

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



<b>Stream ID:</b> S-YZ4	<b>Crossing Start Date:</b> 09/06/2023	<b>Crossing Completion Date:</b> 09/08/2023
<b>Milepost:</b> 265.9	<b>Pre-Con Assessment Date:</b> 09/01/2023	<b>Post-Con Assessment Date:</b> 09/08/2023
<b>Station:</b> 14049 + 69	<b>Stream Classification:</b> Ephemeral (Perennial, Intermittent, Ephemeral)	<b>Bankfull Width (ft.):</b> 3
<b>County:</b> Franklin	<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>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, Flume		
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")	Cobble (2-10")
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)	1 - Optimal	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)	3 - Marginal	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)	3 - Moderate	2 - Minor

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**Comments/Remarks**

MVP Environmental Inspector Bill Leclair, PPL Foreman Lance

9-5-2023: Open cut started topsoil removed, separated, and stockpiled separate from subsoil -D. Willson

9-6-2023: Trench excavated, trench padded, and pipe laid into trench. Pipe installed. -D. Willson

9-7-2023: Trench breakers were installed, the trench was backfilled, and right bank was restored. Restoration limitation was discovered in the pre-existing stream channel, that would be highly likely to cause the pipe to become exposed over time. While in the process of restoring the substrate and contours of stream S-YZ4, survey crews identified the previously existing 18" drop was directly over the center line of the installed pipe. The Environmental Inspector (EI) and Environmental Auditor (EA) reviewed the site and determined based on the site conditions the more stable configuration at the pipe centerline would be to grade in a transitional area (small riffle-pool), in favor of trying to build back a potentially unstable 18 inch "step-down" controlled by root structures as shown in the pre-existing conditions and photos. -D. Willson

This modification is in accordance with the Mitigation Framework App. B Sec. 2.0.1. S-YZ4 is an ephemeral channel, and data does not indicate any pre-existing riffle:pool complexes for this resource. Please see additional photos section for documentation photos collected in 2019.

9-8-2023: Stream channel was restored to pre-existing conditions to the extent possible. Right bank was first restored to the 10' FERC buffer, then left bank was restored to full 50' buffer, then right bank 50' buffer restoration was completed. New erosion control measures were installed in addition to permanent & temporary seed with erosion control matting. Restoration was deemed complete by MVP EI. -D. Willson

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

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>Dana Willson</b> <i>Print Name</i>	 <i>Signature</i>	<b>09/08/2023</b> <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:** 2019 photo looking upstream into the permitted impact area.



**Photo Description:** Right bank center line view of resource



**Photo Description:** Left bank center line view of resource



**Photo Description:** Upstream condition of unpermitted area



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## Progress Photos



**Photo Description:** Restoration of left bank within FERC 10' buffer.



**Photo Description:** Upstream view of resource during restoration activities.



**Photo Description:** View of pipe centerline depicting modification area.



**Photo Description:** View of pipe centerline depicting modification area.