

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-IJ16-b	Crossing Start Date: 11/08/2023	Crossing Completion Date: 11/18/2023
Milepost: 209.1	Pre-Con Assessment Date: 11/06/2023	Post-Con Assessment Date: 11/20/2023
Station: 11050+00	Stream Classification: Ephemeral (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 10
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>	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)	2 - Suboptimal	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.)	2 - Suboptimal	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)	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

11/06/2023- Pre-con meeting held. Pre-con auditor assessment complete. MVP EI for crossing is M. Metcalf. -A. Burgess

Item #18- Instream habitat conditions ranked as "poor" due to no water present. Resource is a dry stream. -A. Burgess

11/08/2023- Began construction. Dam & pump installed. Top 12in. of topsoil & stream substrate were segregated & stockpiled inside 50ft. buffer zone. Began trenching. Subsoil is being relayed & stockpiled in upland areas. -A. Burgess

11/09/2023- Trenching operations continue. Began hammering operations after encountering heavy amounts of rock. Biological conditions remain stable. -A. Burgess

11/10/2023- Rain out. Crews remained onsite for operation of dam & pump and continuous monitoring of resource conditions. -A. Burgess

11/11/2023- Trenching operations continue. Biological conditions remain stable. -A. Burgess

11/12/2023- Trenching operations complete. First pipe section installed and first weld complete. Biological conditions remain stable. -A. Burgess

11/13/2023- Installed second section of pipe and completed second weld. Biological conditions remain stable. -A. Burgess

11/14/2023- Welding, sandblasting, and coating first welds. -A. Burgess

11/15/2023- Finished welding, sandblasting, and coating. Began padding. Biological conditions remain stable. -A. Burgess

11/16/2023- Installed zinc ribbon. Installation of trench breakers complete. Biological conditions remain stable. -A. Burgess


11/17/2023- Padding and backfilling complete. Biological conditions remain stable. -A. Burgess

11/18/2023- Restoration complete. Top 12 inches of stream bed restored with clean native stream substrate. Top 12 in. of 50 ft. buffers restored with native topsoil. 10ft. FERC buffers were seeded and stabilized with erosion control matting. 50ft. buffers were seeded and stabilized with 6in. layer of straw. Stream was restored to pre-construction conditions and flow has been restored. -A. Burgess

11/20/2023- Post-construction auditor assessment completed. -A. Burgess

No unauthorized discharges or impacts to biological conditions 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>Allen Burgess</u> <i>Print Name</i>	<u></u> <i>Signature</i>	<u>11/21/2023</u> <i>Date</i>
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Required Photos



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

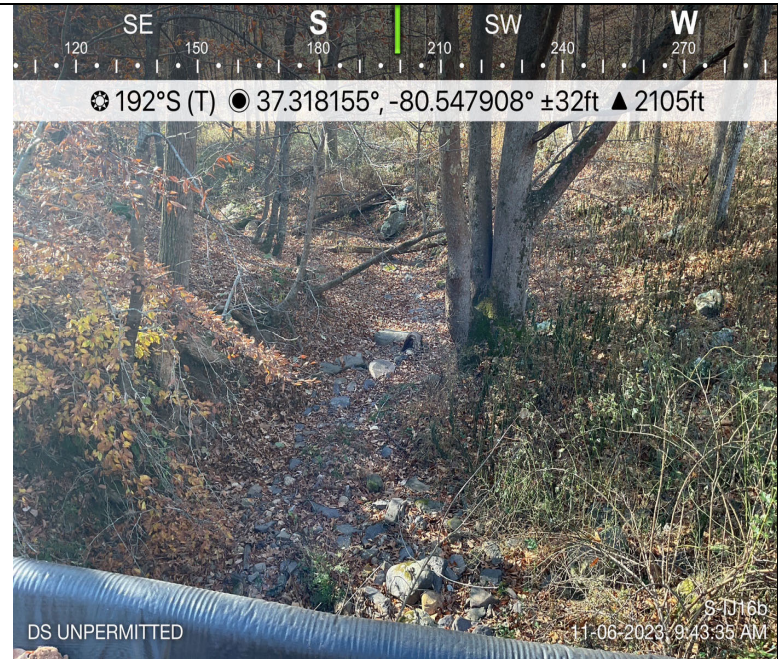


Photo Description: Conditions of the downstream area outside the ROW during pre-construction assessment.



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: Dams & pumps



Photo Description: Stream substrate stockpile



Photo Description: Topsoil stockpiles

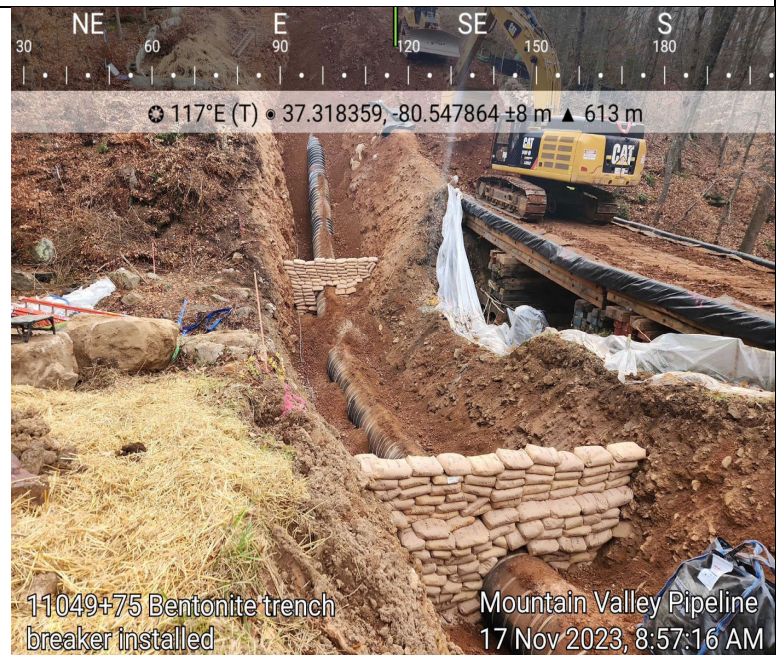


Photo Description: Trench breakers