

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-G32	Crossing Start Date: 11/09/2023	Crossing Completion Date: 11/20/2023
Milepost: 202.4	Pre-Con Assessment Date: 11/08/2023	Post-Con Assessment Date: 11/20/2023
Station: 10712+73	Stream Classification: Intermittent (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 6
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)	3 - Marginal	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.)	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)	3 - Marginal	3 - Marginal
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

11/6/23- Site meeting to discuss the timber mat bridge replacement and relocation. The pre-construction assessment was completed. Once the new timber mat bridge is constructed, a new assessment will be completed. -C. Stanley

11/7/23- The timber mat bridge was removed, and construction of the new bridge has begun. -C. Stanley

11/8/23- A pre-construction meeting was held. The MVP EI is Curt Kammon. A new pre-construction assessment was completed. The new timber mat bridge construction is almost complete. -C. Stanley

11/9/23- Installation of new timber mat bridge has been completed. The dewatering structure has been constructed onsite. The end of the pipe on the CIS has been exposed. -C. Stanley

11/10/23- Rain out. The crews remained onsite for dewatering operations and continuous monitoring of resource conditions. -C. Stanley

11/11/23- The crew excavated, segregated, stockpiled, and stabilized the topsoil. The stream substrate was excavated, segregated, and placed into Super Saks. Test holes were drilled to determine the presence or absence of rock. A small hydraulic leak was discovered outside of the buffer zone. The leak was documented, and the contaminated soil was removed and properly disposed. No impacts occurred to the biological conditions. -C. Stanley

11/12/23- Shot holes were drilled in preparation for blasting. -C. Stanley

11/13/23- The crew completed drilling shot holes in preparation for blasting. Blasting was completed with no unauthorized impacts. Excavation of trench began. -C. Stanley

11/14/23- Excavation of the trench continued. The subsoil was relayed to an upland area and properly segregated. The pipe was welded, x-rayed, and sandblasted in an upland area. -C. Stanley

11/15/23- Trenching is complete. The coating of the pipe in an upland area was completed. -C. Stanley

11/16/23- The first section of pipe was lowered, and welding began. -C. Stanley

11/17/23- Welding continued throughout the day and was completed. The trench was expanded on the CIS to make room for tie in to be conducted safely. No impact on the resource was observed. Installation of the padding began, and the trench breakers are anticipated to be installed tomorrow, weather depending. -D. Coleman

11/18/23- Rainfall occurred overnight but the resource conditions were not impacted. Pumps and the dewatering structure were on standby. The pipe has been padded and the trench breakers were installed. The subsoil has been backfilled. -D. Coleman

11/20/23- The trench breakers were installed within 25-feet of the top of the bank. No precipitation occurred over the weekend, no flowing water was observed, pumps and dewatering structures remained on standby. Final contouring began at 10:00 AM and was completed by days end. The 10-foot FERC buffer was appropriately

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seeded, strawed, and erosion control matting was installed. Stream substrate was re-established. The 50-foot buffer zones were restored with the appropriate topsoil, then seeded and strawed. Additional ECDs were installed in preparation for the upcoming rain event. The dam and pump around and energy dissipation were removed and the final post construction assessment was completed. -D. Coleman

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>	David T. Coleman <i>Print Name</i>	 <i>Signature</i>	11/24/2023 <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: Upstream 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

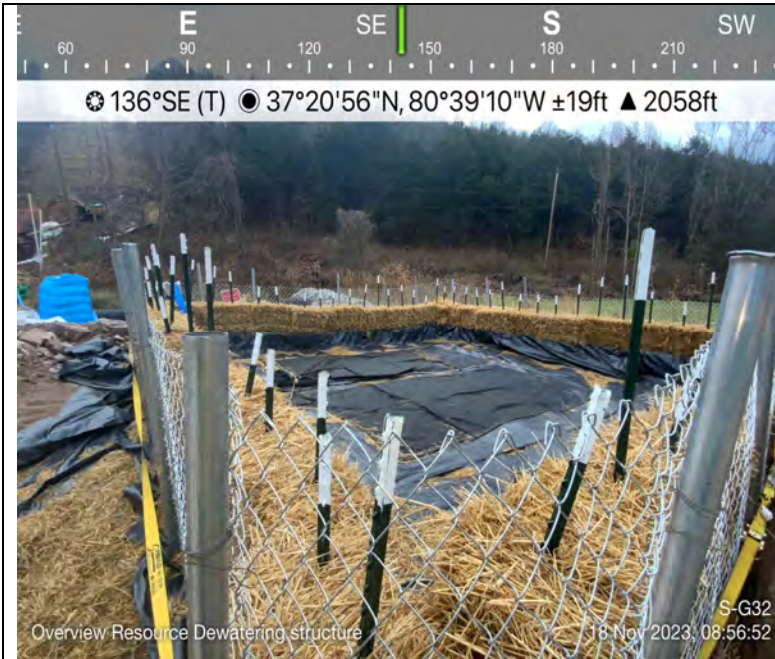


Photo Description: An overview of the dewatering structure.



Photo Description: An overall view of the energy dissipator, dam, and pump set up under the timber mat bridge.



Photo Description: The survey crew providing guidance for stream substrate replacement.



Photo Description: An overview of the trench breakers after installation.