



# 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>	151		
<b>Environmental Auditor</b>	Eric Schicker	<b>Date/Time</b>	12/12/2023 7:21 AM		
<b>Wetland ID</b>	W-MN18-PEM	<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>	12/21/2023
<b>Station</b>	9968+64	<b>Cowardin Classification</b>	PEM	<b>Wetland Impact Area(acres)</b>	0.0510
<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?	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)</b> <b>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.)	2		1

<b>AFE</b> 124300135	<b>Date/Time</b> 12/12/2023 7:21 AM	<b>Report #</b> 151
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**Additional Notes**

Pre-Construction Notes  
 Pre-Construction Meeting - 12/11/2023  
 17. Augured 12" test pit: saturated soil, approximately 2" of recharge and groundwater observed.

12/12/2023 - Standing water pumped from a rectangular area approximately 10'x12" and approximately 10" lower than surrounding ground level in center of aquatic resource. 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.

12/13/2023 - Prepped for blasting through aquatic resource area. Started pumping water from aquatic resource area (standing water). Drilled for blasting.

12/14/2023 - Drilled for blasting. Placed rubber mats for blasting. Blasted. Removed rubber mats. Timber mats put in place to allow for excavation. ECDs placed on outer edge of aquatic resource area. Began excavating subsoils.

12/15/2023 - Excavated trench in aquatic resource (Photo 2), relayed and stockpiled. Water pumped from aquatic resource. Welded. Worked outside resource area including staging pipe in upland area adjacent to aquatic resource.

12/16/2023 - Pumped water from aquatic resource area. Worked ongoing outside aquatic resource area.

12/18/2023 - Pumped water from aquatic resource areas. Minor excavating. Placed trench box into trench adjacent to aquatic resource. Sandbags added to trench for padding. Lowered pipe into trench. Staged pipe and began welding (Photo 3).


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 4). X-rayed. Continued to pad and backfill. Began constructing trench breaker.

12/20/2023 - Continued to construct trench breaker (Photo 5). Backfilled subsoil in aquatic resource area. Removed trench box. Timber mat placed in aquatic resource area for backfilling. Continued to backfill. Restored topsoil in aquatic resource (Photo 6).

12/21/2023 - Survey onsite. Survey evaluated elevations. Adjusted grade (Photo 7). Seeded (Photo 8). Applied jute. Installed P1 fencing.

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	12/21/2023

<b>Required Photos</b>					
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 <p style="font-size: small; margin-top: 5px;">Date &amp; Time: Mon, Dec 11, 2023 11:59:19 EST Position: -037.4876761, -080.6816981 (-15.3ft) Altitude: 1920ft (-11.5ft) Datum: WGS-84 Azimuth/Bearing: 032° N32E 0569mils True (+16) Elevation Angle: -08.6 Horizon Angle: -00.7 Zoom: 1.0X W-MN18-PEM overall unimpacted resource area Mountain Valley Pipeline</p>	 <p style="font-size: small; margin-top: 5px;">Date &amp; Time: Mon, Dec 11, 2023 11:49:47 EST Position: -037.4876761, -080.6816981 (-15.3ft) Altitude: 1920ft (-11.4ft) Datum: WGS-84 Azimuth/Bearing: 032° N32E 0569mils True (+16) Elevation Angle: -08.6 Horizon Angle: -00.7 Zoom: 1.0X W-MN18-PEM overall unimpacted resource area 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: Thu, Dec 21, 2023 15:16:31 EST Position: -037.4878761, -080.6816981 (-15.3ft) Altitude: 1920ft (-11.5ft) Datum: WGS-84 Azimuth/Bearing: 224° S44W 3982mils True (+17) Elevation Angle: +17.9 Horizon Angle: +00.5 Zoom: 0.5X W-MN18-PEM Permitted resource impact (post-construction) MVP</p>	 <p style="font-size: small; margin-top: 5px;">Date &amp; Time: Thu, Dec 21, 2023 15:16:31 EST Position: -037.4878761, -080.6816981 (-15.3ft) Altitude: 1920ft (-11.5ft) Datum: WGS-84 Azimuth/Bearing: 224° S44W 3982mils True (+17) Elevation Angle: +17.9 Horizon Angle: +00.5 Zoom: 0.5X W-MN18-PEM Unimpacted resource area (post-construction) 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: Thu, Dec 12, 2023 17:58:51 EST Position: -037.4872391, -080.6816981 (-39982.5ft) Altitude: 1920ft (-11.5ft) Datum: WGS-84 Azimuth/Bearing: 288° S78W 4587mils True (-12) Elevation Angle: +00.3 Horizon Angle: +00.9 Zoom: 1.0X W-MN18-PEM removing topsoil Mountain Valley Pipeline</p>	 <p style="font-size: small; margin-top: 5px;">Date &amp; Time: Thu, Dec 15, 2023 11:09:18 EST Position: -037.4872391, -080.6816551 (-22.3ft) Altitude: 1920ft (-11.5ft) Datum: WGS-84 Azimuth/Bearing: 105° N68E 1031mils True (-13) Elevation Angle: -27.2 Horizon Angle: -03.2 Zoom: 0.5X S-MN38 &amp; W-MN18-PEM Excavating Subsoil MVP</p>		
<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo
<b>Description</b>	Photo 1: Removing top 12 inches of topsoil in aquatic resource.	<b>Description</b>	Photo 2: Excavating trench in aquatic resource.

<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: Staging pipe in resource area for welding.	<b>Description</b>	Photo 4: Padding and backfilling.



<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo
<b>Description</b>	Photo 5: Constructing trench breaker.	<b>Description</b>	Photo 6: Restoring topsoil.



<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo
<b>Description</b>	Photo 7: Adjusted grade of wetland.	<b>Description</b>	Photo 8: Seeding wetland.