

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-MM18	Crossing Start Date: 10/16/2023	Crossing Completion Date: 10/26/2023
Milepost: 213.7	Pre-Con Assessment Date: 10/06/2023	Post-Con Assessment Date: 10/26/2023
Station: 11292+80	Stream Classification: Ephemeral (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 5
County: Giles	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>	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)	1 - Optimal	1 - Optimal
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)	4 - Poor	4 - Poor
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

10/06/2023- MVP EI is Rodney Summers. Pre-construction meeting was held, and the pre-construction assessment was completed. Dewatering structure located off the LOD. Environmental crew will be excavating loose ends today, but no buffer work is to be completed. Parking for the crossing will be located on the other side of road at the crossing access. Poor habitat rating due to dry stream and lack of varied substrate. -A. Burgess

10/07-15/2023- No work activity within the resource area or buffer zones.

10/16/2023- Began construction. The top 12 inches of topsoil and stream bed substrate were segregated and stockpiled inside the 50-foot buffer zone. Subsoil is being relayed and stockpiled in the appropriate upland area. -A. Burgess

10/17/2023- Trenching has been completed. -A. Burgess

10/18/2023- The first section of pipe was transported to the crossing and welding commenced. The first weld is complete. -A. Burgess

10/19/2023- Installed second section of pipe and completed second weld. -A. Burgess

10/20/2023- Rain out. The crew remained onsite for continuous monitoring and maintenance of the dam and pump crossing method. -A. Burgess

10/21/2023- Installed the final section of pipe and completed the third weld. -A. Burgess

10/22/2023- Final weld is complete. -A. Burgess

10/23/2023- Coating of the pipe is complete. -C. Stanley


10/24/2023- Began backfilling the trench. -C. Stanley

10/25/2023- Installed trench breakers and daylight drain. The backfilling of the trench is complete. -C. Stanley

10/26/2023- Survey stake out complete. Final restoration of stream and buffer zone is complete. Restoration consisted of the application of seed and matting and the installation of filter sock. The dam and pump was removed and flow was restored to the stream. -A. Burgess

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>	Allen Burgess <i>Print Name</i>	 <i>Signature</i>	10/28/2023 <i>Date</i>
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Required Photos

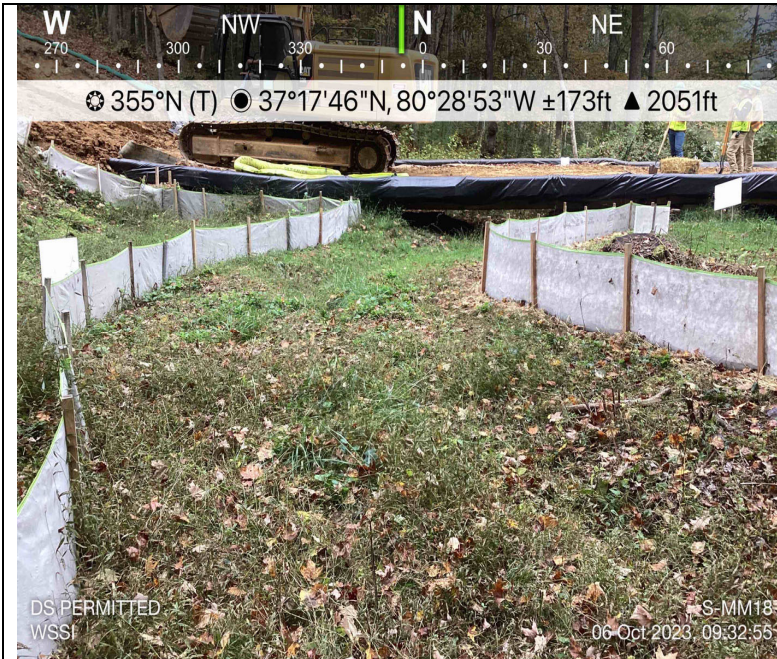


Photo Description: Downstream view of permitted impact area during pre-construction assessment.



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



Photo Description: Dewatering structure located off of the LOD with project permissions.



Photo Description: Topsoil and stream substrate stockpiles. Dam and pump installed for conveyance for stream flow, if needed.



Photo Description: Dam and energy dissipation bag.



Photo Description: Trench breakers installed over the pipe.