

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-E28-W	Crossing Start Date: 08/11/2023	Crossing Completion Date: 08/12/2023
Milepost: 258.2	Pre-Con Assessment Date: 08/10/2023	Post-Con Assessment Date: 08/14/2023
Station: 13643+35	Stream Classification: Perennial (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 12
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)? <u>Yes</u> Fish Relocation? <u>Yes</u> Mussel Relocation? <u>N/A</u>		X	
2.	Is this resource designated a wild or stockable trout stream?			X
3.	Which crossing methods were utilized during the stream crossing? <i>(Select one or more)</i> 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): <i>Bedrock, Boulder (10"), Cobble (2-10"), Gravel (0.1-2"), Sand (0.1"), Mud/Silt/Clay</i>	Cobble (2-10")	Cobble (2-10")
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)	4 - Poor	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.)	1 - Optimal	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)	1 - Optimal	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

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Comments/Remarks

8/10/2023: Pre con held and crews installed and stabilized clean water diversion upslope of crossing. - cv
Tyler Roach MVP EI, William Martin tie in foreman.
-G. Johnson


8/11/2023: Downstream fishnet removed after determination that rock check was adequate to deter fish from returning upstream. Steel plates and sand bags used for dam.
6" hose coupling broke on primary and back up pumps. Some incoming clean water escaped around the dam as water rose but was filtered by rock check. Stream bed was still intact at this time. 3" hose used while the 6" hose was replaced which proved adequate to lower the water level. 2x 6" hoses in use with 3" hose left in place for backup.
There was a small leak (10-15 drops) of hydraulic fluid from a hammer attachment in the upland buffer area outside the stream channel. The leak was identified immediately and contained using a spill kit. The contaminated soil and the faulty device were removed from the site and properly disposed of. - G. Johnson

8/12/2023: Dewatering structure, dams and pumps, energy dissipater and erosion mitigation all still working properly. No organisms visible in the stream work area.
Field modifications were made to the banks due to undercut banks prior to construction. Banks were restored with slopes, tying into the undisturbed bank.
3 rock checks with filter matting were used to mitigate the sediment that was in substrate of the restored stream bed.
Crilex was used for bank stabilization, riparian seed mix used in buffer area, silt socks and fences installed. Flow returned with no issues. 3 rock checks left in place until Sunday, per Tyler Roach.
There was a small rill on the right bank that was not restored to pre-con condition. This modification was approved by Casey McGaha, Lead EI for Spread I. Area will be monitored for erosion moving forward. -G. Johnson

8/14/2023: Instream habitat conditions: varied substrate, varied combination of velocities, no variation in depth, no woody/grassy debris, high amount of mobile particles, low embeddedness, no shade protection, no undercut banks or root mats. -G. Johnson

Item #16: Channel conditions improved undercut banks and right bank rill were restored to stable conditions as shown in the photos. -G. Johnson

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.

<i>This report was written by</i>	Gary Johnson <hr/> <i>Print Name</i>	 <hr/> <i>Signature</i>	08/25/2023 <hr/> <i>Date</i>
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Required Photos



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



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

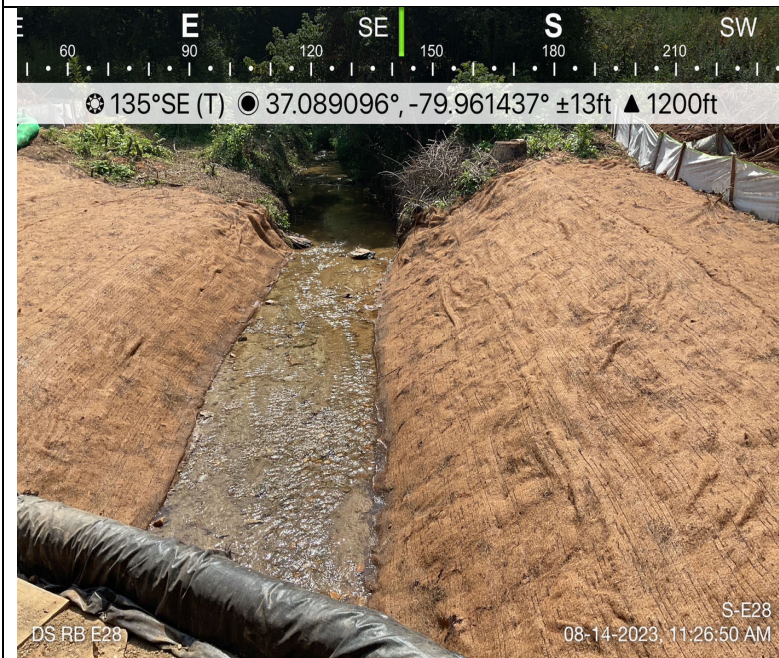


Photo Description: Downstream view of permitted impact area during post-construction assessment.



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

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Optional Additional Photos



Photo Description: Dewatering structure.



Photo Description: Erosion control matting on banks.



Photo Description: Downstream energy dissipator.



Photo Description: Riparian seed for streambanks.