



Stream Biological Conditions EA Report

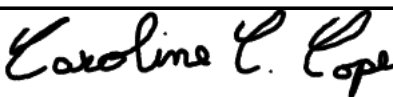
Project Name	H-600 Pipeline Spread D	AFE	124300132	Spread	H-600 Pipeline Spread D
Contractor	Precision Pipeline	Report #	23		
Environmental Auditor	Caroline Cope	Date/Time	8/8/2023 10:07 AM		
Stream ID	S-E50	Crossing Start Date	8/8/2023	Crossing Completion Date	8/12/2023
Milepost	109.63	Pre-Con Assessment Date	8/8/2023	Post-Con Assessment Date	8/12/2023
Station	5788+65	Bankfull Width (ft.)	4	Riffle:Pool Complexes Present?	No
State	WV	Stream Classification	Perennial		
County	Webster	303(d) Impairment Listing	No		

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>	
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 checked="" 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?	N/A
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)?	N/A
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	Mud/Silt/Clay	Mud/Silt/Clay
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	4
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

AFE	124300132	Date/Time	8/8/2023 10:07 AM	Report #	23	
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	4	
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	4	
Additional Notes						
<p>08/08/2023 – The crossing at stream S-E50 that divides wetland W-E21 was started today. The crossing began by removing the top 12 inches of stream substrate in between the ordinary high-water marks along with the first 12 inches of wetland soils to the stacked wetland boundary. Both the soil and substrate were separately segregated and stockpiled to the right side of the LOD on the coming in side of the crossing. The stream substrate was covered by a tarp and signage posted. The disturbed soil across the trench width was approximately 10-12 feet on either side of the pipe. The blasting crew was required after excavating the first few feet of the trench. After blasting the trench excavation continued until reaching the required depth. Ground water in the trench was pumped into a dewatering structure on the coming in side of the crossing. A 12-inch flume pipe was installed to channel the stream water overnight.</p> <p>08/09/2023 – Dewatering operations of the trench continued throughout the day. Excavation of the trench on the going away side of the crossing was completed. On the coming in side of the trench the construction crew encountered a large boulder approximately 30ft by 12ft in size that needed to be hammered out, which slowed production. The segment of pipe for the crossing was lowered into the trench later in the day and welding commenced. A 12-inch flume pipe continued to channel the stream water (S-E50) throughout the day and during the night.</p> <p>08/10/2023 – A rain out event brought a halted construction. Water bars were reinforced, and environmental monitoring was conducted during periods of heavy rainfall.</p> <p>08/11/20 - The coming in side of the pipe will be tied in after the stream and wetland have been put back together, due to rain prediction in the forecast. Dewatering of the trench water continued throughout the day. Welding and X-ray completed the connection on the going away side of the crossing by the end of the day. The flume pipe continued to channel the stream water (S-E50) throughout the day and during the night.</p> <p>08/12/2023 – Stream and wetland crossing was completed today, with the top 12 inches of topsoil and substrate being properly installed. Survey verified elevation before and after topsoil and substrate was returned. Curlex was installed up to the edge of the wetland boundary for erosion control and the wetland seed mix was applied.</p> <p>#9 - Plugs were installed within 25ft from the center of the stream on the going away side and within 28ft on the coming in side.</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		
Caroline Cope				SWCA		
				Date		
				8/12/2023		

AFE	124300132	Date/Time	8/8/2023 10:07 AM	Report #	23		
Required Photos							
<p>8/8/23 8:42 AM +38.3707N -80.6119W 229° SW S-E50 (Pre_CC)f</p> 		<p>8/8/23 8:38 AM +38.3707N -80.6120W 215° SW S-E50 (Pre_CC)f</p> 		<p>GPS Location</p>	38.3707, -80.6119	<p>GPS Location</p>	38.3703, -80.6120
<p>Description</p>	Downstream view of permitted impact area during pre-construction assessment. S-E50	<p>Description</p>	Downstream view of unimpacted area during pre-construction assessment. S-E50	<p>8/12/23 7:43 PM +38.3706N -80.6119W 254° W S-E50 (Post_CC)</p> 		<p>8/12/23 7:39 PM +38.3706N -80.6120W 195° S S-E50 (Post_CC)</p> 	
<p>GPS Location</p>	38.3706, -80.6119	<p>GPS Location</p>	38.3706, -80.6120	<p>Description</p>	Downstream view of permitted impact area during post-construction assessment. S-E50	<p>Description</p>	Downstream view of unimpacted area during post-construction assessment. S-E50
<p>8/8/23 8:38 AM +38.3707N -80.6119W 65° NE S-E50 (Pre_CC)f</p> 		<p>8/12/23 7:39 PM +38.3706N -80.6119W 60° NE S-E50 (Post_CC)</p> 		<p>GPS Location</p>	39.3707, -80.6119	<p>GPS Location</p>	38.3706, -80.6119
<p>Description</p>	Upstream view of permitted impacted area during pre-construction assessment.	<p>Description</p>	Upstream view of permitted impacted area during post-construction assessment.				

Optional Photos					
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