

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-GH14	Crossing Start Date: 10/12/2023	Crossing Completion Date: 10/19/2023
Milepost: 252.2	Pre-Con Assessment Date: 10/06/2023	Post-Con Assessment Date: 10/19/2023
Station: 13325+30	Stream Classification: Perennial (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 4
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)? <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, Flume		
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>	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)	4 - Poor	3 - Marginal
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.)	3 - Marginal	3 - Marginal
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)	2 - Suboptimal	2 - Suboptimal
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)	3 - Moderate	2 - Minor

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Comments/Remarks

10/6/2023- Pre-construction meeting and auditor assessment. EI on-site is James Simmons. Fish Relocation scheduled 10/9/23. Estimated start date is 10/11/23. - S. Manzo

10/11/2023- No instream work activity. Prepping to install dams and pump for fish relocation on 10/12/2023. - S. Frost

10/12/2023- Jeep tests and coated outside of 50 ft buffer. Fish relocation process completed. Dam and pump setup for stream bed material removal. Flume in place for overnight stream flow management. - S. Frost

10/13/2023- Trenching through resource. Prepping to lay first section of pipe. Possibly rain event for 10/14/23. Early work shut down to ensure adequate upland hillside stabilization. - S. Frost

10/14/2023- Trenching continues. Prepping to lower in stream section of pipe. - S. Frost

10/16/2023- Stream section of pipe lowered into trench. Welding on G.A.S. - S. Frost


10/17/2023- Final weld made on the C.I.S. X-ray, coating, and jeep test completed. Prepping for trench breaker installation. - S. Frost

10/18/2023- Trench breakers installed. Final X-ray, coating, and jeep testing. Partial backfill of trench with subsoil. Prepping for restoration on 10/19/23. - S. Frost

10/19/2023- Subsoil backfill completed. Native rock restored at the toe of banks for stabilization. The bank on the C.I.S was sloped to a 3:1 and made as stable as possible. 12" of topsoil was replaced inside of the 10ft buffer. 12" of stream substrate was replaced and contoured for final grade. Survey staked out the toe and thalweg for the stream elevation. Banks were not surveyed due to the modifications made for proper bank stabilization to prevent future erosion. The banks inside of the 10 ft buffer were heavily seeded with permanent riparian mix and temporary seed for stabilization. Heavy duty stabilization matting was installed with high velocity screw pins and keyed in 6". Flow restored to the resource and auditor conducted post-construction assessment.

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

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.

<p><i>This report was written by</i></p>	<p align="center">Summer Frost _____ <i>Print Name</i></p>	<p align="center"> _____ <i>Signature</i></p>	<p align="center">10/23/2023 _____ <i>Date</i></p>
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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.

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Optional Additional Photos



Photo Description: Dewatering structure.



Photo Description: Stream substrate segregation.



Photo Description: Energy dissipater.



Photo Description: Heavy duty stabilization matting and high velocity screw pins.