



# Wetland Biological Conditions EA Report

<b>Project Name</b>	H-600 Pipeline Spread F	<b>AFE</b>	124300135	<b>Spread</b>	H-600 Pipeline Spread F
<b>Contractor</b>	Price Gregory	<b>Report #</b>	107		
<b>Environmental Auditor</b>	Luke Fultz	<b>Date/Time</b>	10/26/2023 3:44 PM		
<b>Wetland ID</b>	W-K9-PEM-1	<b>Crossing Start Date</b>	11/9/2023	<b>Crossing Completion Date</b>	11/17/2023
<b>Milepost</b>	155.19	<b>Pre-Con Assessment Date</b>	10/26/2023	<b>Post-Con Assessment Date</b>	11/17/2023
<b>Station</b>	8194+28	<b>Cowardin Classification</b>	PEM	<b>Wetland Impact Area(acres)</b>	0.0354
<b>State</b>	WV				
<b>County</b>	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	<b>Wetland Saturation:</b> Are surface waters, the water table, and/or overall soil saturation present? (Select Yes or No)	Yes		Yes
18	<b>Resource Alterations:</b> Are the wetland soil conditions visibly disturbed? <b>Examples:</b> Livestock presence, haul roads, farm traffic, drain tiles, recent mowing/clear cutting, recent excavating/disking of soils, etc. <b>Rating:</b> 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)	2		2
19	<b>Is vegetation present within the permitted impact area prior to disturbance? (Pre-Con)Are areas properly seeded and stabilized after restoration? (Post-Con)</b> <b>Rating:</b> 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

<b>AFE</b> 124300135	<b>Date/Time</b> 10/26/2023 3:44 PM	<b>Report #</b> 107
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**Additional Notes**

**Pre-Construction Notes**  
 Pre-Construction Meeting - 10/26/2023  
 17. Test pit did contain water or saturated soils. Hydric soils present.  
 18. Ag, livestock, mowing, previously constructed drainage swall.  
 Timber mat in place for travel lane.

11/9/2023 - Reviewed Pre-Construction Assessment completed on 10/26/2023. No changes observed. Excavated wetland topsoil (Photo 1) and segregated in upland area. Test drilling in aquatic resource area (Photo 2). Work ongoing at other locations at this site.

11/10/2023-11/11/2023 - No work in resource. Work ongoing at other locations at this site.

11/13/2023 - Timber mats put in place to begin excavation of aquatic resource. Excavation of trench through aquatic resource (Photo 3). Pumped water from trench in aquatic resource area and then repeated as needed. Sandbags for padding added in trench (Photo 4). Pipe placed in trench through aquatic resource area and prepared for welding (Photo 5). Welding and x-ray of connection outside of aquatic resource area.

11/14/2023 - Pumping water from trench in aquatic resource area. Construction of trench breaker on the southern side of the aquatic resource area (Photo 6). Began backfilling.


11/15/2023 - Pumping water from trench in aquatic resource area. Work ongoing at other locations at this site including welding and x-ray.

11/16/2023 - Pumping water from trench in aquatic resource area. Construction of trench breaker on the northern side of the aquatic resource area. Continued backfilling subsoils in aquatic resource area (Photo 7). Survey onsite shooting pre-restoration soil levels. Restored and contoured wetland topsoil (Photo 8). Seeding completed and jute added. Reseeding completed. Dark. Final check and assessment to be completed in the morning when visibility is better.





11/17/2023 - Site evaluated to determine if restoration is complete. Post Construction Assessment completed.

**Post Construction Notes**  
 17. Saturated soils.  
 19. Crossing and riparian areas have been recently restored. These areas will be monitored until 80% vegetative coverage has been achieved and areas that do not have 80% vegetative cover within 30 days will be reseeded.  
 Timber mat remains in place for travel lane and work area access.

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	11/17/2023

<b>Required Photos</b>		
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 <p><small>Date &amp; Time: Thu, Oct 26, 2023 at 15:49:08 EDT Position: -83.7860945° / -080.757932° (-32.28ft) Altitude: 2667ft (+63.6ft) Datum: WGS-84 Azimuth/Bearing: 104° 30'E 1920mils True (+12°) Elevation Angle: -13.2° Horizontal Angle: 407.2° Zoom: 0.5X W-K9-PEM-1 Pre-construction assessment (permitted LOD) MVP</small></p>	 <p><small>Date &amp; Time: Thu, Oct 26, 2023 at 15:51:42 EDT Position: -83.7860965° / -080.757702° (-15.5ft) Altitude: 2450ft (+51.1ft) Datum: WGS-84 Azimuth/Bearing: 088° N88E 1554mils True (+12°) Elevation Angle: 505.5° Horizontal Angle: 439.2° Zoom: 0.5X W-K9-PEM-1 Pre-construction assessment (permitted outside LOD) (2) MVP</small></p>
<b>GPS Location</b> See Photo	<b>GPS Location</b> See Photo
<b>Description</b> View of permitted resource impact area during pre-construction assessment.	<b>Description</b> At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment.
 <p><small>Date &amp; Time: Fri, Nov 17, 2023 at 09:27:53 EST Position: -83.7860967° / -080.757738° (-15.1ft) Altitude: 2450ft (+51.1ft) Datum: WGS-84 Azimuth/Bearing: 104° 30'E 1880mils True (+15°) Elevation Angle: -03.3° Horizontal Angle: 40.3° Zoom: 0.5X W-K9-PEM-1 Permitted impact (post-construction) MVP</small></p>	 <p><small>Date &amp; Time: Fri, Nov 17, 2023 at 09:27:53 EST Position: -83.7860967° / -080.757738° (-15.3ft) Altitude: 2450ft (+51.1ft) Datum: WGS-84 Azimuth/Bearing: 104° 30'E 1884mils True (+15°) Elevation Angle: -13.2° Horizontal Angle: 40.3° Zoom: 0.5X W-K9-PEM-1 Permitted impact (post-construction) MVP</small></p>
<b>GPS Location</b> See Photo	<b>GPS Location</b> See Photo
<b>Description</b> View of permitted resource impact area during post-construction assessment.	<b>Description</b> At edge of LOD, view of unimpacted resource area conditions during post-construction assessment.
 <p><small>Date &amp; Time: Thu, Nov 02, 2023 at 12:01:47 EST Position: -83.7860967° / -080.757700° (-49.0ft) Altitude: 2450ft (+51.1ft) Datum: WGS-84 Azimuth/Bearing: 104° 30'E 1882mils True (+15°) Elevation Angle: -00.6° Horizontal Angle: 40.3° Zoom: 0.5X W-K9-PEM-1 Topsoil removed and separated MVP</small></p>	 <p><small>Date &amp; Time: Thu, Nov 02, 2023 at 12:03:09 EST Position: -83.7860967° / -080.757700° (-49.7ft) Altitude: 2450ft (+51.1ft) Datum: WGS-84 Azimuth/Bearing: 104° 30'E 1882mils True (+15°) Elevation Angle: -01.8° Horizontal Angle: 40.3° Zoom: 0.5X S-K19 &amp; W-K9-PEM-1 Test drilling in resource MVP</small></p>
<b>GPS Location</b> See Photo	<b>GPS Location</b> See Photo
<b>Description</b> Photo 1: Wetland topsoil excavated.	<b>Description</b> Photo 2: Test drilling in aquatic resource area.

<b>Optional Photos</b>					
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<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo
<b>Description</b>	Photo 3: Excavating trench in aquatic resource area. Equipment on timber mats.	<b>Description</b>	Photo 4: Adding sandbag padding to trench in aquatic resource area.



<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo
<b>Description</b>	Photo 5: Lowering pipe into trench through aquatic resource area and preparing for welding.	<b>Description</b>	Photo 6: Construction of trench breaker on the southern side of aquatic resource area.



<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo
<b>Description</b>	Photo 7: Backfilling in aquatic resource area.	<b>Description</b>	Photo 8: Restoring and grading wetland topsoil.