

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-E28-M	Crossing Start Date: 08/31/2023	Crossing Completion Date: 09/02/2023
Milepost: 259.1	Pre-Con Assessment Date: 08/29/2023	Post-Con Assessment Date: 09/02/2023
Station: 13693+07	Stream Classification: Perennial (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 12
County: Franklin	303(d) Impairment Listing: Impaired	Riffle:Pool Complexes Present? Yes

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.	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-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.	Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank: Rating: 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.)	4 - Poor	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

8-29-2023: Pre-Con meeting. EI is Davey Johnston. Forman is Scooter. Stream is to be open-cut. Expected to start Thursday 8-31. Banks will be restored to a 3:1 slope due to current steep slope conditions. -J. Vandertill

8-31-2023: Fish relocation occurred. Nets installed. Dam and pump and energy dissipator installed. Topsoil from 50' buffer removed, stockpiled and mulched. The survey crew will be using new data because the old data was off from current conditions. -J. Vandertill


9-1-2023: Pipe in place and welded in. Survey crew onsite, pipe has 7' 7" of coverage under the resource. Trench breaker on the left bank was installed.

Item #9: The trench breaker was installed approximately 30' outside of the top of bank, per specification MVP-20. A change order was approved by MVP Environmental, and the project noted that a variance request for trench breaker spacing will be submitted to DEQ, if required. Trench backfilling began and stream channel roughed in. -J. Vandertill

9-2-2023: Survey and environmental crews on site. Trench backfilling continued. Stream channel formed, toe of bank has been restored to pre construction points. Banks have been graded to 3:1 slope. The natural benches of the banks were restored whenever possible. Channel material replaced. Seed and matting installed on banks. Flow restored. -J. Vandertill

9-9-2023: Trench breaker installed on the RB. The trench breaker was installed approximately 40' from top-of-bank per specification MVP-20. -J. Vandertill

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>	Jim Vandertill <hr/> <i>Print Name</i>	 <hr/> <i>Signature</i>	09/09/2023 <hr/> <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: Dewatering structure installed and operating.



Photo Description: Restored and stabilized stream banks.



Photo Description: Channel substrate segregated and stockpiled on timber mat.



Photo Description: Trench breaker installation.