



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread D	AFE	124300132	Spread	H-600 Pipeline Spread D
Contractor	Precision	Report #	34		
Environmental Auditor	Alex Miller			Date/Time	8/27/2023 10:27 AM
Wetland ID	W-IJ50	Crossing Start Date	8/27/2023	Crossing Completion Date	9/1/2023
Milepost	111.72	Pre-Con Assessment Date	8/19/2023	Post-Con Assessment Date	9/1/2023
Station	5898+82	Cowardin Classification	PEM	Wetland Impact Area(acs)	0.0528
State	WV				
County	Nicholas				

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?	Yes
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?	Yes
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 124300132	Date/Time 8/27/2023 10:27 AM	Report # 34
----------------------	-------------------------------------	--------------------

Additional Notes

8/27 - Wetland vegetation was removed, and top 12 inches of wetland substrate was segregated. Wetland topsoil was placed on right side of LOD in a plastic lined containment. Topsoil was then surrounded with silt fence and covered in plastic to protect from rain.

8/28 - No work performed due to rain event. Dewatering of work space and trench began.

8/29 - Due to rain, the work area was full of water. The work area was pumped out with a 2" pump and trenching commenced. The trench was excavated towards both the coming in-side (CIS) and going away side (GAS) of exposed pipe. A flume was placed in the work space to direct horizontal flow of water across trench and a 3" pump was placed in the trench for dewatering due to groundwater seepage and overland flow draining into trench. Dewatering continued overnight.

8/30 - Due to immense amount of rainfall, the trench needed to be pumped before excavation could resume. The flume was removed from the work space and sandbags were placed on either side of the trench to prevent water from flowing into the trench from the wetland. Further excavation of the trench was needed due to sedimentation from rainfall, after which the pipe was placed within the trench and welding commenced on the CIS of the pipe. The coming in-side welds were completed.

8/31 - Welds on GAS were completed and X-Rayed. The coming in-side welds were coated and covered with rock shield. Dewatering was not performed overnight.

9/1 - Trench breakers were constructed inside the 25 ft. buffer. The pipe was padded with sifting buckets from excavators on both the CIS and GAS, working towards the edges of W-IJ50. After the pipe was padded using the sifting buckets, the trench was backfilled with subsoil to with in the top 12". Topsoil was replaced to grade and verified by survey. Any compaction of the wetlands topsoil was removed by hand rafting. P1 silt fence was constructed at the wetland buffer and Curlex was applied to the non-vegetated slopes adjacent to the wetland. Wetland seed mix was applied and wetland W-IJ50 restoration was completed.







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-IJ50 PEM topsoil has 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	9/1/2023

AFE 124300132	Date/Time 8/27/2023 10:27 AM	Report # 34
----------------------	-------------------------------------	--------------------

Required Photos

<p>8/27/23 10:35 AM +38.3509N -80.6372W 187° S W-IJ50 (Pre-AMf)</p> 		<p>8/27/23 10:35 AM +38.3508N -80.6371W 80° E W-IJ50 (Pre-AMf)</p> 	
GPS Location	See Photo	GPS Location	See Photo
Description	View of permitted resource impact area during pre-construction assessment. View of wetland pre construction from CIS on pipe centerline.	Description	At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment. View off left side of LOD taken from LOD Edge pre construction
<p>9/1/23 17:12:39 +38.3507N -80.6372W 177° S W-IJ50 (Post-AM)</p> 		<p>9/1/23 17:11:06 +38.3508N -80.6371W 111° E W-IJ50 (Post-AM)</p> 	
GPS Location	See Photo	GPS Location	See Photo
Description	View of permitted resource impact area during post-construction assessment. View of wetland post construction from CIS of Pipe centerline.	Description	At edge of LOD, view of unimpacted resource area conditions during post-construction assessment. View off left side of LOD taken from LOD edge post construction.
<p>9/1/23 12:24:18 +38.3508N -80.6375W 287° W W-IJ50 (Dur-AM)</p> 		<p>9/1/23 15:11:00 +38.3508N -80.6372W 303° NW W-IJ50 (Dur-AM)</p> 	
GPS Location	See Photo	GPS Location	See Photo
Description	Trench breakers constructed just past the 10 ft buffer of W-IJ50. Located within the 25ft buffer.	Description	Excavator replacing and grading wetland topsoil in W-IJ50.

AFE	124300132	Date/Time	8/27/2023 10:27 AM	Report #	34
------------	-----------	------------------	--------------------	-----------------	----

Optional Photos					
------------------------	--	--	--	--	--



GPS Location	See Photo	GPS Location	See Photo
Description	Unimpacted area of W-IJ50 within LOD taken from bridge, facing right side of LOD. Post construction	Description	Unimpacted area of W-IJ50 within LOD taken from bridge, facing right side of LOD, Pre construction.

Insert image here	Insert image here
-------------------	-------------------

GPS Location		GPS Location	
Description		Description	

Insert image here	Insert image here
-------------------	-------------------

GPS Location		GPS Location	
Description		Description	