



# 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>	126		
<b>Environmental Auditor</b>	Eric Schicker			<b>Date/Time</b>	11/7/2023 11:22 AM
<b>Wetland ID</b>	W-M2	<b>Crossing Start Date</b>	11/7/2023	<b>Crossing Completion Date</b>	11/20/2023
<b>Milepost</b>	159.55	<b>Pre-Con Assessment Date</b>	11/7/2023	<b>Post-Con Assessment Date</b>	11/20/2023
<b>Station</b>	8424+40	<b>Cowardin Classification</b>	PEM	<b>Wetland Impact Area(acres)</b>	0.1064
<b>State</b>	WV				
<b>County</b>	Summers				

### 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		No
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		3
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> 11/7/2023 11:22 AM	<b>Report #</b> 126
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**Additional Notes**

Pre-Construction Notes  
 Pre-Construction Meeting - 11/06/2023  
 17. Ground water observed. Test pit dug, resurgence observed/soil saturated/clearly hydric.  
 Vegetation cleared prior to construction. ROW crosses wetland in two locations. Timber mat travel lane in place.

11/7/2023 - Crossing started. Top 12" of topsoil removed from both sections of wetland (Photo 1) and segregated using Morooka for storage separate from subsoil in upland area. Timber mats placed in northern section of wetland for access to trench. Stumps removed. Drilled for use of explosive charges (Photo 2). Explosive charges place in the southern aquatic resource area and detonated.

11/8/2023 - Timber mats placed in southern aquatic resource area for equipment use while digging trench. Began excavating trench in upland area moving towards the portion of aquatic resource associated with S-M6 or the southern portion of the aquatic resource. Trench spoil removed and transferred to upland location. Welding ongoing outside of resource area.

11/9/2023 - Excavation of trench continued through both southern and northern portions of aquatic resource (Photo 3). Trench box installed. Excavation of trench continued outside aquatic resource area. Sandbags placed in trench for pipe support. Welding and X-ray outside aquatic resource area.

11/10/2023 - Light steady rain most of the day. Trench contained minimal amount of water. Pipe brought to trench and set in trench outside of aquatic resource area. Working outside aquatic resource area included sandblasting, coating and backfilling of trench.

11/11/2023 - Work ongoing outside resource area includes welding, X-ray, holiday detection, rock shielding of pipe and padding dirt.

11/13/2023 - Pipe transported and lowered into the northern portion of the aquatic resource area (Photo 4). Welded pipe section to existing pipeline. Sandblasting and coating welds outside resource area. Checked topsoil storage stockpile, properly separated and labeled.

11/14/2023 - Sandblasting, coating, and preparing padding dirt outside resource area. Transported final pipe section to southern aquatic resource crossing. Tac welded pipe in place to be finished tomorrow.

11/15/2023 - Holiday detection, grinding, sandblasting and coating outside resource area. Previous days weld finished, and X-ray completed. Survey team on site to shoot pipe sections/welds outside resource area. Backfilling trench outside of the northern portion of the aquatic resource area.

11/16/2023 - Final weld started but not completed. Sandblasting/coating previous days weld. Preparing pad dirt/backfill ongoing.


11/17/2023 - Prepared more pad dirt and backfilling. Previous days weld completed. Coated weld in trench box. Survey on site to shoot trench breakers and other features. Trench breakers constructed adjacent to northern aquatic resource area (Photo 5) and the northern portion of the southern aquatic resource area. X-ray of final weld. Coating previous days weld. Remove trench box. Backfilling trench.

11/18/2023 - Finished final trench breaker. Survey on site to shoot wetland boundary and elevation but couldn't compete that due to lack of elevation data. Coating final weld. Continued to backfill trench (Photo 6).

11/20/2023 Survey onsite for boundary and elevation and working with equipment operator to contour subsoil in southern section of aquatic resource. Topsoil restored in aquatic resource and contoured according to pre-construction survey data. P1 installed around aquatic resource boundary. Southern aquatic resource area seeded and covered with jute. Wetland topsoil returned to northern section of aquatic resource (Photo 7) and contoured using pre-construction survey data. P1 installed around boundary. Wetland seeded (Photo 8).

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.  
 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	11/20/2023

AFE	124300135	Date/Time	11/7/2023 11:22 AM	Report #	126
<b>Required Photos</b>					
 <p><small>Date &amp; Time: Nov 20, 2023 11:45:51 AM Position: 4307.8076637° / -83.8746188° (-83.8746188) Altitude: 2990ft (911.400) Datum: WGS-84 Azimuth/Bearing: 000° 00'00" 0.000mils True (±16) Elevation Angle: 01.0 Horizon Angle: -02.1 Zoom: 1.0X W-M2 south view wetland Mountain Valley Pipeline</small></p>		 <p><small>Date &amp; Time: Nov 20, 2023 07:52:56 EST Position: 4307.8076637° / -83.8746188° (-83.8746188) Altitude: 2990ft (911.400) Datum: WGS-84 Azimuth/Bearing: 236° 35'58" 0.000mils True (±16) Elevation Angle: 01.2 Horizon Angle: 00.3 Zoom: 1.0X W-M2 south view of non-permitted resource area Mountain Valley Pipeline</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: Nov 20, 2023 11:45:51 AM Position: 4307.8076637° / -83.8746188° (-83.8746188) Altitude: 2990ft (911.400) Datum: WGS-84 Azimuth/Bearing: 000° 00'00" 0.000mils True (±16) Elevation Angle: 01.0 Horizon Angle: -02.1 Zoom: 1.0X W-M2 overall view of wetland permitted impact Mountain Valley Pipeline</small></p>		 <p><small>Date &amp; Time: Nov 20, 2023 11:45:51 AM Position: 4307.8076637° / -83.8746188° (-83.8746188) Altitude: 2990ft (911.400) Datum: WGS-84 Azimuth/Bearing: 236° 35'58" 0.000mils True (±16) Elevation Angle: 01.2 Horizon Angle: 00.3 Zoom: 1.0X W-M2 overall view of wetland unimpacted area Mountain Valley Pipeline</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: Nov 20, 2023 11:26:04 EST Position: 4307.8076637° / -83.8746188° (-83.8746188) Altitude: 2982ft (909.8m) Datum: WGS-84 Azimuth/Bearing: 016° 11'46" 0.028mils True (±12) Elevation Angle: 04.6 Horizon Angle: 0.0 Zoom: 1.0X W-M2 hauling topsoil Mountain Valley Pipeline</small></p>		 <p><small>Date &amp; Time: Nov 20, 2023 11:21:01 AM Position: 4307.8076637° / -83.8746188° (-83.8746188) Altitude: 2972ft (906.6m) Datum: WGS-84 Azimuth/Bearing: 182° 50'27" 0.3236mils True (±14) Elevation Angle: -03.9 Horizon Angle: -00.3 Zoom: 2.0X W-M2 John Henry drilling for blasting Mountain Valley Pipeline</small></p>			
<b>GPS Location</b>	See Photo	<b>GPS Location</b>	See Photo		
<b>Description</b>	Photo 1: Excavating top 12 inches of wetland topsoil and transporting to upland area.	<b>Description</b>	Photo 2: John Henry drilling for placement of explosive charges		

<b>Optional Photos</b>		
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<b>GPS Location</b> See Photo	<b>GPS Location</b> See Photo
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<b>Description</b> Photo 3: Completed excavation of trench through aquatic resource area.	<b>Description</b> Photo 4: Lowering pipe into aquatic resource area.
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<b>GPS Location</b> See Photo	<b>GPS Location</b> See Photo
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<b>Description</b> Photo 5: Trench breakers being constructed adjacent to northern portion of the aquatic resource area.	<b>Description</b> Photo 6: Backfilling trench.
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<b>GPS Location</b> See Photo	<b>GPS Location</b> See Photo
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<b>Description</b> Photo 7: Restoring topsoil in northern portion of aquatic resource crossing.	<b>Description</b> Photo 8: Seeding northern portion of aquatic resource post construction.
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