

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-H42	Crossing Start Date: 10/14/2024	Crossing Completion Date: 10/28/2024
Milepost: 303.2	Pre-Con Assessment Date: 10/04/2024	Post-Con Assessment Date: 10/29/2024
Station: 15982+56	Stream Classification: Perennial (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 5
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>No</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, 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.	Predominant Substrate Type (select one): <i>Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay</i>	Gravel (0.1-2")	Gravel (0.1-2")
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)	2 - Suboptimal	2 - Suboptimal
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	2 - Suboptimal
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)	1 - Negligible	3 - Moderate

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Comments/Remarks

10-04-24: Pre-construction meeting conducted with MVP and contractor(JC Martin Excavating). Pre-Construction assessment and photos were taken. Contact Ben Farmer or Tracey Hilbun with concerns. Discussion notes below:

Permanent culvert installation projected for Oct 16th. 6' by 5' culvert 22 ft long

Wednesday October 14th starting access

Tuesday October 15th fish relocation

Stream work starts October 16th. Crane and culvert arrives on site.

Riprap on upstream side of the box culvert. Backfill walls with #57 stone. Precast walls for culvert. No Concrete pouring needed.

10-14-24: Fish relocation was conducted and temporary nets were installed. A dam and pump was constructed upstream and downstream for bridge removal. 6mil black plastic was used in place of visqueen underneath the filter bag attached to the downstream pump. This substitution was approved by Patty Hale from MBP. The top of the bridge was dismantled and all timber caps and runners were removed. A section of topsoil from the 10' buffer zone on the left bank was removed for easier access to the stream bed during flume installation. The topsoil was segregated onto 6mil black plastic. A plastic flume was installed for overnight flow. -A. Thorpe

10/15/2024: Flume was removed and dam and pump set up. Ground water that entered the work area overnight was pumped out to the dewatering structure. Topsoil, subsoil, and stream substrate were segregated appropriately in the upland. The bottom layer of gravel was applied and leveled in preparation for the culvert installation. Flume was installed to allow stream flow overnight without a pump. - N.Fillip

10/16/2024: Flume was removed and dam and pump was set up. Flume performed properly overnight. Dewatering of groundwater in area is being directed to the dewatering structure. Timber mats were moved in preparation of utilizing equipment. More base stone arrived onsite as well as scour walls/footers. Excavation for wing walls and footers continues. Subsoil was stockpiled and stabilized with straw. Excavation was completed and three footers were placed on the upstream side. Pumping will continue overnight in lieu of using the flume. MVP EI, fish relocation services, and third party DEQ representatives were on site. -C. Parsons

10/17/2024: S-H42 footers have been installed and subgrade compacted. Box culvert pieces arrived on trucks and crane was installed on site for installation of culvert. Box culvert was installed onto footers. Wing walls were set at appropriate angles on inlet and outlet sides of culvert with seam sealants. Contractor began grouting the culvert seams. Flume set up through installed culvert for overnight conveyance. Dewatering operation was maintained throughout the day to keep workspace dry. Dewatering structure was found to be in good condition and operating as designed. Dam and pump operated throughout the day and stream flow remained clear with appropriate energy dissipation at outlet. No impacts to the resource were observed and stream flow remained clear. -S. Fisher

10/18/2024: Flume from overnight use was removed and dam and pump were installed prior to work beginning again. Dam and pump are functioning as intended. Dewatering of groundwater is active and being directed to the dewatering structure, also functioning as intended. Geotech fabric was laid down prior to installation of riprap on the upstream side of the culvert, in accordance with the approved plans. The wing walls were backfilled and angled back with correct soil restoration process observed, subsoil and then topsoil. The banks were seeded with riparian seed mix and erosion control matting was installed and keyed in. The downstream dam was removed followed by the upstream dam and flow was restored to the resource. There were no impacts observed to the

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biological conditions of the resource during the culvert installation activities. -A. Breeding

10/29/2024: Permanent access road installation has completed around the culvert, and resource remains in good condition. Post-construction assessment was completed and post-construction photos were taken. -A. Breeding

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>	Alyson Breeding <i>Print Name</i>	 <i>Signature</i>	10/30/2024 <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: Flume installed to convey stream flow.



Photo Description: Bottom layer of stone installed.



Photo Description: Dewatering structure onsite.



Photo Description: Riprap installed on inflow of culvert.