## BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

## Version 1.1

Pre-Con Assessment Date:

Resource ID: \_\_\_\_\_\_W-HS07

Station: MVP-GI-243.01

Milepost: ~208.4

Crossing Start Date: \_\_\_\_\_\_10/22/2021

Crossing Completion Date: 10/23/2021

Post-Con Assessment Date: 10/23/2021

Wetland

a DAVEY 😤 company

Classification: <u>PEM Wetland</u> (Perennial, Intermittent, Ephemeral)

9/9/2021

Bankfull Width (ft.): <u>N/A</u>

ltem #	Resource Crossing Conditions	N/A	YES	NO
1.	Were all resource specific crossing conditions satisfied? (if applicable) TOYR? Fish Relocation? Mussel Relocation?	$\checkmark$		
2.	Is this resource a designated wild or stockable trout stream?	$\checkmark$		
3.	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?		$\checkmark$	
4.	Was the top 1-foot of wetland soil or stream bed material segregated and stockpiled separate from trench spoils?	$\checkmark$		
5.	Was excavated material not needed for backfill removed and disposed of at an upland site?	$\checkmark$		
6.	Was stream work conducted continuously to completion; time of disturbance minimized?		$\checkmark$	
7.	Was the top 1-foot of backfill in Cold Water Fisheries made with clean native stream substrate?	$\checkmark$		
8.	Was wetland topsoil replaced and seeded?		$\checkmark$	
9.	Was permanent seed applied to riparian areas and unsaturated wetlands?		$\checkmark$	
10.	Was pre-construction survey data utilized during restoration of stream and/or wetland areas?	$\checkmark$		
11.	Have surveys been scheduled to verify as-built conditions meet pre-construction conditions in accordance with federal/state permit requirements? (V: ±0.3 ft; H: ±1.0 ft)	$\checkmark$		
12.	Were disturbed areas restored to pre-construction contours?		$\checkmark$	
13.	Are bareroot plantings scheduled for dormant season (10/1 – 4/30)?	$\checkmark$		

Item #	Biologic Conditions	Pre-Con	Post-Con
14.	Substrate Type (select one): Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay	Mud/Silt/Clay	Mud/Silt/Clay
15.	<b>Channel Conditions:</b> 1-Optimal (80-100% stable banks), 2-Sub-optimal (60-80% stable banks), 3-Marginal (Erosion present in 40-60% of banks), 4-Poor (Erosion present in 60-80% of banks), 5-Severe (Erosion on 80-100% of the stream banks, highly eroded/unvegetated banks)	N/A	N/A
16.	<b>Riparian Buffers within ROW:</b> 1-Optimal (60% tree canopy cover + non-maintained understory), 2-Sub-optimal (30-60% canopy cover), 3-Marginal (<30% canopy cover), 4-Poor (Mowed/maintained areas, farmland, impervious area, sparsely vegetated, etc.)	2-Sub-Optimal	2-Sub-Optimal
17.	<ul> <li>In-Stream Habitat: Is the stream high or low gradient? (Definitions below)</li> <li>High Gradient: Defined by EPA as streams with moderate-high gradient landscapes; substrates primarily composed of coarse sediments [gravel (2mm) or larger] or frequent coarse particulate aggregations; riffle/run prevalent.</li> <li>Low Gradient: Defined by EPA as streams with low-moderate gradient landscapes; substrates of fine sediment particles or infrequent aggregations of coarse sediment particles [gravel (2mm) or larger]; glide/pool prevalent.</li> </ul>	N/A	
17.a.	High Gradient: Varied substrate sizes, Low amount of mobile particles, Low embeddedness, Varied combination of water velocities, Presence of wood/leafy debris, Provision of shade protection.         Low Gradient: Varied substrate sizes in pools, submerged aquatic vegetation, Presence of woody/leafy debris, Provision of shade protection.         Rating: 1-Optimal (Habitat elements present in >50% of stream), 2-Suboptimal (Habitat elements in 30-50% of stream), 3-Marginal (Habitat elements in 10-30% of stream), 4-Poor (Habitat elements lacking or <10% of stream)	N/A	N/A
18.	<b>Channel Alterations:</b> Straightened channel, Non-MVP stream crossings, Non-native riprap/rock along banks, Concrete/gabions/concrete block, Manmade embankments, Constrictions w/in channel, livestock impacts. 1-Negligible (unaltered/natural stream), 2-Minor (20-40% of stream disrupted by channel alterations), 3-Moderate (40-80% of stream disrupted), 4-Poor (>80% of stream disrupted)	N/A	N/A

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## **Comments/Remarks**

The work activity associated with this Environmental Auditor report was to permanently impact and fill wetland W-HS07 to restore the previously cleared access road MVP-GI-243.01 to pre-project conditions that did not include wetland W-HS07. W-HS07 was observed to have formed in 2020 due to site conditions caused by the initial grading activities from developing the road in 2018. This work was performed under the Norfolk District CoE Nationwide Permit 18, NAO-2015-00898. In order to tram equipment and restore the access road, timber mats with a geotextile underlayment were installed across W-HS07 to reduce impact on the wetland resource. The work activity within the wetland occurred over three working days due to discussions with the landowner regarding road restoration specifications for areas outside the wetland boundary. The timber mats were initially installed within the wetland area to provide access to the road for restoration on 9/14/2021. After the landowner discussions regarding timber removal/management were resolved, the wetland activity commenced with mat removal on 10/22 and final stabilization completed on 10/23. After the road was restored back to the W-HS07 boundary, the mats were removed with an excavator and the underlayment was removed by hand. The wetland area was then graded via excavator & hand work, seeded, and stabilized with the appropriate temporary and permanent upland seeding, in accordance with permit conditions. No future activity is expected at this access road location.

Pre-Constru	uction Assessment	Post-Construction Assessment					
Pre-Constru- S <sup>80</sup> :	0.567', -80°33.387' ±16ft ▲ 2605ft	Post-Construction Assessment S 210 SW 240 W 270 SW	NW 000 • I • I • 1 • 10 6ft ▲ 2594ft 000 • I • I • I • 10 000 • I • I • I • I • 10 000 • I • I • I • I • I • 10 000 • I • I • I • I • I • I • I • I • I				
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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 docum	nent instream conditions and any impacts	to the resources.					
This report was written by	Stephen Fisher	Stephen Fisher	11/2/2021				
	Print Name	" Signature	Date				