STREAM BIOLOGICAL CONDITIONS
ENVIRONMENTAL AUDITOR REPORT

Version 2.3

Wetland Studies and Solutions, Inc.® a DAVEY company

Stream ID: S-D20	**Crossing Start Date:** 03/10/2025	**Crossing Completion Date:** 03/11/2025
Milepost: 261.3	**Pre-Con Assessment Date:** 03/10/2025	**Post-Con Assessment Date:** 03/11/2025
Station: 13805+52	**Stream Classification:** Intermittent **(Perennial, Intermittent, Ephemeral)**	**Bankfull Width (ft.):** 8
County: Franklin	**303(d) Impairment Listing:** Not Impaired	**Riffle:Pool Complexes Present?** No

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? N/A 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?	Dam & Pump		
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*	Mud/Silt/Clay	Mud/Silt/Clay
16.	**Channel Conditions:** **Rating:** *1-Optimal (80-100% stable banks), 2-Suboptimal (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-Suboptimal (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	2 - Suboptimal
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)*	4 - Poor	4 - Poor
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	3 - Moderate

Comments/Remarks

Please note that this is a bank repair report.

03/10/2025: The pre-construction pictures assessment was performed. Both banks are extremely unstable due to their excessively soft and wet composition. To mitigate this issue, riprap will be keyed in at the toe of the bank and installed to the top of the bank. Riprap will not be placed within the stream bed. Fish removal was not conducted for this stream as water level was too low for the fish removal procedure. A downstream rock shield and dam & pump around were installed. Topsoil was removed from the right bank and stockpiled. An extra layer of subsoil was removed to accommodate the addition of riprap. The bank was smoothed and a layer of geotextile fabric was installed on the slope. Layers of riprap were installed from the toe up to the top of the bank to match the grade. Temporary straw matting was installed to the disturbed portions of the bank that were not covered in riprap. The dam and pump around was disassembled for the night. Bridge removal and left bank repair will occur tomorrow. -A. Thorpe

03/11/2025: Dam and pump was reinstalled and the workspace was staged with timber mats for the site equipment to operate on to reduce compaction. All pumps and fuel cans are stored in secondary containments. Erosion controls were removed from left bank, and the bank was regraded to a stable angle of repose (~3:1). For the area above the pipe installation, a geotextile fabric underlayment was applied, and imported riprap was installed along the left bank to provide long term stability of the crossing area. For the area where the bridge was previously installed, the left bank was regraded to a stable angle of repose, seeded, and stabilized with erosion control matting. The edges of the matting were keyed in and staked appropriately. Post-construction assessment and photos were completed. -S. Fisher

Item #8 & #19: Riprap was installed on the left and right stream banks above the pipe centerline to ensure long term stability of the crossing area.

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	Stephen Fisher	D. Stephen Fisher	03/11/2025
	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: Riprap placement on left bank.

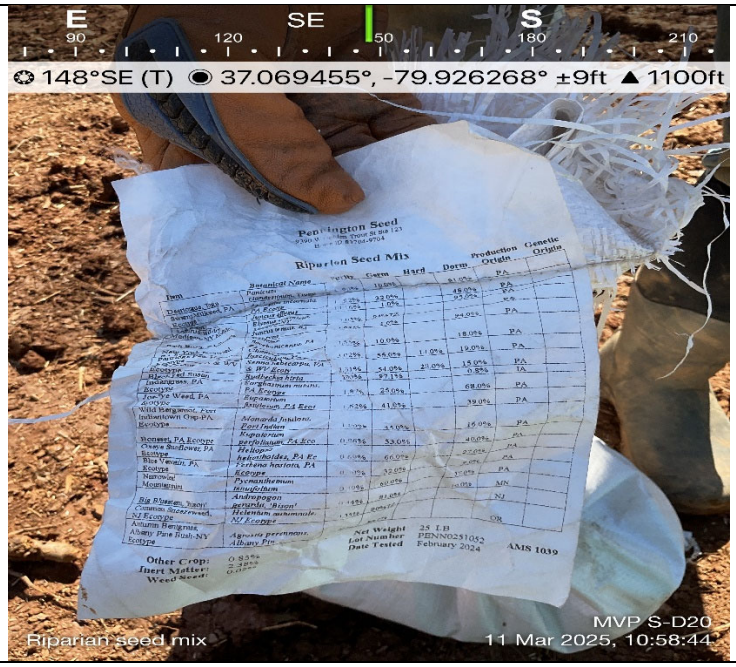

Photo Description: Riparian seed mix used for stabilization.

Photo Description: Regrading left bank where bridge was staged.

Photo Description: Pollution prevention practices in place during the bank repair.