



# Wetland Biological Conditions EA Report

<b>Project Name</b>	H-600 Pipeline Spread F	<b>A/E</b>	124300135	<b>Spread</b>	H-600 Pipeline Spread F
<b>Contractor</b>	Price Gregory	<b>Report #</b>	152		
<b>Environmental Auditor</b>	Eric Schicker			<b>Date/Time</b>	12/12/2023 7:22 AM
<b>Wetland ID</b>	W-MN18-PFO	<b>Crossing Start Date</b>	12/12/2023	<b>Crossing Completion Date</b>	12/21/2023
<b>Milepost</b>	188.80	<b>Pre-Con Assessment Date</b>	12/11/2023	<b>Post-Con Assessment Date</b>	12/22/2023
<b>Station</b>	9968+64	<b>Cowardin Classification</b>	PFO	<b>Wetland Impact Area(acres)</b>	0.1750
<b>State</b>	WV				
<b>County</b>	Monroe				

### 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?	Yes
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)	1		1
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> 12/12/2023 7:22 AM	<b>Report #</b> 152
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**Additional Notes**

Pre-Construction Notes  
 Pre-Construction Meeting - 12/11/2023  
 17. Augured 12" test pit: saturated soil, recharged to surface and groundwater observed. Soil hydric.

12/12/2023 - Timber mats put in place for excavating. Removed top 12 inches of topsoil (Photo 1) and used Morooka to transport to separate upland containment area. Drilled for blasting. Drilling suspended due to dust.

12/13/2023 - Prepped for blasting through aquatic resource area. Drilled for blasting. Mats put in place for blasting (Photo 2). Blasted.

12/14/2023 - Timber mats put in place to allow for excavation. Began excavating subsoils. Excavated through aquatic resource.

12/15/2023 - Water pumped from aquatic resource. Welded. Worked outside resource area.

12/16/2023 - Pumped water from aquatic resource area. Worked ongoing outside aquatic resource area. Excavated subsoil from southern portion of aquatic resource area (Photo 3).

12/18/2023 - Pumped water from aquatic resource areas. Sandbags added to trench for padding. Lowered pipe into trench (Photo 4). Staged pipe and began welding.

12/19/2023 - Restaged pipe through aquatic resource area for welding. Welding completed. Pumped from trench in aquatic resource area. Padded and backfilled subsoil in aquatic resource area (Photo 5). X-rayed. Constructed trench breaker (Photo 6). Continued to pad and backfill.


12/20/2023 - Timber mat placed in aquatic resource area for backfilling. Continued to backfill. Restored topsoil in aquatic resource (Photo 7).

12/21/2023 - Survey onsite. Survey evaluated elevations. Seeded aquatic resource (Photo 8). Applied jute. Installed P1 fencing.







12/22/2023 - Completed assessment.

Post Construction Notes  
 17. Saturated soils.  
 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.  
 Timber mat bridge remains in place for travel lane.

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
Eric Schicker		Potesta	12/22/2023

<b>Required Photos</b>	
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 <p style="font-size: small; margin-top: 5px;">Date &amp; Time: Mon, Dec 11, 2023 12:31:58 EST Position: +037.487435, -080.681970 (+15.3ft) Altitude: 1798ft (+11.4ft) Datum: WGS-84 Azimuth Bearing: 093. N49E 0853mils True (+12) Elevation Angle: -02.9 Horizon Angle: -02.9 Zoom: 1.0X W-MN18-PFO overall view permitted impact Mountain Valley Pipeline</p>	 <p style="font-size: small; margin-top: 5px;">Date &amp; Time: Mon, Dec 11, 2023 12:33:27 EST Position: +037.487424, -080.681864 (+15.5ft) Altitude: 1992ft (+11.1ft) Datum: WGS-84 Azimuth Bearing: 099. N59E 1049mils True (+12) Elevation Angle: -11.3 Horizon Angle: -02.1 Zoom: 1.0X W-MN18-PFO overall view unimpacted Mountain Valley Pipeline</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 style="font-size: small; margin-top: 5px;">Date &amp; Time: Tue, Dec 12, 2023 11:08:52 AM EST Position: +037.487436, -080.682209 (+15.3ft) Altitude: 1924ft (+9.7ft) Datum: WGS-84 Azimuth Bearing: 029. N45E 0516mils True (+27) Elevation Angle: -07.8 Horizon Angle: -02.3 Zoom: 1.0X W-MN18-PFO view of permitted resource impact area during post-construction assessment MVP</p>	 <p style="font-size: small; margin-top: 5px;">Date &amp; Time: Tue, Dec 12, 2023 11:09:31 AM EST Position: +037.487436, -080.681954 (+15.3ft) Altitude: 1927ft (+9.9ft) Datum: WGS-84 Azimuth Bearing: 025. N45E 0499mils True (+27) Elevation Angle: -08.5 Horizon Angle: -01.4 Zoom: 1.0X W-MN18-PFO at edge of LOD view of unimpacted resource area conditions during post-construction assessment MVP</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 style="font-size: small; margin-top: 5px;">Date &amp; Time: Tue, Dec 12, 2023 11:54:40 AM EST Position: +037.487436, -080.682209 (+15.3ft) Altitude: 1948ft (+9.9ft) Datum: WGS-84 Azimuth Bearing: 189. S07W 3289mils True (+12) Elevation Angle: -00.1 Horizon Angle: -00.1 Zoom: 1.0X W-MN18-PFO removing topsoil Mountain Valley Pipeline</p>	 <p style="font-size: small; margin-top: 5px;">Date &amp; Time: Wed, Dec 13, 2023 at 15:54:26 EST Position: +037.489224, -080.681542 (+23.5ft) Altitude: 2071ft (+0.13ft) Datum: WGS-84 Azimuth Bearing: 187. S07W 3324mils True (+12) Elevation Angle: -08.0 Horizon Angle: -00.7 Zoom: 4.0X S-MN37 &amp; W-MN18-PFO Rubber mats for blasting MVP</p>
<b>GPS Location</b> See Photo	<b>GPS Location</b> See Photo
<b>Description</b> Photo 1: Excavating top 12 inches of topsoil.	<b>Description</b> Photo 2: Rubber mats in place in aquatic resource for blasting.

<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 southern portion of aquatic resource.	<b>Description</b>	Photo 4: Lowering pipe into aquatic resource.
			
<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo
<b>Description</b>	Photo 5: Padding and backfilling.	<b>Description</b>	Photo 6: Trench breaker complete.
			
<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo
<b>Description</b>	Photo 7: Restoring topsoil.	<b>Description</b>	Photo 8: Seeding aquatic resource.