

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



<b>Stream ID:</b> S-A19-H26	<b>Crossing Start Date:</b> 12/29/2023	<b>Crossing Completion Date:</b> 01/09/2024
<b>Milepost:</b> 278.8	<b>Pre-Con Assessment Date:</b> 12/22/2023	<b>Post-Con Assessment Date:</b> 01/11/2024
<b>Station:</b> 14727+62	<b>Stream Classification:</b> Intermittent (Perennial, Intermittent, Ephemeral)	<b>Bankfull Width (ft.):</b> 7
<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>	Gravel (0.1-2")	Gravel (0.1-2")
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)	4 - Poor	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.)	2 - Suboptimal	2 - Suboptimal
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	3 - Marginal
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	1 - Negligible

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## Comments/Remarks

12-16-23: Pre-construction meeting. The MVP EI is D. Johnstone, and the Precision Pipeline foreman is W. Martin. The resource is a very low flow intermittent stream that feeds a larger creek, A20, downstream. As such, it was determined at the pre-con meeting that rather than pump the flow around and back into A19, the water would be pumped into A20 once A20's fish relocation was completed. A standard rock shield and energy dissipator will be used. No work is scheduled to begin within the 10 ft. buffer today. Topsoil will be removed outside the buffer and segregated so that exploratory drilling can be done to determine if blasting is going to be required. -G. Johnson

12-18-23: No activity onsite due to extremely muddy conditions. -G. Johnson

12-19-23: No activity onsite until crew returns from holiday break. -G. Johnson

12-29-23: The dam and pump were installed. The top 12 inches of stream bed substrate was excavated and stockpiled on geotechnical plastics. The soil was removed from both banks and stockpiled in the upland area. The Blasting crew drilled in the 50-foot buffer. Blasting was completed and the extra debris was cleaned up with shovels. No impacts to biological conditions or unauthorized discharges were observed. -D. Fraise

12-30-23: The blasting crew drilled inside the 10-foot buffer zone and blasted both banks and the stream bed. The crew was hammering, excavating, and removing soil to the upland stockpile. -D. Fraise

12-31-23: The crew continued hammering and excavating the trench. The excavated soil was transported to the upland area. -D. Fraise

01-01-24: The site is inactive due to New Years Day holiday. The pumps and pump around were manned and functioning as designed. The water in the stream was clear. -D. Fraise

01-02-24: Installed pipe in the trench. Welding has begun. The Coming-In-Side (C.I.S) trench breaker was constructed. -D. Fraise

01-03-24: Soil was padded, and the trench was backfilled. Backfill continued up to the 50-foot buffer. A seep was discovered between the pump-around dam and return. The trench continues to be dewatered and the seep water is being pumped to the upland dewatering structure. -G. Johnson

01-04-24: The seep continues to be diverted to the upland dewatering structure. The pipe will be tied-in and trench breakers installed following blasting at the nearby resource. The upstream pump-around and dam operations were functioning properly. The dewatering structure is functioning as designed. - G. Johnson

01-05-24: The trench continued to be dewatered. Blasting operations began at the nearby resource (S-A20), which is preventing further progress on this stream crossing. - G. Johnson

01-06-24: Heavy rain prevented work onsite. Pumps were monitored overnight and throughout the day. No impacts to biological conditions or unauthorized discharges. -G. Johnson

01-07-24: The Going Away Side (G.A.S.) pipe was lowered into the trench. The pipe was welded together. The soil was padded, and backfilling began. -G. Johnson

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01-08-24: The stream crossing is complete. The contours were returned to the pre-construction conditions. The stream banks were stabilized with erosion control fabric and a riparian seed mix was applied. Straw mulch was applied for stabilization in the buffer areas. No unauthorized discharges occurred during construction. Erosion control devices including silt socks, silt fencing, super silt fencing and mulch were installed, and flow was returned to the stream. -G. Johnson

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>	<b>Gary Johnson</b> <hr/> <i>Print Name</i>	 <hr/> <i>Signature</i>	<b>01/11/2024</b> <hr/> <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. S-A19-H26 converges with S-A20 within the permitted impact area.



**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. S-A19-H26 converges with S-A20 within the permitted impact area.

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## Optional Additional Photos



**Photo Description:** The dam was installed and the pump around was functioning as designed.



**Photo Description:** The topsoil was stockpiled and stabilized with straw mulch.



**Photo Description:** Trench breaker installation.



**Photo Description:** An overview of the site restoration. Crews installing new ESCs, applying riparian seed, stabilization matting, and straw.