

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



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| Stream ID: S-PP1 | Crossing Start Date: 08/17/2023 | Crossing Completion Date: 08/23/2023 |
| Milepost: 217.4 | Pre-Con Assessment Date: 08/15/2023 | Post-Con Assessment Date: 08/24/2023 |
| Station: 11489+58 | Stream Classification: Intermittent (Perennial, Intermittent, Ephemeral) | Bankfull Width (ft.): 3 |
| County: Craig | 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> | Gravel (0.1-2") | Gravel (0.1-2") |
| 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) | 2 - Suboptimal | 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.) | 3 - Marginal | 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) | 3 - Marginal | 3 - Marginal |
| 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) | 3 - Moderate | 3 - Moderate |

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Comments/Remarks

8/15/2023- Pre-construction meeting held onsite. EI is Mindy Metcalf. Stream crosses a publicly accessed road so a road plate will be installed for traffic to cross. Stream has flowing water and a plate and culvert were installed by MVP and will be reinstalled post construction. Dewatering structure location agreed upon in field. Survey located edge of LOD for de-energizer location to be found. No redline changes were made to field plans. Start date planned for 8/17/2023. -A. Breeding

8/17/2023- No topsoil on-site due to road crossing and cut area to west of the stream. Stream and stream bank are the only areas with topsoil and will be removed and separated appropriately. Rocks removed from area adjacent to stream will not be put back and will be used as fill for the cut to the west of the stream. Road plate is installed and excavation of trench has begun. Multiple snakes relocated from resource prior to construction. -A. Breeding

8/18/2023- Welding day. Weld one complete. Second section of pipe brought down and cut to fit alignment. Weld two complete. X-Ray one complete. - A. Breeding

8/19/2023- Welding day. X-Ray two complete. Section 3 pipe in ground. Weld three and four complete and XRay'd. Bell hole to east of pipe backfilled and padded. -A. Breeding

8/21/2023- Weld five complete. Trench breakers installed with test leads left exposed appropriately. Backfill and padding started on both sides. Survey shooting in pipe. Backfill up to road crossing filled in. Coating completed on all welds. -A. Breeding

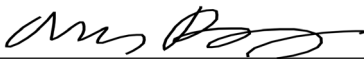
8/22/2023- Padding and backfilling continues. Trench breakers are all installed. Stream subsoil backfilled. Road and stream flow will be restored 8/23/2023. -A. Breeding

8/23/2023: Road fill was brought in, controlled density fill. Modification to toe of bank point in cross section A to hold existing ground and prevent erosion. Existing grade was prioritized over survey stake out for one point in XS A, the rest of data points were shot to match the pre-construction survey conditions. Stream contouring was completed, and ECM was installed appropriately. Stream flow was restored successfully, and the crossing was completed. -A. Breeding

8/24/2023: Final post-construction assessment completed. -A. Breeding

Item #8: Survey data was utilized to restore stream to pre-construction conditions, however, stable tie out to existing grade was prioritized over one point in cross section A. It should be noted that stones larger than 4" outside of stream banks were not put back.

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.

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| This report was written by | A. Breeding <hr/> Print Name |  <hr/> Signature | 08/24/2023 <hr/> Date |
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Required Photos



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



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



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



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

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Optional Additional Photos



Photo Description: Dam and Pump installed and functioning.



Photo Description: Stream substrate material with subsoil stockpiles in background.



Photo Description: Trench Breakers installed appropriately.



Photo Description: Baseline data survey did not match up to current field conditions. Therefore, a modification was made to only one point, the toe of bank in cross section A. All other data points held constant.