



Stream Biological Conditions EA Report


Project Name	H-600 Pipeline Spread D	AFE	124300132	Spread	H-600 Pipeline Spread D
Contractor	Precision	Report #	331		
Environmental Auditor	Scott Wessel	Date/Time	10/27/2023 8:14 AM		
Stream ID	S-L35-1	Crossing Start Date	10/27/2023	Crossing Completion Date	11/1/2023
Milepost	124.86	Pre-Con Assessment Date	10/27/2023	Post-Con Assessment Date	11/1/2023
Station	6592+76	Bankfull Width (ft.)	4.0	Riffle:Pool Complexes Present?	No
State	WV	Stream Classification	Perennial		
County	Nicholas	303(d) Impairment Listing	No		







Resource Post-Crossing Conditions

1	Were all applicable resource specific crossing conditions satisfied? Time of Year Restrictions (TOYR)? <u>Yes</u> Mussel Relocation? <u>N/A</u>	See Below
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?	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)?	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	1
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	10/27/2023 8:14 AM	Report #	331	
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	3	
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>Expanded Notes for question 1: Stream S-L35-1 has a time of year restriction (TOYR) prohibiting construction between Sept. 15th to March 31st. A waiver has been obtained from the appropriate agencies to allow construction within this window.</p> <p>10/27/23 - Dam and pump around was utilized during the day for crossing, and a flume was installed at the end of each workday. The top 12" of stream substrate material was removed, put into labeled super sacks, and staged in an upland area. Substrate material mainly consisted of small pebbles, silt, and mud. Topsoil for stream banks was removed and segregated from subsoil material in an upland area. Crew hit solid rock soon after trenching started and the blasting crew was called in for tomorrow.</p> <p>10/28/23 – Blasting crew was on site and spent most of the day drilling on the coming in side (CIS) and going away side (GAS) of resource. After blasting was completed, trenching of S-L35-1 continued.</p> <p>10/29/23 - Pipe preparations on the CIS of S-L35-1 continued with welding, x-ray, and the instillation of rock shields. The ditch was lined with sandbags after water was pumped out to the dewatering structure staged on the CIS of the resource. The section of pipe for S-L35-1 that was lowered into the ditch extended past the 10' buffers, and will have its tie-in welds completed by a different crew at a later date. Some of the pipe was padding before the end of the day.</p> <p>10/30/23 – No construction activities were conducted due to a rain out.</p> <p>10/31/23 - Bentonite breakers were installed within 25 feet of high water mark on both the CIS and GAS of stream S-L35-1. Once backfilling was complete, stream banks and buffer zones were put back using previously segregated topsoil.</p> <p>11/1/23 - Erosion control blankets were installed along with proper seed mixture for the 10-foot buffer zone. Super silt fence was installed outside the buffer zone area on the CIS and GAS of resource. Survey verified that the top 12" of substrate for S-L35-1 between the high water marks of the stream channel were restored to pre-construction elevations and contours. The pump and dam were removed, and flow was restored to S-L35-1.</p> <p>Numbers 17 and 18 were rated "4" and "3" due to lack of vegetation in the impact area following the completion of crossing and restoration efforts. The disturbed area for stream S-L35-1 has been properly stabilized and 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.</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		
Scott Wessel				SWCA		
				Date		
				11/1/2023		

AFE	124300132	Date/Time	10/27/2023 8:14 AM	Report #	331						
Required Photos											
				GPS Location	See coordinates in above photo.	GPS Location	See coordinates in above photo.				
Description	Downstream view of permitted impact area during pre-construction assessment.	Description	Downstream view of unimpacted area during pre-construction assessment.					GPS Location	See coordinates in above photo.	GPS Location	See coordinates in above photo.
Description	Downstream view of permitted impact area during post-construction assessment.	Description	Downstream view of unimpacted area during post-construction assessment.					GPS Location	See coordinates in above photo.	GPS Location	See coordinates in above photo.
Description	Dam and pump around materials being set up.	Description	Stream substrate material segregated into super sacks and staged on the CIS of resource in an upland area.								

AFE	124300132	Date/Time	10/27/2023 8:14 AM	Report #	331
Optional Photos					
				GPS Location	See coordinates in above photo.
Description	Removing sub soil from buffer zone area on the CIS of resource.	Description	Pipe being padded after section was lowered into ditch.		
GPS Location	See coordinates in above photo.	GPS Location	See coordinates in above photo.	Description	Trench breaker being installed after pipe section was lowered into ditch.
				GPS Location	See coordinates in above photo.
Description	Erosion control bank and super silt fence installed on the CIS of crossing.	Description	Restored resource area post construction.		