



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread F	AFE	124300135	Spread	H-600 Pipeline Spread F
Contractor	Price Gregory	Report #	106		
Environmental Auditor	Luke Fultz	Date/Time	10/26/2023 3:21 PM		
Wetland ID	W-UV11	Crossing Start Date	11/8/2023	Crossing Completion Date	11/25/2023
Milepost	155.17	Pre-Con Assessment Date	10/26/2023	Post-Con Assessment Date	11/25/2023
Station	8192+98	Cowardin Classification	PEM	Wetland Impact Area(acres)	0.0285
State	WV				
County	Greenbrier				

Resource Post-Crossing Conditions

1	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?	Yes
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?	Yes
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)	No		No
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)	4		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		1

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Additional Notes

Pre-Construction Notes
 Pre-Construction Meeting - 10/26/2023
 17. No Surface water present, test pit did not recharge nor were there saturated soils.
 18. Ag field, livestock, mowing, previously constructed drainage swall. Vegetation cleared prior to construction.

11/08/2023 - Pre-Construction Assessment review and was found to be consistent with current conditions. First 12 inches of topsoil on the northwestern edge of the aquatic resource was removed and segregated (Photo 1).

11/09/2023 - Additional topsoil from the northwestern edge of the aquatic resource was removed. Work ongoing outside of the aquatic resource area.

11/10/2023 - No work in aquatic resource. Work ongoing outside of the aquatic resource area.

11/11/2023 - First 12 inches of topsoil was removed from the remainder of the aquatic resource (Photo 2). Material was segregated.

11/13/2023 - Begin excavating subsoil in adjacent resource areas [S-K19 & W-K9-PEM-1]. Subsoil stockpiled on subsoil where topsoil removed. Work ongoing outside of the aquatic resource area.

11/14/2023 - Excavating subsoil from ditch directly adjacent to aquatic resource (slightly through edge of resource area as ditch moves south) (Photo 3). Staging pipe in ditch directly adjacent to aquatic resource. Welding pipe connect in ditch directly adjacent to aquatic resource. Work ongoing outside of the aquatic resource area.

11/15/2023 - No work in aquatic resource. Work ongoing outside of the aquatic resource area.

11/16/2023 - Constructed trench breaker south of the aquatic resource area (Photo 4). Work ongoing outside of the aquatic resource area.

11/17/2023 - Constructed trench breaker north of the aquatic resource area. Backfilling subsoil along the northwestern edge of the aquatic resource (Photo 5). Work ongoing outside of the aquatic resource area.

11/18/2023 - Completed backfilling subsoil on the northwestern edge of the aquatic resource (rest of aquatic resource undisturbed) (Photo 6).

11/20/2023 - Survey onsite to shoot boundary of aquatic resource area. Work ongoing outside of the aquatic resource area.

11/21/2023 - Rain event. No work in aquatic resource area.


11/22/2023 - 1.02" of precipitation recorded in previous 24 hours near site. Due to ground conditions from yesterday's precipitation event, no work is planned in aquatic resource area for the day.

11/24/2023 - No rain. Due to saturated ground conditions work was not completed in this aquatic resource. Work ongoing at other locations outside of the aquatic resource.

11/25/2023 - No rain. Work ongoing at other locations outside of the aquatic resource. Additional subsoil was added to resource (Photo 7). Additional work smoothing and contouring soil. Survey previously staked wetland limits (11/20/2023) which were utilized for restoration. Wetland topsoil added and edges contoured to meet existing grade. Wetland seeded. P1 fencing added. Additional seed added once fencing was installed (Photo 8). Site Complete.

Post Construction Notes
 19. Crossing has recently been restored. These areas will be monitored until 80% vegetative cover is achieved. Areas that do not have 80% vegetative cover within 30 days will be reseeded.

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
Luke Fultz		Potesta	11/25/2023

Required Photos		
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GPS Location See Photo	GPS Location See Photo
Description View of permitted resource impact area during pre-construction assessment.	Description At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment.



GPS Location See Photo	GPS Location See Photo
Description View of permitted resource impact area during post-construction assessment.	Description At edge of LOD, view of unimpacted resource area conditions during post-construction assessment.



GPS Location See Photo	GPS Location See Photo
Description Photo 1: Removal of first 12 inches of topsoil in the northwestern corner of the aquatic resource.	Description Photo 2: Remainder of the first 12 inches of topsoil in the aquatic resource removed.

Optional Photos		
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 <p style="font-size: small; color: blue;">Date & Time: Thu, Nov 16, 2023 at 11:55:46 EST Position: +037.861430 / -080.757965 (+37.861430, -80.757965) Altitude: 2451ft (+46.5ft) Datum: WGS-84 Azimuth Bearing: 175.505E (31.5ft True (+31.5)) Elevation Angle: +07.1 Horizon Angle: +03.3 Zoom: 1.0X W-UV11 Excavating subsoil slightly into resource area. MVP</p>	 <p style="font-size: small; color: blue;">Date & Time: Thu, Nov 16, 2023 at 11:55:55 EST Position: +037.861001 / -080.757865 (+37.861001, -80.757865) Altitude: 2455ft (+11.4ft) Datum: WGS-84 Azimuth Bearing: 0.7 N37E 0658mits True (+2.7) Elevation Angle: +24.3 Horizon Angle: +02.8 Zoom: 1.0X W-UV11 Trench breaker to south of aquatic resource. MVP</p>
GPS Location See Photo	GPS Location See Photo
Description Photo 3: Excavating subsoil slightly into aquatic resource area.	Description Photo 4: Constructing trench breaker to south of aquatic resource.
 <p style="font-size: small; color: blue;">Date & Time: Fri, Nov 17, 2023 at 03:43:48 EST Position: +037.861181 / -080.757947 (+37.861181, -80.757947) Altitude: 2454ft (+36.3ft) Datum: WGS-84 Azimuth Bearing: 100.580E (778mits True (+7.8)) Elevation Angle: +16.5 Horizon Angle: +01.7 Zoom: 1.0X W-UV11 Replacing subsoil. MVP</p>	 <p style="font-size: small; color: blue;">Date & Time: Sat, Nov 18, 2023 at 12:44:51 EST Position: +037.861249 / -080.757865 (+37.861249, -80.757865) Altitude: 2445ft (+11.3ft) Datum: WGS-84 Azimuth Bearing: 101.579E (779mits True (+7.9)) Elevation Angle: +18.1 Horizon Angle: +01.8 Zoom: 0.9X W-UV11 Subsoil backfilled. MVP</p>
GPS Location See Photo	GPS Location See Photo
Description Photo 5: Replacing subsoil.	Description Photo 6: Subsoil backfilled in the aquatic resource area.
 <p style="font-size: small; color: blue;">Date & Time: Sat, Nov 18, 2023 at 10:43:40 EST Position: +037.862091 / -080.760821 (+37.862091, -80.760821) Altitude: 2450ft (+36.3ft) Datum: WGS-84 Azimuth Bearing: 168.984E (142mits True (+4.2)) Elevation Angle: +08.8 Horizon Angle: +03.8 Zoom: 1.0X W-UV11 Adding additional subsoil. MVP</p>	 <p style="font-size: small; color: blue;">Date & Time: Sat, Nov 18, 2023 at 14:00:20 EST Position: +037.862091 / -080.760821 (+37.862091, -80.760821) Altitude: 2450ft (+36.3ft) Datum: WGS-84 Azimuth Bearing: 179.501E (3182mits True (+31.8)) Elevation Angle: +07.5 Horizon Angle: +00.3 Zoom: 1.0X W-UV11 additional seed MVP</p>
GPS Location See Photo	GPS Location See Photo
Description Photo 7: Adding additional subsoil to aquatic resource area.	Description Photo 8: Adding additional seed to aquatic resource area.