# STREAM BIOLOGICAL CONDITIONS
# ENVIRONMENTAL AUDITOR REPORT

Version 2.3

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| **Stream ID:** S-D7 | **Crossing Start Date:** 09/29/2023 | **Crossing Completion Date:** 10/03/2023 |
| **Milepost:** 283.7 | **Pre-Con Assessment Date:** 09/27/2023 | **Post-Con Assessment Date:** 10/03/2023 |
| **Station:** 14991+12 | **Stream Classification:** Intermittent **(Perennial, Intermittent, Ephemeral)** | **Bankfull Width (ft.):** 8 |
| **County:** Franklin | **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?<br>Time of Year Restrictions (TOYR)? N/A Fish Relocation? N/A Mussel Relocation? N/A | X | | |
| 2. | Is this resource designated a wild or stockable trout stream? | | | X |
| 3. | Which crossing methods were utilized during the stream crossing? *(Select one or more)*<br>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):**<br>*Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay* | Mud/Silt/Clay | Mud/Silt/Clay |
| 16. | **Channel Conditions:**<br>**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)* | 3 - Marginal | 2 - Suboptimal |
| 17. | **Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank:**<br>**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:**<br>**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.*<br>**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)* | 4 - Poor | 3 - Marginal |
| 19. | **Channel Alterations:**<br>**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.*<br>**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 | 2 - Minor |

## Comments/Remarks

09-26-2023: Pre-Con meeting. Jim Parker is MVP EI, Nathan Card is Precision foreman. This resource is being crossed in conjunction with resource W-MM17.

09-27-2023: Pre-construction assessment completed. Soil separation in 50' buffers and bore pit preparation. Test drilling for rock. -B. Fennell

9-28-2023: No work in the resource, prep work in upland areas adjacent to resource. -S. Johnson

9-29-2023: Dam and pump with energy dissipater installed. 10' buffer topsoil removed and stockpiled separately. Top 12" of stream bed removed and segregated. Trench excavation completed. Pipe installed and welded. -S. Johnson

9-30-2023: Trench breakers installed. Stream bed was roughed in and backfilled. Topsoiled applied with required seed mixes and matting. Final restoration of resource using collected survey information. Dam and pump removed, and stream flow restored. -S. Johnson

10-3-2023: Crossing noted as completed. Post-construction assessment and documentation collected. -G. Aceves

No unauthorized discharges or impacts to biological conditions 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.

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| *This report was written by* | George Aceves | | 10/03/2023 |
| | *Print Name* | *Signature* | *Date* |

# 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.

# Optional Additional Photos


**Photo Description:** Survey crews stake out of pre-existing conditions for restoration purposes.


**Photo Description:** Buffer zone topsoil stockpiled separately from subsoil.


**Photo Description:** Dam and pump downstream outlet and energy dissipation.


**Photo Description:** Restoration crews applying seed and stabilization matting to impacted resource areas.