

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-G11	Crossing Start Date: 10/09/2023	Crossing Completion Date: 10/12/2023
Milepost: 285.3	Pre-Con Assessment Date: 10/07/2023	Post-Con Assessment Date: 10/12/2023
Station: 15072+86	Stream Classification: Intermittent (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 6
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>	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)	4 - Poor	4 - Poor
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	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)	2 - Suboptimal	2 - Suboptimal
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)	2 - Minor	2 - Minor

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Comments/Remarks

10-7-2023: Pre-construction meeting and auditor assessment. El Josh Varney, Precision foreman Derrick Denton. Estimated start date Monday 10-9-23. Open-cut dam & pump crossing method. The plan is to first separate 12" topsoil from stream and from 10' buffer, keeping both each topsoils in their respective stockpiles. Stream meanders within impact area and has eroded channel banks. Restoration of pre-construction banks would result in unstable conditions, and a modification will be needed to ensure stability of channel. Dewatering structure to be constructed today. -G. Aceves

10-9-2023: Installed dam and pump crossing method. Removed top 2" of soil and woody debris on banks. Removed 12" of topsoil for separation. Excavation of subsoil to a 16' depth. Lowered in pipe for welding activity. – G. Aceves

10-10-2023: Welding on both CIS & GAS for tie-in. QA/QC welds completed. – G. Aceves

10-11-2023: Blasting and coating GAS. GAS TB installed. Backfilling trench. Restored stream with modifications to account for unstable pre-construction conditions to reduce future erosion around pipe. Seeded and blanket matted streambanks and upland buffer zones. Installed rock check dams for 24-hrs to reduce any substrate movement during dam & pump release. – G. Aceves


10-12-2023: Hand-removed rock check dams. Performed post-construction auditor assessment. – G. Aceves

Item #16: Channel banks disturbed by construction were restored to stable configuration, however areas not disturbed by pipe installation adjacent to the impact area remain in pre-existing, eroded conditions.

Item #9: Due to safety concerns, the trench breakers were installed further than 25' from top of bank.

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

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>	George Aceves <i>Print Name</i>	 <i>Signature</i>	10/12/2023 <i>Date</i>
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Required Photos



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

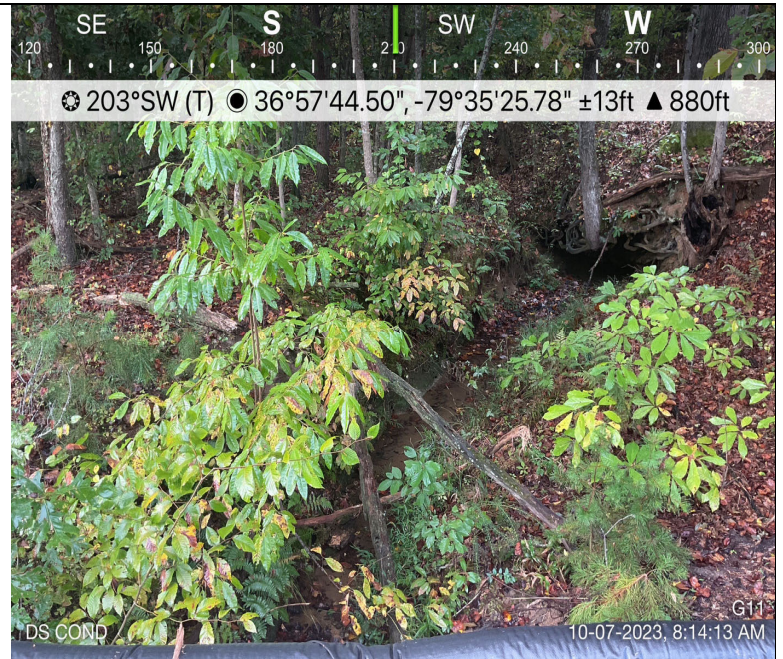


Photo Description: Conditions of the downstream area outside the ROW during pre-construction assessment.



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

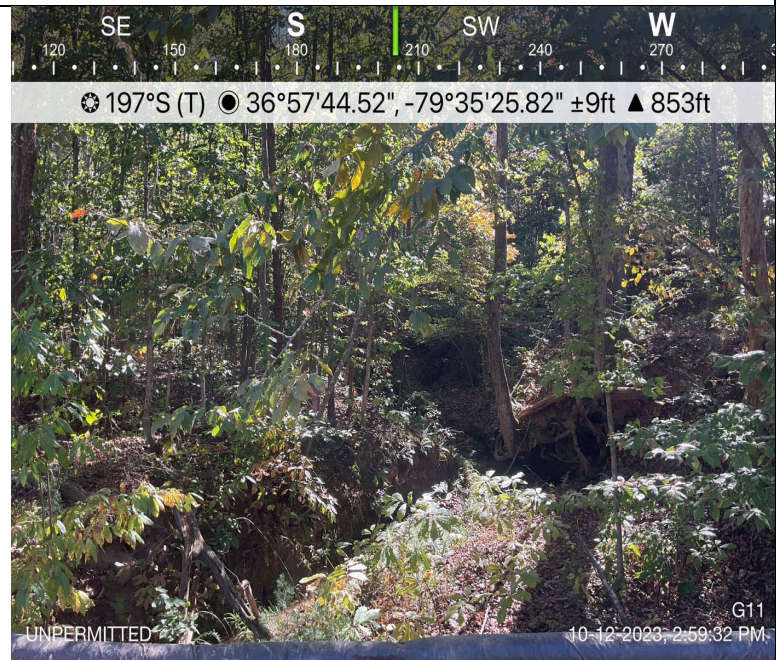


Photo Description: Conditions of the downstream area outside the ROW during post-construction assessment.

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Optional Additional Photos



Photo Description: Erosion control matting installation during restoration.

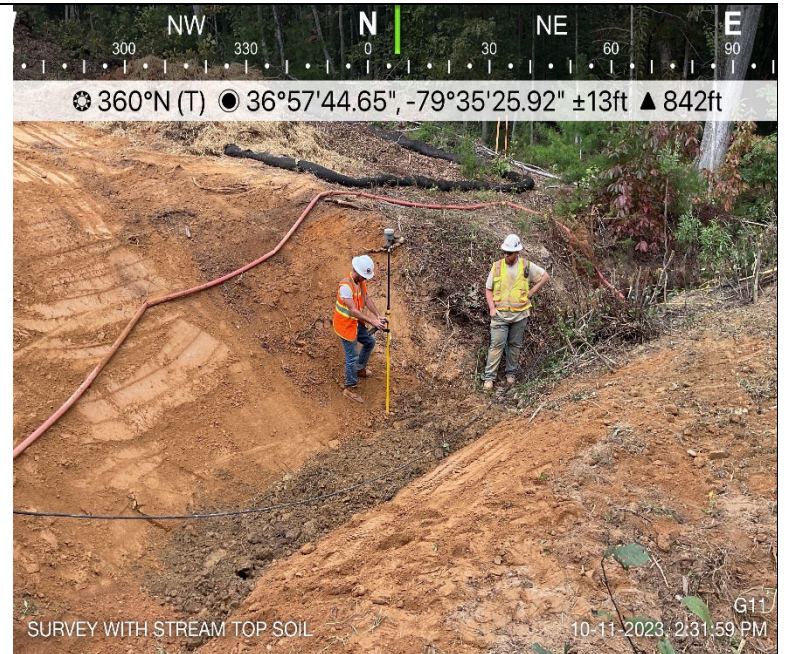


Photo Description: Survey team on-site providing restoration as-built support.

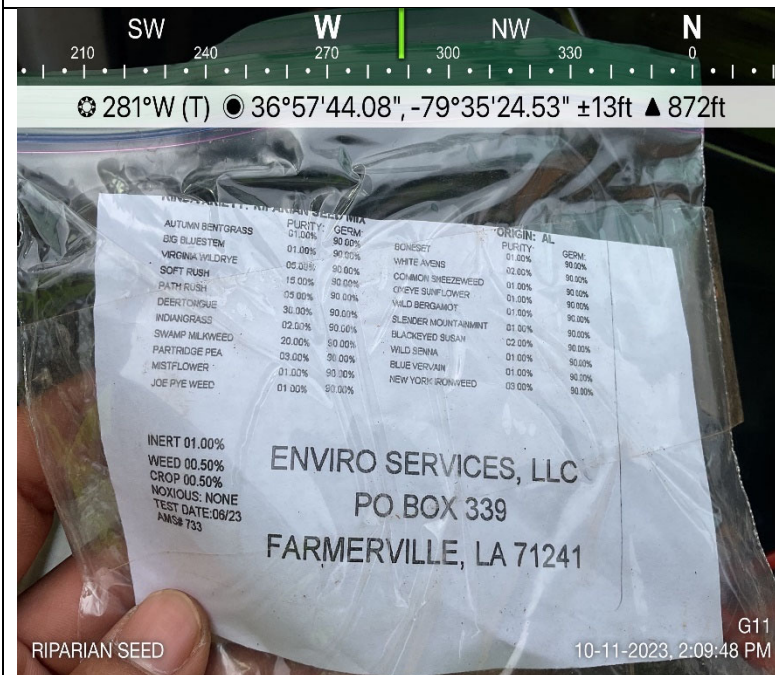


Photo Description: Riparian seed mix used during restoration.



Photo Description: Dam and pump around crossing installed and functional throughout crossing activity.