



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread C	A/E	124300131	Spread	H-600 Pipeline Spread C
Contractor	Precision	Report #	26		
Environmental Auditor	Alex Miller			Date/Time	8/15/2023 8:30 AM
Wetland ID	W-H90	Crossing Start Date	8/15/2023	Crossing Completion Date	8/21/2023
Milepost	74.21	Pre-Con Assessment Date	8/11/2023	Post-Con Assessment Date	8/21/2023
Station	3918+33	Cowardin Classification	PEM	Wetland Impact Area(acs)	0.0388
State	WV				
County	Braxton				

Resource Post-Crossing Conditions

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

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		Yes
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)	1		4
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.)	1		4

AFE 124300131	Date/Time 8/15/2023 8:30 AM	Report # 26
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Additional Notes

Dewatering of the trench was required during the day and overnight throughout the crossing, this same crew managed the pump around water as well.

8/15/23
 Prior to construction entering the 10' buffer of W-H90, the stream crossing S-H123s was dammed with sandbags and a pump around was installed.
 Excavation of the top 12" of wetland topsoil was removed, stored and covered on the right side of the coming in side (CIS) of the ROW form W-H90.
 The top 12" of stream substrate for S-H123s was also excavated and placed in super sacks and stored next to wetland topsoil.
 The trench was excavated until hitting a hard rock layer and a blasting crew was brought in.

8/16/23
 Excavation was complete through the wetland, stream, and going away side (GAS) of the crossing and a large section of pipe was lowered into the trench. Welding operations started tying in the GAS of the pipe.

8/17/23
 Welding continued on the GAS of the cross while the excavation of the trench on the CIS was completed. The segment of pipe on the CIS was lowered into the trench and welding operations commenced.

8/18/23
 Welding operations on the CIS and GAS continued in the morning. A section of pipe was required to be cut out on the CIS, but by the end of the day both the CIS and GAS welds and X-rays were completed.

8/19/23
 Sand blasting and coating of the pipe was completed first thing in the morning and trench breaker was installed within 25' of the wetland boundary. The trench was backfilled by padding the pipe using a sifting bucket on an excavator up to the 10' buffer zone of the wetland. The top 12" of segregated soil was replaced in wetland (W-H90) and stream (S-H123s) to the surveyor pre-construction specifications. The pump and dam were removed, and stream flow was restored.
 Super-silt was installed on both sides of the wetland, but seeding and the installation of jute was only completed on the CIS due to running out of daylight.

8/21/23
 The remaining section of W-H90 was completed with the installation jute and seeding on the GAS. Curlex was installed within the 50ft riparian zone outside of the wetland.

Conditions 18 and 19 were given a rating of 4 due to the lack of vegetation in the disturbed permitted impact area following completion of the crossing and restoration efforts. The W-H90 PEM topsoils have been properly stabilized and the disturbed area has been seeded with the appropriate permanent seed mix in accordance with Appendix B: Restoration Work Plan of the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework.

In accordance with the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework, 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.

Name	Signature	Company	Date
Alex Miller		SWCA	8/21/2023

AFE 124300131	Date/Time 8/15/2023 8:30 AM	Report # 26
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Required Photos

<p>8/15/23 8:23 AM +38.7605N -80.5137W 329° NW W-H90 (AMf)</p> 	<p>8/15/23 8:20 AM +38.7602N -80.5135W 140° SE W-H90 (AMf)</p> 
<p>GPS Location See photo</p>	<p>GPS Location See photo</p>
<p>Description View of permitted resource impact area during pre-construction assessment. View of wetland W-H90 from Left side of LOD on going away side of wetland prior to construction.</p>	<p>Description At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment. Unpermitted area of W-H90 as seen from left edge of LOD on the coming in side prior to construction.</p>
<p>8/21/23 2:11 PM +38.7605N -80.5136W 303° NW W-H90 (Post-AM)</p> 	<p>8/21/23 2:02 PM +38.7605N -80.5136W 142° SE W-H90 (Post-AM)</p> 
<p>GPS Location See Photo</p>	<p>GPS Location See Photo</p>
<p>Description View of permitted resource impact area during post-construction assessment. View of wetland W-H90 from left side of LOD on going away side of wetland post construction.</p>	<p>Description At edge of LOD, view of unimpacted resource area conditions during post-construction assessment. Unpermitted area of W-H90 as seen from left edge of LOD on the coming in side, post construction.</p>
<p>8/19/23 5:00 PM +38.7604N -80.5137W 267° W W-H90 (Dur-AM)</p> 	<p>8/17/23 8:37 AM +38.7603N -80.5136W 330° NW W-H90 (Dur-AM)</p> 
<p>GPS Location See Photo</p>	<p>GPS Location See photo</p>
<p>Description Wetland W-90 prior to replacement of stream and wetland substrate.</p>	<p>Description Wetland/stream area after removal of topsoil and with pipe placed in trench.</p>

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Optional Photos					
Insert image here			Insert image here		
GPS Location		GPS Location		Description	
Insert image here			Insert image here		
GPS Location		GPS Location		Description	
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GPS Location		GPS Location		Description	