

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



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|---------------------------|---|---|
| Stream ID: S-MN21 | Crossing Start Date: 09/18/2023 | Crossing Completion Date: 09/25/2023 |
| Milepost: 221.2 | Pre-Con Assessment Date: 09/01/2023 | Post-Con Assessment Date: 09/25/2023 |
| Station: 11687+42 | Stream Classification: Perennial (Perennial, Intermittent, Ephemeral) | Bankfull Width (ft.): 7 |
| County: Montgomery | 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>Yes</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> | Cobble (2-10") | Cobble (2-10") |
| 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.) | 2 - Suboptimal | 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) | 1 - Negligible | 1 - Negligible |

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Comments/Remarks

9/1/2023- Pre-construction meet held. Dewatering structure field located. Estimated start date after 9/11/2023.
-A. Burgess

9/18/2023- Began construction. Top 12 inches of topsoil and stream substrate segregated and stockpiled inside 50ft. buffer zone. Subsoil stockpiled in upland area. Trenching complete. -A. Burgess

9/19/2023- Installed pipe and started first two welds. -A. Burgess

9/20/2023- Completed 1 of 3 welds. Welding machine malfunction resulted in delay. -A. Burgess

9/21/2023- Completed final 2 welds. Completed X-ray and began media blasting. -A. Burgess

9/22/2023- Finished media blasting and coating. Installed first trench breaker. Began padding and backfilling.
-A. Burgess

9/23/2023- Rain out. Crew remained onsite for continuous monitoring. -A. Burgess


9/25/2023- Installed last trench breaker and completed backfill. Completed survey stake out. Final restoration of stream and 50ft buffer zone complete and flow restored. -A. Burgess

Item #1: Time of Year Restriction (Brown Trout)—October 1 through March 31.

Item #2: DWR Stream Designation: wild trout (Brown Trout).

No impacts to biological conditions or unauthorized discharges 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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| <i>This report was written by</i> | Allen Burgess <i>Print Name</i> |  <i>Signature</i> | 09/27/2023 <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: Dam & pump installed and operated throughout crossing.



Photo Description: De-watering structure set up for use throughout crossing.



Photo Description: Soil and streambed stockpiles.



Photo Description: Survey stake out for restoration crews.