Wetland
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Wetland ID: W-ST2-PEM	Crossing Start Date: 08/23/2023	<b>Crossing Completion Date:</b> 09/20/2023
Milepost: 246.5	Pre-Con Assessment Date: 08/21/2023	Post-Con Assessment Date: 09/20/2023
<b>Station:</b> 13023+95	Cowardin Classification: PEM (PEM, PFO, PSS, POW)	Wetland Impact Area (sq ft.): 4974.55
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	
9.	Was equipment/timber matting removed from the wetland area properly by vertically lifting, and not pulling through the impact area.		Х	
10.	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	
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?		Х	
13.	Was the time of disturbance minimized by conducting resource work continuously to completion?		Х	
14.	Does the post-construction square footage of wetland area appear to be restored to meet or exceed the pre-construction area square footage?		Х	
15.	Are bareroot saplings required and/or scheduled to be planted for the dormant season $(10/1 - 4/30)$ in PFO classified wetlands?			Х
16.	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.			Χ

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)		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.)	3 - Marginal	2 - Suboptimal

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#### **Comments/Remarks**

El on-site is Matt Futkos. This resource crossing was performed in conjunction with S-G25 & S-G24.

- 8/21/23- Pre-con meeting and pre-con assessment completed. S. Frost
- 8/22/23- No work in the resource. -S. Frost
- 8/23/23- Trenching outside and inside 50 ft buffer. Trench box installed at the PI. Trench began to give way in the 50 ft buffer near the timber mats. Second trench box was ordered and back filled the unstable trench area- S. Frost
- 8/24/23- Trenching inside of 50 ft buffer. Second trench box delivered and installed in the 50ft buffer. S. Frost
- 8/25/23- Rained out. No work in the resource. S. Frost
- 8/26/23- Pipe lowered into trench. PI weld not yet made. S. Frost
- 8/28/23- Rained out. No work in the resources. S. Frost
- 8/29/23- Rained out. No work in the resources. S. Frost
- 8/30/23- Trench dewatering. Dewatering structure failed, causing sediment to wash off LOD in an upland area that did not impact the resources. Matt Futkos documented and mitigated appropriately. He advised for the dewatering structure to be deconstructed and reconstructed in a more suitable location. No further issues have been observed. S. Frost
- 8/31/23- Dewatering of trench. Blasting prep and operation completed in the steep slope area outside of the 50ft buffer. -S. Frost
- 9/1/23- Dewatering of trench. Welds started at the PI outside of the 50 ft buffer. S. Frost
- 9/2/23- PI welds completed. X-ray showed faults and has to be cut and welded again. S. Frost
- 9/3/23- Second weld completed, X-ray passed, coated, and jeep tested. S. Frost
- 9/4/23- Survey completed. Piped padded. Backfill completed outside of the 50ft buffer. Timber mats and geotext fabric placed for wetland and stream bed top soil segregation. S. Frost

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- 9/5/23- Topsoil removed from wetland and segregated. Bridge geotech fabric compromised and has to be replaced. S. Frost
- 9/6/23- Bridge repaired. Prep for trenching. S. Frost
- 9/7/23- Rain and lightning event caused late start. Trenching started in wetland. Late evening rain caused stop to work. S. Frost
- 9/8/23- Dam and pump replaced with flume. Prep for rain.- S. Frost
- 9/9/23- Dewatering trench. Flume removed. Dam and pump functioning. Early stop due to rain. - S. Frost
- 9/11/23- Trenching through wetland and streams. -S. Frost
- 9/12/23- Trenching continues through 10 ft buffer into 50ft buffer. S. Frost
- 9/13/23- Trenching through 50 ft buffer. Prepping pipe to be installed. -S. Frost
- 9/14/23- Pipe lowered into trench. Welding, X-ray, coating, and jeep tested. S. Frost
- 9/15/23- Partial backfill. Prep for trench breakers. -S. Frost
- 9/16/23- Trench breakers installation started. -S. Frost
- 9/18/23- Trench breakers finished. Partial backfill. S. Frost
- 9/19/23- Backfill completed. Wetland and stream restoration partially started. S. Frost
- 9/20/23- Wetland and stream restorations completed. Seeding and matting completed and stabilized. Final grade survey shot. Post-con assessment completed. S. Frost

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	Summer Frost  Print Name		09/21/2023 Date
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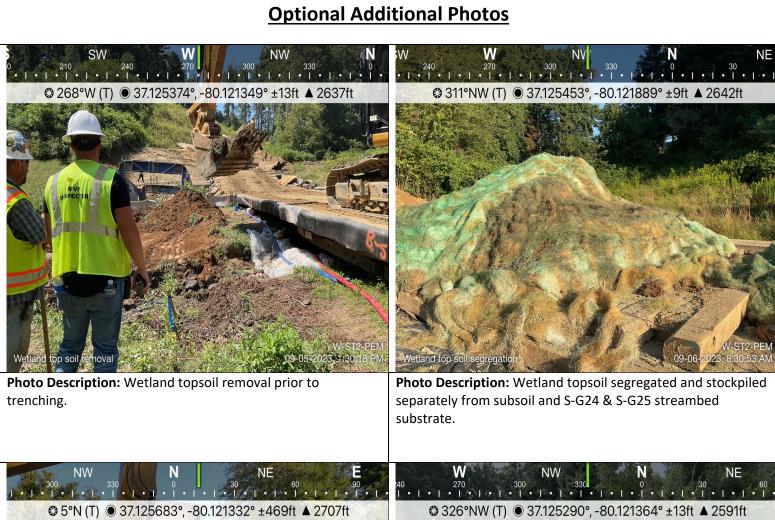


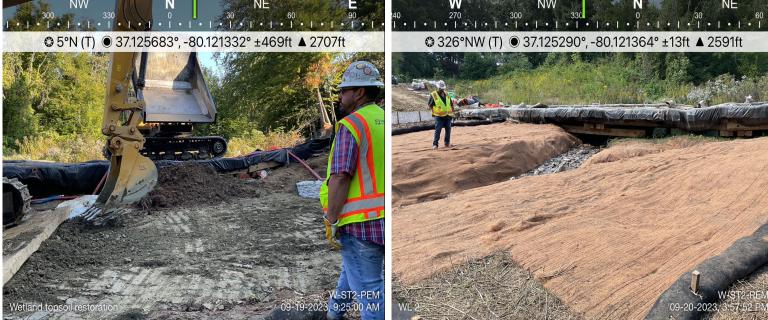
**Photo Description:** View of permitted resource impact area during post-construction assessment.

**Photo Description:** At edge of LOD, view of unpermitted resource area conditions during post-construction assessment.









of work area.

Photo Description: Restoring wetland topsoil.

Photo Description: View of final stabilization and restoration