



# Wetland Biological Conditions EA Report

<b>Project Name</b>	H-600 Pipeline Spread A	<b>AFE</b>	124300129	<b>Spread</b>	H-600 Pipeline Spread A
<b>Contractor</b>	Precision	<b>Report #</b>	54		
<b>Environmental Auditor</b>	Devin Jen			<b>Date/Time</b>	9/18/2023 11:34 AM
<b>Wetland ID</b>	W-K43	<b>Crossing Start Date</b>	9/18/2023	<b>Crossing Completion Date</b>	10/28/2023
<b>Milepost</b>	31.38	<b>Pre-Con Assessment Date</b>	9/18/2023	<b>Post-Con Assessment Date</b>	10/28/2023
<b>Station</b>	1656+92	<b>Cowardin Classification</b>	PEM	<b>Wetland Impact Area(acres)</b>	0.2086
<b>State</b>	WV				
<b>County</b>	Harrison				

### 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)	1		4
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		4

<b>AFE</b> 124300129	<b>Date/Time</b> 9/18/2023 11:34 AM	<b>Report #</b> 54
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**Additional Notes**

9/16/2023  
The pre-construction meeting was held and pre-construction assessment took place. -D. Jenn

9/21/2023  
The contractor removed the topsoil from the stream/wetland complex and stockpiled it in a designated upland area and began work on sheetpiling installation. -A. Dunn

9/22/2023-10/5/2023  
The contractor continued work on installation of the sheet piling and dewatering of groundwater as necessary. -A. Dunn, M. Kastan

10/6/2023-10/9/2023  
The contractor worked on excavating the trench through the stream/wetland complex. -M. Kastan

10/10/2023-10/17/2023  
The contractor worked on installing the pipe through the stream/wetland complex, including welding, x-ray, and coating. -M. Kastan


10/18/2023-10/26/2023  
The contractor worked on backfilling the trench and removing sheetpiling in the stream/wetland complex. -M. Kastan, M. Huber

10/27/2023  
Weather mostly cloudy with a high of 75 degrees Fahrenheit. Crew removed sheet piling and began restoration of W-K43. Only a small portion of the wetland was completed before the end of the day. Silt fencing was placed at the stopping point to prevent any erosion of wetland topsoil overnight.  
M. Huber

10/28/2023  
The contractor finished removing all remaining sheetpiling and the restoring the of original 12" of segregated wetland topsoil to the wetland area and graded it to the correct contour. Erosion and sediment controls were then installed around the wetland.

Post-construction assessment  
Conditions 18 and 19 were given a rating of 4 due to the of vegetation in the disturbed permitted impact area following the completion of the restoration. The W-K43 PEM topsoils have been properly stabilized and the disturbed area has been seeded with the appropriate permanent seed mix in accordance with Appendix B: Restoration Work Plan of the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework.  
M. Huber

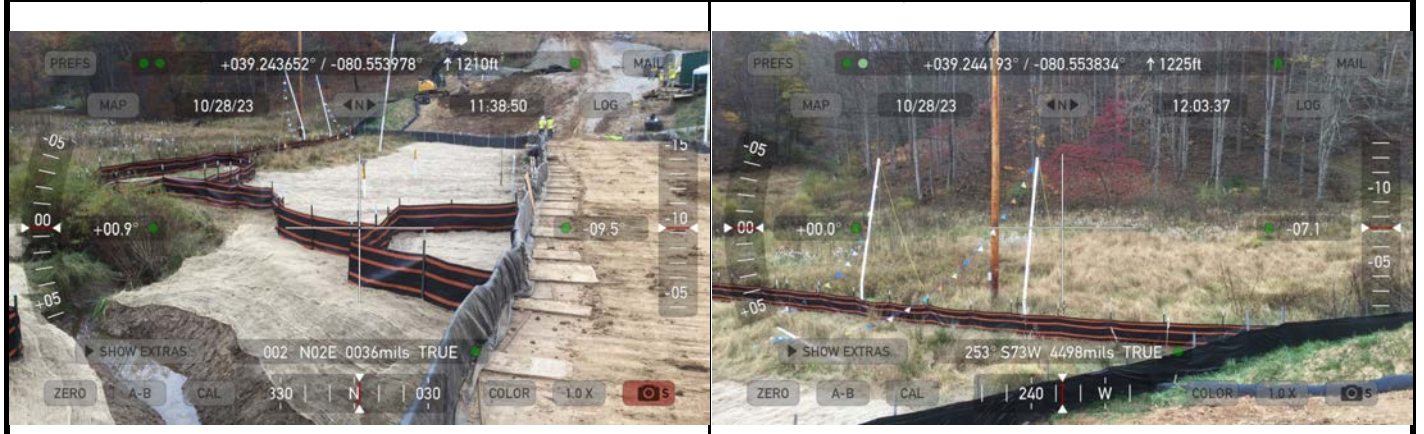
In accordance with the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework, this independent report was completed to document the on-site monitoring of instream invertebrate and fisheries resources during all construction activity related to waterbody and wetland crossings, and document instream conditions and any impacts to the resources.

Name	Signature	Company	Date
Devin Jen		ERM	10/28/2023

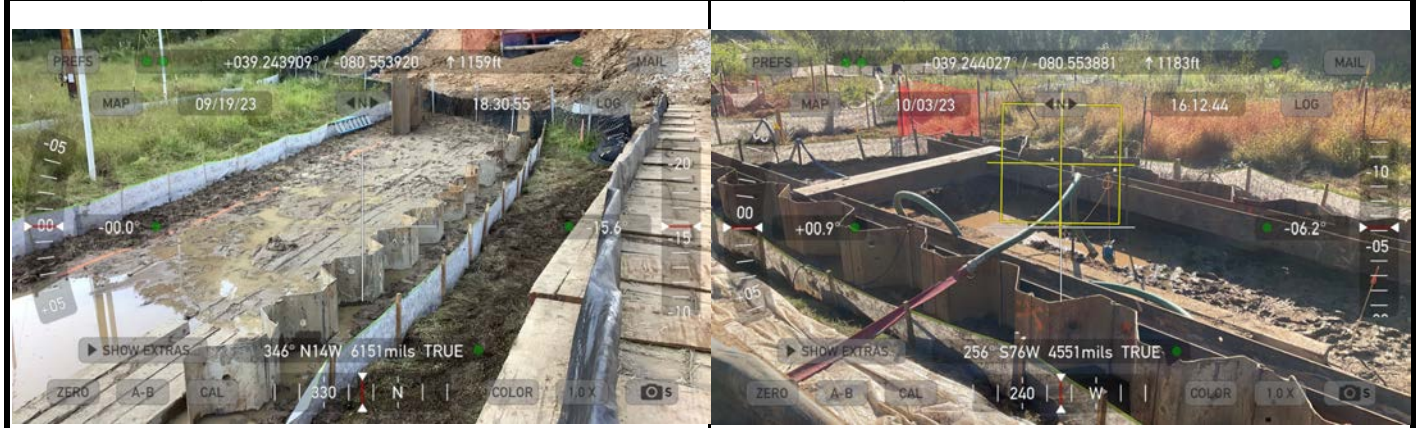
**Required Photos**



<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.



<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.

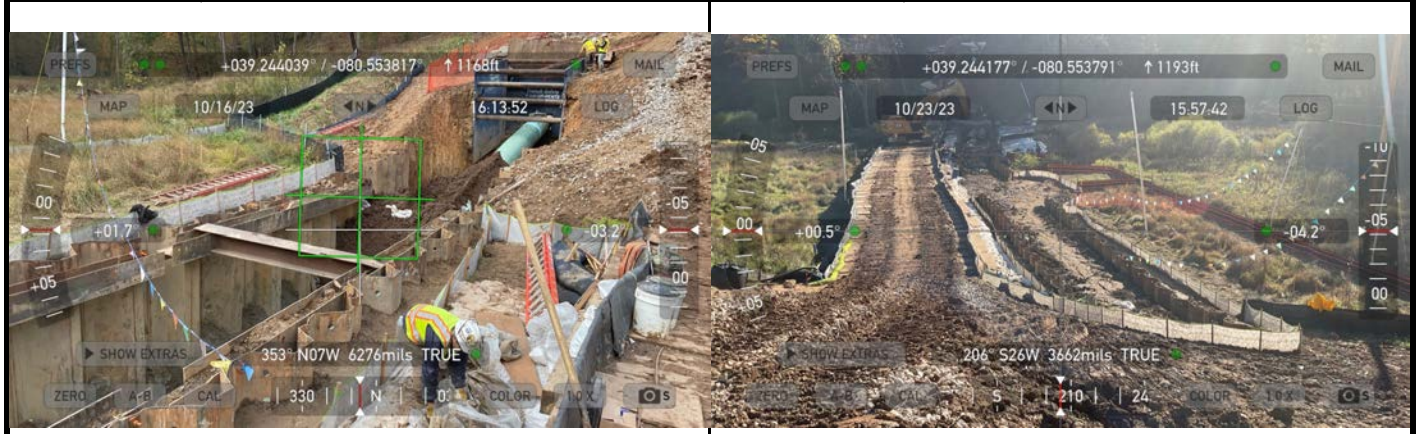


<b>GPS Location</b>	See photo.	<b>GPS Location</b>	See photo.
<b>Description</b>	The photo shows the progress the crew made on driving in the sheet piling on 9/19/2023	<b>Description</b>	This photo shows sheetpiling installed in the stream/wetland complex

**Optional Photos**



<b>GPS Location</b> See photo	<b>GPS Location</b> See photo
<b>Description</b> This photo shows the excavated trench through the stream/wetland complex	<b>Description</b> This photo shows the contractor working on installing the pipe



<b>GPS Location</b> See photo	<b>GPS Location</b> See photo
<b>Description</b> This photo shows the partially backfilled trench through the stream/wetland complex	<b>Description</b> This photo shows the backfilled trench through the stream/wetland complex



<b>GPS Location</b> See photo	<b>GPS Location</b> See photo
<b>Description</b> This photo shows the backfilled trench through the stream/wetland complex	<b>Description</b> This photo shows the restored wetland