



Stream Biological Conditions EA Report


Project Name	H-600 Pipeline Spread A	AFE	124300129	Spread	H-600 Pipeline Spread A
Contractor	Precision	Report #	9		
Environmental Auditor	Samantha Felix	Date/Time	7/16/2023 7:49 AM		
Stream ID	S-A118	Crossing Start Date	7/7/2023	Crossing Completion Date	7/13/2023
Milepost	5.53	Pre-Con Assessment Date	7/6/2023	Post-Con Assessment Date	7/14/2023
Station	291+98	Bankfull Width (ft.)	1.0	Riffle:Pool Complexes Present?	No
State	WV	Stream Classification	Intermittent		
County	Wetzel	303(d) Impairment Listing	Not impaired		





Resource Post-Crossing Conditions

1	Were all applicable resource specific crossing conditions satisfied?	N/A
	Time of Year Restrictions (TOYR)? <u>N/A</u> Mussel Relocation? <u>N/A</u> Fish Relocation? _____	
2	This question is not applicable in WV.	
3	Which crossing methods were utilized during the stream crossing? (If so select one or more) Dam & Pump <input checked="" type="checkbox"/> Flume <input type="checkbox"/> Cofferdam <input type="checkbox"/> Conventional Bore <input type="checkbox"/> Horizontal Directional Drill (HDD) Bore <input type="checkbox"/>	
4	Was the top 1-foot (12-inches) of streambed substrate segregated and stockpiled separate from trench spoils?	Yes
5	Was excess material not needed for backfill removed and disposed of in an upland area?	Yes
6	Was the top 12-inches of backfill made with clean native stream substrate?	Yes
7	Was the pre-construction survey data utilized during restoration in attempt to re-establish pre-construction contours?	Yes
8	Were any field modifications to the stream implemented by project or regulatory personnel to address potential drainage or bank restoration limitations?	No
9	Were impervious trench breakers/plugs properly installed within 25-feet of top-of-bank to prevent subsurface erosion to or from the resource area?	Yes
10	Was permanent seed and stabilization material (straw or matting) applied to riparian areas and stream banks prior to re-establishing flow to the impact area of the channel?	Yes
11	Was the time of disturbance minimized by conducting resource work continuously to completion?	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	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 - 4/30)?	No
14	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
15	Predominant Substrate Type (select one): Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay	Cobble (2-10")	Cobble (2-10")
16	Channel Conditions: Rating: 1-Optimal (80-100% stable banks), 2-Sub-optimal (60-80% stable banks), 3-Marginal (40-60% stable banks), 4-Poor (20-40% stable banks), 5-Severe (0-20% stable banks, highly eroded or unvegetated banks)	1	5
17	Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank: Rating: 1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (30-60% mixed vegetated coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetated coverage, etc.)	1	4

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Biological Conditions Continued					Pre-Con	Post-Con
18	Instream Habitat Conditions: Examples: Varied substrate sizes, varied combination of water velocities & depths, presence of woody/leafy debris, stable substrate with low amount of mobile particles, low embeddedness, shade protection, undercut banks, root mats, Varied combination of water velocities, submerged aquatic vegetation Rating: 1-Optimal (Habitat conditions present in >50% of resource), 2-Suboptimal (Habitat conditions in 30-50% of resource), 3-Marginal (Habitat conditions in 10-30% of resource), 4-Poor (Habitat conditions in 0-10% of resource)			1	1	
19	Channel Alterations: Examples: Straightened channel, non-MVP stream crossings, non-native riprap/rock along banks, concrete/gabions/concrete block, manmade embankments, constrictions w/in channel, livestock or agricultural impacts Rating: 1-Negligible (unaltered/natural stream), 2-Minor (20-40% of resource disrupted by channel alterations), 3-Moderate (40-80% of resource disrupted), 4-Severe (>80% of resource disrupted)			1	1	
Additional Notes						
<p>Pre-Construction</p> <p>Weather was sunny and 85° F at time of picture taking.</p> <p>The permitted work area stream is an unnamed tributary to Price Run. The stream channel is wider towards the south/upstream end of the right-of-way (ROW) and is skinnier towards the northern/downstream end of the ROW near the temporary equipment crossing. The banks are heavily vegetated with herbaceous plants.</p> <p>The stream is bordered on the southeast side by wetland W-A27 and a steep hill on the northwest side.</p> <p>Post-Construction</p> <p>Weather was cloudy and 79° F at time of picture taking.</p> <p>Stream has been restored to pre-construction contours. Conditions 16 and 17 were given a rating of 5 and 4 respectively due to the lack of vegetation in disturbed permitted impact area following completion of the crossing and restoration. The streambanks have been properly stabilized and the disturbed area have been seeded with the appropriate permanent seed mix and/or planted with bare-root saplings (as required) in accordance with Appendix B: Restoration Work Plan of the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework.</p> <p>There was a considerable stormwater event that occurred after restoration of the stream and wetland. The restored stream channel remained stable during and after the storm.</p>						
<p>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.</p>						
Name		Signature		Company		
Samantha Felix				ERM		
				Date		
				7/17/2023		

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Required Photos					
					
GPS Location 39.502294, -80.523569		GPS Location 39.502494, -80.523490			
Description Downstream view of permitted impact area during pre-construction assessment.		Description Downstream view of unimpacted area during pre-construction assessment.			
					
GPS Location 39.502324, -80.523568		GPS Location 39.502494, -80.523482			
Description Downstream view of permitted impact area during post-construction assessment.		Description Downstream view of unimpacted area during post-construction assessment.			
Insert image here		Insert image here			
GPS Location		GPS Location			
Description		Description			

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Optional Photos					
Insert image here			Insert image here		
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