

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-001	Crossing Start Date: 10/30/2023	Crossing Completion Date: 11/02/2023
Milepost: 302.4	Pre-Con Assessment Date: 10/28/2023	Post-Con Assessment Date: 11/03/2023
Station: 15977+35	Stream Classification: Intermittent (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 5
County: Pittsylvania	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>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.	Predominant Substrate Type (select one): <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.	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)	3 - Marginal	2 - Suboptimal
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.)	1 - Optimal	1 - Optimal
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)	1 - Optimal	1 - Optimal
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)	1 - Negligible	1 - Negligible

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Comments/Remarks

09-07-23: Timber bridge mats were not replaced at the TOI. -B. Fennell

10-28-23: Pre-construction meeting. The MVP EI is Dustin Wilson, and the Precision foreman is John Rogers. -K. Bryant

10-30-23: Construction has begun. The topsoil was excavated, stockpiled, and stabilized. -K. Bryant

10-31-23: A dam and energy dissipator were constructed and pumps were used to carry water around the area of construction. Excavation began. Rocks were encountered during construction and blasting was instituted. The pipe was lowered into the trench but removed to be cut and rotated. -K. Bryant

11-1-23: The pipe was cut and welded. -K. Bryant

11-2-23: The pipe was lowered into the trench, lined up, and welded to tie in pieces. The dams were removed, and the stream bed was restored. The banks were seeded and stabilized with straw matting. -K. Bryant

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

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>	Kwame Bryant <i>Print Name</i>	 <i>Signature</i>	11/03/2023 <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.



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

North East Elevation

220°SW (T) 36°49.818', -79°21.401' ±9ft ▲ 625ft



Dam and pump system

S-001
10-31-2023, 11:52:54 AM

Photo Description: The dam and pump installed at the crossing.

LOT:520

KIND/VARIETY: RIPARIAN SEED MIX

NET WEIGHT: 40#

ORIGIN: AL

	PURITY:	GERM:		PURITY:	GERM:
AUTUMN BENTGRASS	01.00%	90.00%	BONESET	01.00%	90.00%
BIG BLUESTEM	01.00%	90.00%	WHITE AVENS	02.00%	90.00%
VIRGINIA WILDRYE	05.00%	90.00%	COMMON SHEEPSWEED	01.00%	90.00%
SOFT RUSH	15.00%	90.00%	ONEYE SUNFLOWER	01.00%	90.00%
PATH RUSH	05.00%	90.00%	WILD BERGAMOT	01.00%	90.00%
DEERTONGUE	30.00%	90.00%	SLENDER MOUNTAINMINT	01.00%	90.00%
INDIANGRASS	02.00%	90.00%	BLACKEYED SUSAN	02.00%	90.00%
SWAMP MILKWEED	20.00%	90.00%	WILD SENNA	01.00%	90.00%
PARTRIDGE PEA	03.00%	90.00%	BLUE YERVAIN	01.00%	90.00%
MISTFLOWER	01.00%	90.00%	NEW YORK IRONWEED	03.00%	90.00%
JOE PYE WEED	01.00%	90.00%			

INERT 01.00%
WEED 00.50%
CROP 00.50%
NOXIOUS: NONE
TEST DATE:06/23
AMS# 733

ENVIRO SERVICES, LLC
PO BOX 339
FARMERVILLE, LA 71241

Photo Description: The seed mix applied on the banks and buffers.

E SE S SW
90 120 150 180 210 240
163°S (T) 36°49.819', -79°21.398' ±9ft ▲ 624ft



Trench breakers installed

S-001
11-02-2023, 3:22:05 PM

Photo Description: A trench breaker installed over the pipe.

SE S SW W NW
150 180 210 240 270 300
216°SW (T) 36°49.821', -79°21.395' ±13ft ▲ 597ft



Stream bed soil restored

S-001
11-02-2023, 6:35:26 PM

Photo Description: Restoration of the stream bed.