Wetland

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| Wetland ID: W-E7 | Crossing Start Date: 09/06/2023 | Crossing Completion Date: 09/09/2023 |
|--------------------------|--|---------------------------------------|
| Milepost: 259.2 | Pre-Con Assessment Date: 08/29/2023 | Post-Con Assessment Date: 09/11/2023 |
| Station: 13695+06 | Cowardin Classification: PEM (PEM, PFO, PSS, POW) | Wetland Impact Area (sq ft.): 9247.79 |
| County: Franklin | | |

| Item # | Resource Crossing Conditions | N/A | YES | NO |
|--------|--|-----|-----|----|
| 1. | Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands? | | Х | |
| 2. | Was the existing vegetation removed prior to initiating land disturbance within the resource? | | Х | |
| 3. | Was the top 1-foot (12-inches) of wetland soil segregated and stockpiled separate from trench spoils? | | Х | |
| 4. | Was excess material not needed for backfill removed and disposed of in an upland area? | | Х | |
| 5. | Was the top 12-inches of backfill made with clean native wetland topsoil? | | Х | |
| 6. | Were standard decompaction practices (disking, plowing, cultivating, tilling, or incorporation of organic matter into the topsoil horizon) implemented prior to applying seed? | | Х | |
| 7. | Was wetland topsoil replaced and temporarily seeded? | | Х | |
| 8. | Was permanent seed applied to unsaturated wetlands? | | Х | |
| | Was equipment/timber matting removed from the wetland area properly by vertically lifting, and not pulling through the impact area. | | Х | |
| | Were impervious trench breakers/plugs properly installed within 25-feet of the resource to prevent subsurface erosion to or from the resource area? | | Х | |
| 11. | Was the pre-construction survey data provided and utilized during restoration in attempt to maintain the original surface hydrology, and were contours re-established to pre-construction conditions to maintain overland flow patterns? | | х | |
| 4 2 | 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? | | Х | |
| 13. | Was the time of disturbance minimized by conducting resource work continuously to completion? | | Х | |
| 4 4 | Does the post-construction square footage of wetland area appear to be restored to meet or exceed the pre-construction area square footage? | | Х | |
| 4 - | Are bareroot saplings required and/or scheduled to be planted for the dormant season $(10/1 - 4/30)$ in PFO classified wetlands? | Х | | |
| 4.0 | 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. | | | Х |

| Item # | Biological Conditions | Pre-Con | Post-Con |
|--------|--|----------------|----------------|
| 17. | Wetland Saturation: Are surface waters, the water table, and/or overall soil saturation present? (Select Yes or No) | Yes | No |
| 18. | Resource Alterations: Are the wetland soil conditions visibly disturbed? Examples: Livestock presence, haul roads, farm traffic, drain tiles, recent mowing/clear cutting, recent excavating/disking of soils, etc. Rating: 1-Negligible (undisturbed/natural resource), 2-Minor (20-40% of resource disturbed by alterations), 3-Moderate (40-80% of resource disturbed), 4-Poor (>80% of resource disturbed) | 2 - Minor | 2 - Minor |
| 19. | Is vegetation present within the permitted impact area prior to disturbance? (Pre-Con) Are areas properly seeded and stabilized after restoration? (Post-Con) Rating: 1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (30-60% mixed vegetative coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetative coverage, etc.) | 2 - Suboptimal | 2 - Suboptimal |

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Comments/Remarks

8-29-2023: PRECON meeting. EI is Davey Johnston. Forman is Scooter. Wetland is to be open cut.
-J. Vandertill

8-31-2023: Wetland topsoil has been removed and stockpiled on geotech fabric. Drilling began for blasting. Originally mats were not used in the wetland. There was a misunderstanding of the requirements as the Standards and Specs states, "If standing water or saturated soils are present, low-ground-weight construction equipment, will be used or normal equipment will be operated on timber riprap, prefabricated equipment mats, or geotextile fabric overlain with gravel. Geotextile fabric used for this purpose must be strong enough to allow removal of all gravel and fabric from the wetland." However, the Final Individual Permit states, "14. Machinery or heavy equipment in temporarily impacted wetlands shall be placed on mats or geotextile fabric, or other suitable means shall be implemented, to minimize soil disturbance to the maximum extent practical. Mats, fabrics, or other measures shall be removed as soon as the work is complete in the temporarily impacted wetland." This issue was resolved, and mats are being utilized moving forward.

- -J. Vandertill
- 9-01-2023: Timber mats placed for equipment. -J. Vandertill
- 9-02-2023 Drilling for blasting begins. First blast was shot around 3:45 pm. More drilling occurred after first blast. Second blast occurred around 5:55 pm. -J. Vandertill
- 9-05-2023: Drilling for blasting continued. Blast occurred around 3:00 pm. -J. Vandertill
- 9-06-2023: Drilling for blasting continues. Excavation of wetland began. Machines on mats.
- -J. Vandertill
- 9-07-2023: Excavation of wetland continues. Rock hammering occurred. Pipe laid in trench.
- -J. Vandertill
- 9-08-2023: Trench breaker installed. Backfill began. Mats were not used under equipment during backfill of subsoil. EI was reminded of the mat requirement. After the reminder machines were removed and work stopped in the wetland. -J. Vandertill
- 9-09-2023: Forman reiterated that equipment must be on mats in the wetland. Backfilling continued. Topsoil replaced. Survey crew on site confirming grade. Wetland reflagged and delineated with filter sock. Seed and straw was applied. -J. Vandertill
- 9-11-2023: Post-construction assessment completed. No impacts to biological conditions or unauthorized discharges were observed. -S. Fisher

In accordance with the Mountain Valley Pipeline Consent Decree, dated 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.

| This report was written by | Stephen Fisher | Stiffst | 09/11/2023 |
|----------------------------|----------------|-----------|------------|
| | Print Name | Signature | Date |





Required Photos



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Optional Additional Photos

