grade was established, topsoil was restored and seeded and ECM was installed. The cofferdam was removed and flow was fully restored. ECD's were installed in the 50 ft buffer. Any saplings that were removed during construction are scheduled to be replaced in March. There were no impacts to biological conditions observed during the bank repair activities. -A. Breeding

In accordance with the Mountain Valley Pipeline Consent Decree, Case No. CL18006874-00, (Issued October 11, 2019) this independent report was completed to document the on-site monitoring of instream invertebrate and fisheries resources during all construction activity related to waterbody and wetland crossings, and document instream conditions and any impacts to the resources.

This report was written by	Alyson Breeding		02/28/2025
	Print Name	*Signature*	*Date*

Required Photos

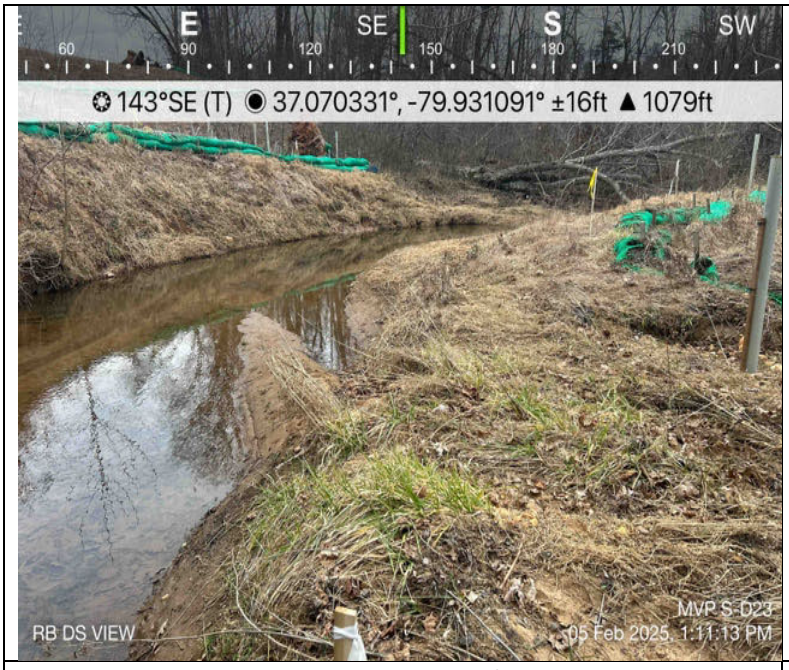

Photo Description: Downstream view of permitted impact area during pre-construction assessment.

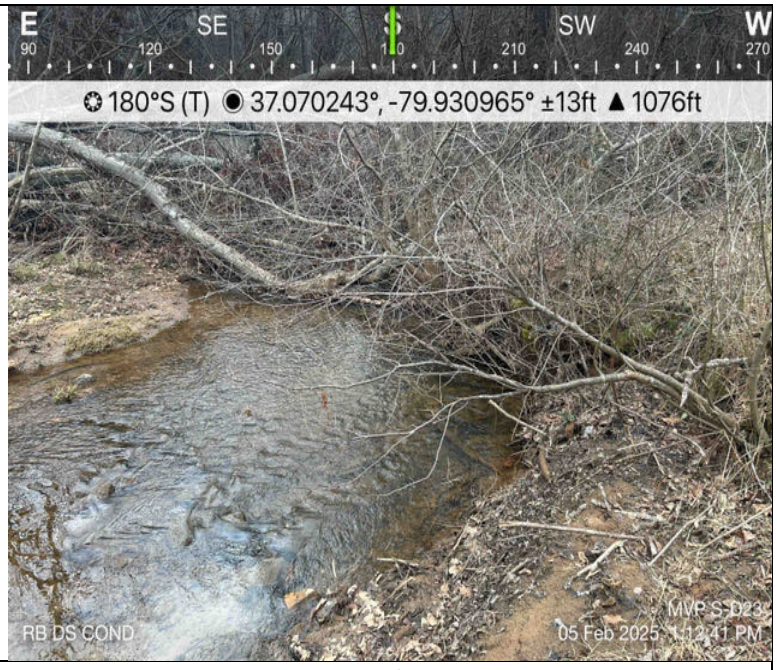

Photo Description: Conditions of the downstream area outside the ROW during pre-construction assessment.

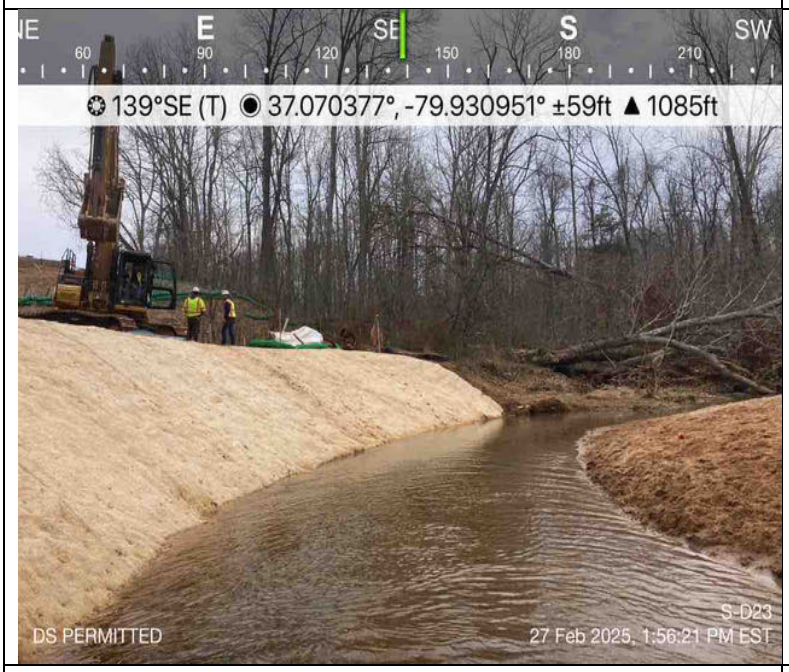

Photo Description: Downstream view of permitted impact area during post-construction assessment.

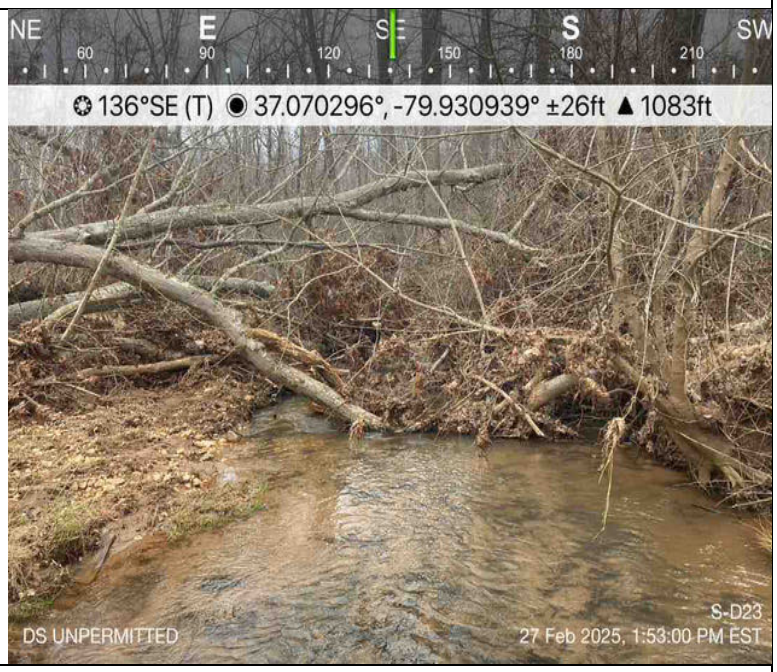

Photo Description: Conditions of the downstream area outside the ROW during post-construction assessment.

Optional Additional Photos

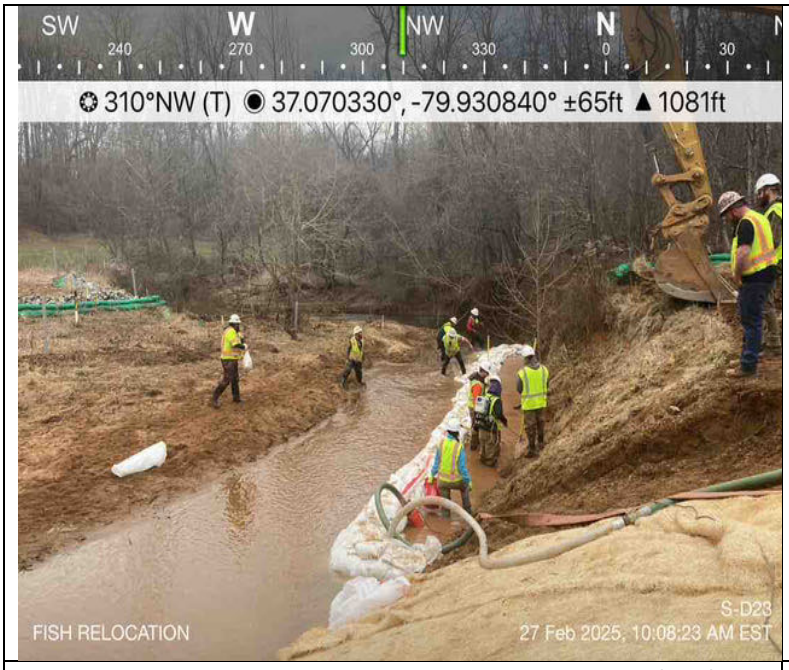

Photo Description: Fish relocation services relocated fish from within cofferdam.

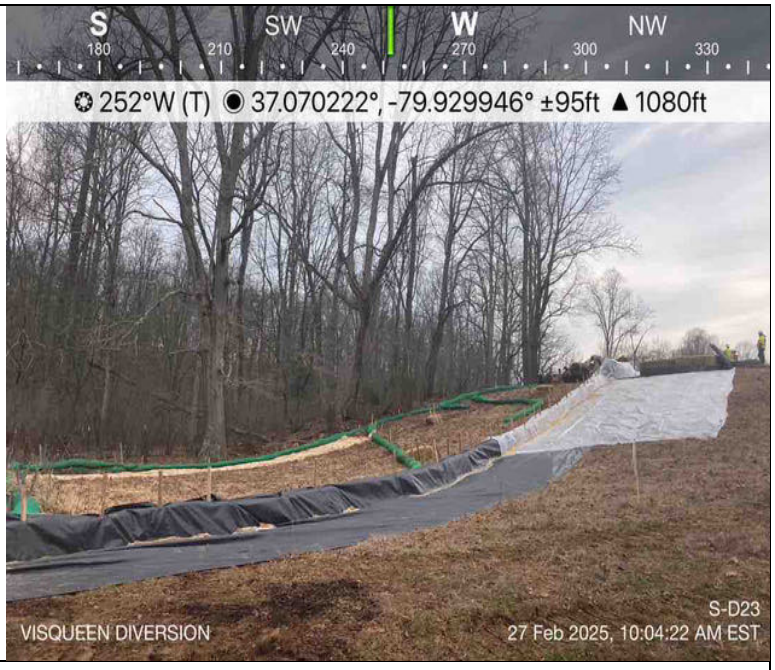

Photo Description: Dewatering operations onsite, visqueen and Geotech fabric were laid out along the slope to prevent erosion.

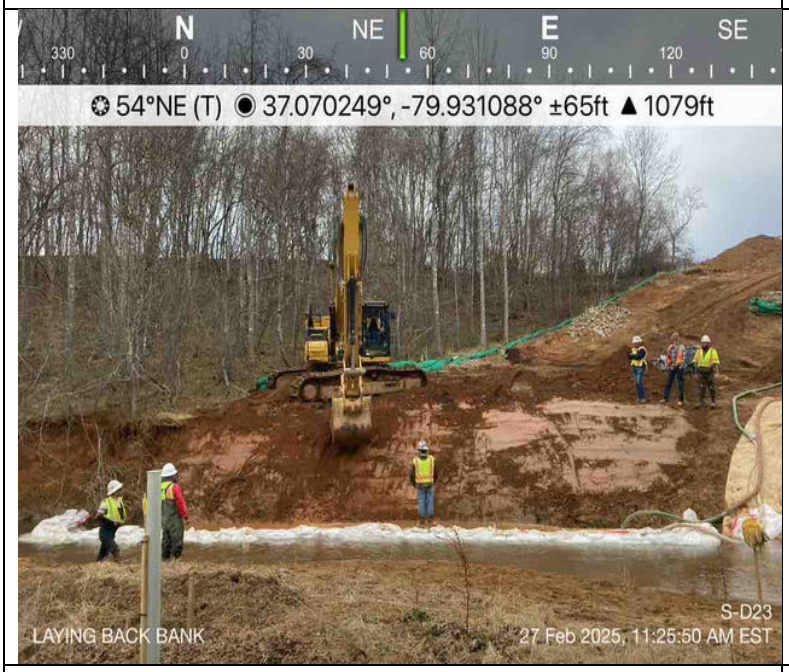

Photo Description: Slope was laid back to allow for new grade to prevent further damage to banks.

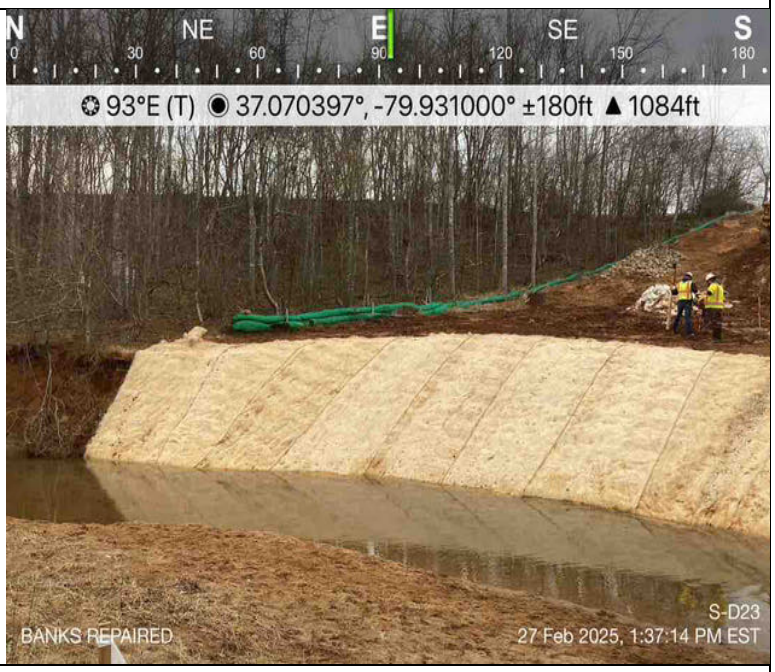

Photo Description: Area was seeded and ECM was installed after soil was appropriately restored.