

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



<b>Stream ID:</b> S-CC11	<b>Crossing Start Date:</b> 11/08/2023	<b>Crossing Completion Date:</b> 11/10/2023
<b>Milepost:</b> 294.8	<b>Pre-Con Assessment Date:</b> 11/04/2023	<b>Post-Con Assessment Date:</b> 11/11/2023
<b>Station:</b> 15573+81	<b>Stream Classification:</b> Perennial (Perennial, Intermittent, Ephemeral)	<b>Bankfull Width (ft.):</b> 8
<b>County:</b> Pittsylvania	<b>303(d) Impairment Listing:</b> Not Impaired	<b>Riffle:Pool Complexes Present?</b> 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>Yes</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.	<b>Predominant Substrate Type (select one):</b> <i>Bedrock, Boulder (&gt;10"), Cobble (2-10"), Gravel (0.1-2"), Sand (&lt;0.1"), Mud/Silt/Clay</i>	Cobble (2-10")	Gravel (0.1-2")
16.	<b>Channel Conditions:</b> <b>Rating:</b> 1-Optimal (80-100% stable banks), 2-Sub-optimal (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.	<b>Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank:</b> <b>Rating:</b> 1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (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.	<b>Instream Habitat Conditions:</b> <b>Examples:</b> 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. <b>Rating:</b> 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	3 - Marginal
19.	<b>Channel Alterations:</b> <b>Examples:</b> 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. <b>Rating:</b> 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**

11-04-2023: PreCon meeting and auditor assessment.

Foreman: D. Denton

El: J. Gresham

Buffer zones established. Crossing method will be an open cut. Blasting crew from Hoover onsite to stage John Henry for test drill. Work anticipated to commence Tue 11-07. -K. Douglas

11-07-2023: Environmental crew onsite for maintenance and prep of ECDs including upland dewatering structure on GAS. -K. Douglas

11-08-2023: Fish removal commenced ahead of provided schedule. Upon arrival, two fish had been relocated downstream. Sandbags with Visqueen dam and pump and energy dissipation system installed. Dewatering of stream bed channel. Top 12" of substrate segregated & covered with geotextile filter fabric. Top 10" topsoil segregated from buffer zones. Trench excavated, sandbags installed in trench, and pipe section lowered in. Tie-in weld completed on GAS. X-ray and further prep to follow on 11-09-23. No impacts to the unpermitted areas of the resource or biological conditions. -K. Douglas

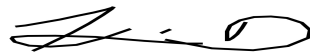
11-09-2023: Blasting and coating of tie-in weld (CIS). 2nd and final tie-in weld completed, sandblasted and coated (GAS). Trench breaker installed and padded (GAS). Backfill of trench completed. Survey crew on site to begin restoration of bank contours and stream channel. Spreading of segregated, clean, native substrate in stream channel and of topsoil on banks. Banks seeded and stabilized with erosion control matting. Dam and pump removed, stream flow in the channel restored. Re-establishment of 50' buffer and installation of final trench breaker (CIS) expected on Fri 11-10. -K. Douglas

11-10-2023: Trench breaker, padding and backfill completed (CIS). 50' FERC aquatic resource buffer reestablished, stabilized and enclosed with 12" filter sock (CIS). -K. Douglas

11-11-2023: Post-construction auditor assessment conducted. -K. Douglas

No impacts to biological conditions or unauthorized discharges 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>	<b>Keith Douglas</b> <hr/> <i>Print Name</i>	 <hr/> <i>Signature</i>	<b>11/11/2023</b> <hr/> <i>Date</i>
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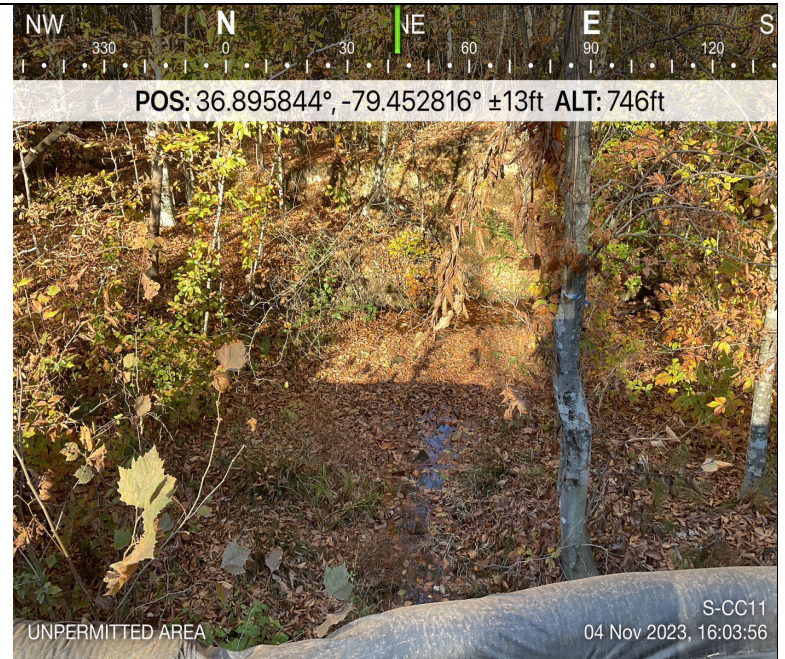
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## Required Photos



**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:** Crossing construction begins within 10' FERC buffer.



**Photo Description:** Segregated and covered stream bed substrate.



**Photo Description:** Trench breaker installed (GAS).



**Photo Description:** 50' FERC Buffer zones reestablished.