

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



<b>Stream ID:</b> S-AB8	<b>Crossing Start Date:</b> 11/14/2023	<b>Crossing Completion Date:</b> 11/17/2023
<b>Milepost:</b> 281.8	<b>Pre-Con Assessment Date:</b> 10/30/2023	<b>Post-Con Assessment Date:</b> 11/18/2023
<b>Station:</b> 14881+45	<b>Stream Classification:</b> Intermittent (Perennial, Intermittent, Ephemeral)	<b>Bankfull Width (ft.):</b> 4
<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>N/A</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 (&gt;10"), Cobble (2-10"), Gravel (0.1-2"), Sand (&lt;0.1"), Mud/Silt/Clay</i>	Boulder (>10")	Boulder (>10")
16.	<b>Channel Conditions:</b> <b>Rating:</b> 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	2 - Suboptimal
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-Suboptimal (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.	<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)	3 - Marginal	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)	1 - Negligible	2 - Minor

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**Comments/Remarks**

10-30-2023: MVP El Josh Varney, Forman Billy Schlueter, had pre-con meeting discussed soil management, dewatering structure placement. -D. Fraise

11-14-2023: Began construction. Dam and pump set up, energy dissipater placed, topsoil was removed and stockpiled inside 50ft. buffer area. Top 12in. of stream substrate first 6in and second 6in was removed and stored in Super Sak to prevent mixture, both top of banks stockpiled together and straw was placed to stabilize, trenching. Blasting crew blasting stream bed and both banks. Subsoil stockpiled in proper upland area. -D. Fraise

11-15-2023: Excavated trench and set pipe in trench, welded two joints. -D. Fraise

11-16-2023: Welded section of pipe, x-ray, sand blasted and coated pipe. -D. Fraise

11-17-2023: Cut and welded pipe, pipe being x-rayed, coated and sand blasted. Backfilling started, placed trench breakers on both sides of stream, survey shot for reconstruction on stream, both banks had areas of 3:1 slopes, backfilled both 50 feet buffer zones, laid out sock, seeded and stabilization matting was installed with high velocity screw pins and keyed in 6", replaced at 50 ft buffer. The banks inside of the 10-foot buffer were heavily seeded with permanent riparian mix and temporarily seeded for stabilization. Flow restored to the resource. -D. Fraise

Item #8: Portions of the stream banks exhibited signs of erosion during the pre-construction assessment. Those areas were graded out during restoration to ensure long term stability of the banks, and where necessary graded to a 3:1 slope.

11-18-2023: Auditor conducted post construction assessment. -D. Fraise

No impact to biological conditions or unauthorized discharge, were observed during the 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>	<u>Darrell Fraise</u> <i>Print Name</i>	<u>Darrell F.</u> <i>Signature</i>	<u>11/18/2023</u> <i>Date</i>
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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.



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## Optional Additional Photos



**Photo Description:** Dewatering structure



**Photo Description:** Survey for reconstruction of stream



**Photo Description:** Trench breaker



**Photo Description:** Second 6 inch of stream bed material