

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



<b>Stream ID:</b> S-EF34b	<b>Crossing Start Date:</b> 08/31/2023	<b>Crossing Completion Date:</b> 09/22/2023
<b>Milepost:</b> 241.1	<b>Pre-Con Assessment Date:</b> 08/26/2023	<b>Post-Con Assessment Date:</b> 09/25/2023
<b>Station:</b> 12743+84	<b>Stream Classification:</b> Perennial (Perennial, Intermittent, Ephemeral)	<b>Bankfull Width (ft.):</b> 10
<b>County:</b> Roanoke	<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>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.	<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>	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)	2 - Suboptimal	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-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	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)	2 - Suboptimal	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	1 - Negligible

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**Comments/Remarks**

MVP EI - James Simmons

8/25/2023: Pre-con scheduled for 10:00 was postponed until 8-26-23. -B. Fantauzzi

8/26/2023: Pre-con meeting and auditor assessment complete - B. Fantauzzi

8/29/2023: Crews cleared water bars and prepped for next day's work. - B. Fantauzzi

8/31/2023: Crews started topsoil removal and segregation/stockpiling of stream topsoil/substrate. -A. Burge

9/1/2023: Fish and wildlife removed and relocated downstream outside of impact area. The crews removed cobblestones and substrate of stream bed soil for blasting drill holes. -A. Burge

9/2/2023: Dam and pump functioning properly. Prepping for trenching outside of 50 ft buffer. -S. Frost

9/3/2023: Dam and pump functioning properly. Trenching began at pipe loose end outside of 50 ft buffer. - S. Frost

9/4/2023: Dam and pump functioning properly. Trenching continues outside of 50ft buffer. -S. Frost

9/5/2023: Dam and pump functioning properly. Trenching continues outside and slightly inside of 50 ft buffer. Pipe lowered into trench. Prep work for welding. -S. Frost

9/6/2023: Welding started at PI. -S. Frost

9/7/2023: Welding continued. X-ray, coated, and jeeped. Dam reinforced due to excessive rainfall. -S. Frost

9/8/2023: Second weld started. X-ray, coated, and jeeped. -S. Frost

9/11/2023: Subsoil removal from 50 ft buffer zone for work to start within the stream resource. -A. Burge

9/12/2023: Pipe welding with x-ray QC within 50 ft buffer, but outside 10ft buffer zone of the stream. -A. Burge

9/13/2023: Welding and X-ray continues outside of 10ft buffer. - S. Frost

9/14/2023: Sand blasted and coated weld outside of 10ft buffer. - S. Frost

9/15/2023: Trench breakers installed outside of 50 ft buffer at PI. - S. Frost

9/16/2023: Sand blasted and coated PI weld outside of 50 ft buffer. - S. Frost

9/18/2023: Trenching inside 10ft buffer. Trench box installed at 50 ft buffer. - S. Frost

9/19/2023: Trenching continues through 10 ft buffer. - S. Frost

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9/20/2023: Pipe lowered into trench. Welding completed, X-ray, coated, jeepeed. - S. Frost

9/21/2023: Trench breakers installed and partial backfill. - S. Frost

9/22/2023: Backfill completed, restoration completed, and flow restored to the impact area. Post con assessment will be completed at later date due to late day restoration. -S. Manzo


9/25/2023: Post-con assessment completed. - S. Frost

Item #1: Time of Year Restriction—Brook Trout: October 1 through March 31.

Item #2: None, but upstream of trout water (Brook Trout)

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

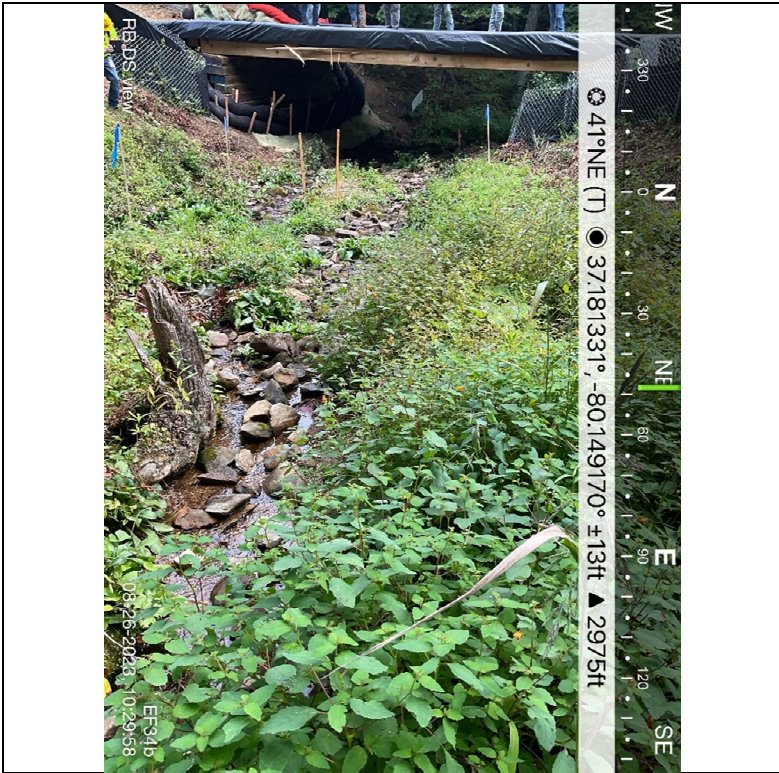
In accordance with the Mountain Valley Pipeline Consent Decree, Case No. CL18006874-00, (Issued October 11, 2019) this independent report was completed to document the on-site monitoring of instream invertebrate and fisheries resources during all construction activity related to waterbody and wetland crossings, and document instream conditions and any impacts to the resources.

<i>This report was written by</i>	<b>Sergio Manzo Saavedra</b> <i>Print Name</i>	 <i>Signature</i>	<b>09/26/2023</b> <i>Date</i>
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## Required Photos



**Photo Description:** Downstream view of permitted impact area during pre-construction assessment. Landscape mode malfunction on Solocator App.



**Photo Description:** Conditions of the downstream area outside the ROW during pre-construction assessment. Landscape mode malfunction on Solocator App



**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.

