

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



<b>Stream ID:</b> S-E29	<b>Crossing Start Date:</b> 08/14/2023	<b>Crossing Completion Date:</b> 08/19/2023
<b>Milepost:</b> 258.9	<b>Pre-Con Assessment Date:</b> 08/14/2023	<b>Post-Con Assessment Date:</b> 08/21/2023
<b>Station:</b> 13679+04	<b>Stream Classification:</b> Perennial (Perennial, Intermittent, Ephemeral)	<b>Bankfull Width (ft.):</b> 8
<b>County:</b> Franklin	<b>303(d) Impairment Listing:</b> Not Impaired	<b>Riffle:Pool Complexes Present?</b> No

Item #	Resource Crossing Conditions	N/A	YES	NO
1.	Were all applicable resource specific crossing conditions satisfied? Time of Year Restrictions (TOYR)? <u>N/A</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.	<b>Predominant Substrate Type (select one):</b> <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.	<b>Channel Conditions:</b> <b>Rating:</b> 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.	<b>Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank:</b> <b>Rating:</b> 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.	<b>Instream Habitat Conditions:</b> <b>Examples:</b> 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. <b>Rating:</b> 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	2 - Suboptimal
19.	<b>Channel Alterations:</b> <b>Examples:</b> 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. <b>Rating:</b> 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)	2 - Minor	1 - Negligible

**STREAM BIOLOGICAL CONDITIONS  
ENVIRONMENTAL AUDITOR REPORT**

Version 2.3



**Comments/Remarks**

8/14/2023: Tyler Roach is the MVP EI. William Martin is the tie-in foreman. Bedrock found on both sides of the crossing. Blasting operations scheduled for 8/16.

8/16/2023: Fish relocation complete, downstream net in place. Drilling holes for blasting. Stream substrate and buffer top soil segregated. - G. Johnson

8/17/2023: Blasting operations complete, pump around and energy dissipation still intact. - G. Johnson

8/18/2023: Pump around continues to function properly. Trench breakers installed. - G. Johnson


8/19/2023: Stream contours replaced with field modifications. Left bank toe moved back approximately 1' after determining flow was going to cut into bank and create an unacceptable amount of sediment, per EI Tyler Roach. Right bank sloped back at 3:1 due to bank being undercut during pre-construction. Buffer zone seeded with riparian seed mix. Crilex installed for erosion mitigation. Top soil and substrate returned to channel. 3 rock check dams in place for sediment and scour mitigation. - G. Johnson

8/21/2023: Instream habitat conditions: Varied substrate, varied combination of water velocity, no woody or leafy debris, low/medium amount of mobile particles, low embeddedness, no shade protection, no undercut banks or root mats. - G. Johnson

Rock checks removed, stream flowing unimpeded. - G. Johnson

No impacts to biological conditions or unauthorized discharges were observed during crossing activities.

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>	<b>G. Johnson</b> <hr/> <i>Print Name</i>	 <hr/> <i>Signature</i>	<b>08/21/2023</b> <hr/> <i>Date</i>
-----------------------------------	--	--	--

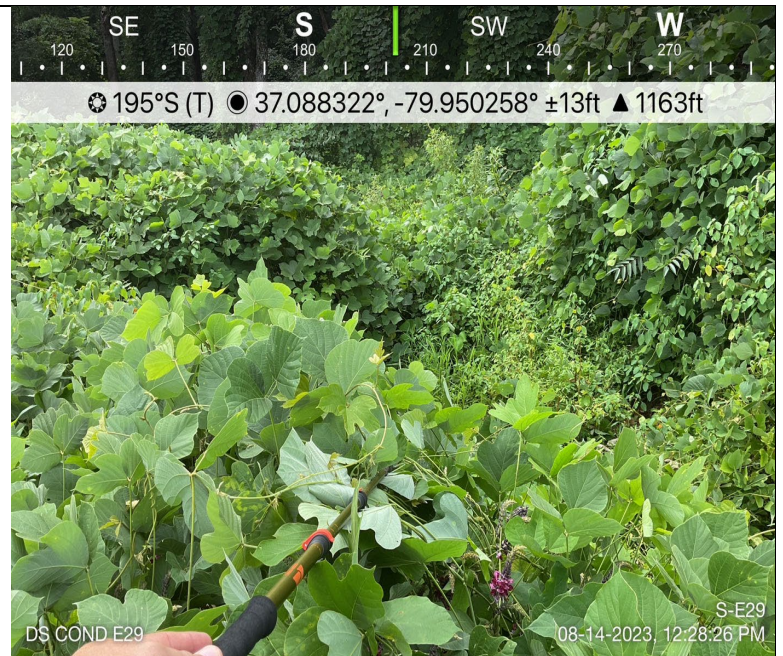
# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3

## 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.

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3

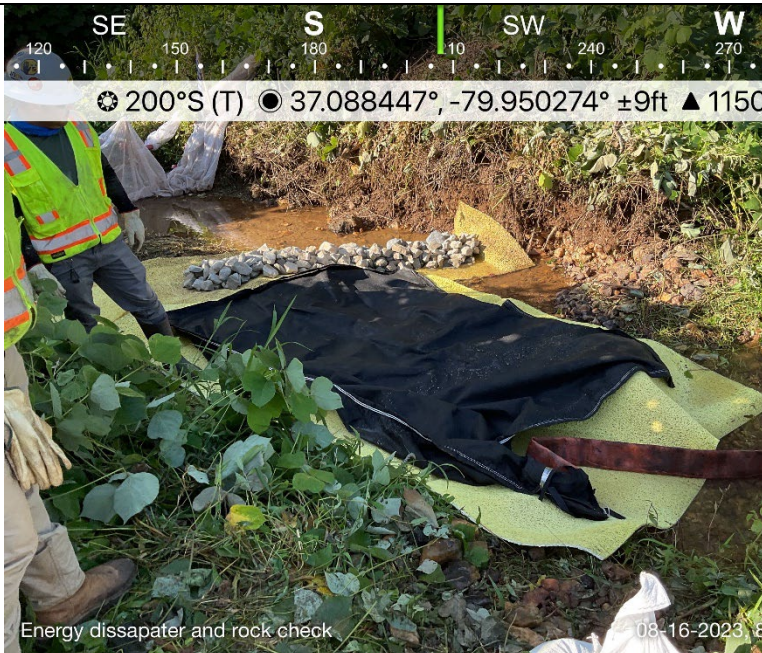
## Optional Additional Photos



**Photo Description:** Temporary check dams to slow initial flows returning to stream



**Photo Description:** Segregated stream substrate



**Photo Description:** Energy dissipater and temporary check for clean water bypass.



**Photo Description:** Trench dewatering area.