



# Wetland Biological Conditions EA Report

<b>Project Name</b>	H-600 Pipeline Spread B	<b>AFE</b>	124300130	<b>Spread</b>	H-600 Pipeline Spread B
<b>Contractor</b>	Precision	<b>Report #</b>	72		
<b>Environmental Auditor</b>	Elyse Johnston			<b>Date/Time</b>	9/27/2023 6:42 AM
<b>Wetland ID</b>	W-A23	<b>Crossing Start Date</b>	9/27/2023	<b>Crossing Completion Date</b>	10/25/2023
<b>Milepost</b>	34.96	<b>Pre-Con Assessment Date</b>	9/27/2023	<b>Post-Con Assessment Date</b>	10/26/2023
<b>Station</b>	1845+83	<b>Cowardin Classification</b>	PEM	<b>Wetland Impact Area(acres)</b>	.2701
<b>State</b>	WV				
<b>County</b>	Doddridge				

### 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?	See Below
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		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

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**Additional Notes**

9/27 Pre-construction meeting occurred, all representative parties in concurrence. Pre construction assessment: This wetland has been previously disturbed. There is currently a pothole and an existing feeder line pipes (2" diameter) bisecting the wetland within the proposed trench, claimed by Diversified Production. Thus, wetland has been given a rating of "2" for alterations. Topsoil removal occurred. Topsoil was segregated, stockpiled within the wetland immediately adjacent to trench, stabilized with a sock, and labeled with proper signage. Subsequent sheet piling of W-A23 occurred. W-A23 bisects both Spreads A & B, but this work occurred on Spread B.

9/28 No work occurred in wetland today due to delays related to foreign utility crossings.

9/29 Same as 9/27. Crews took proper precaution to maintain a 2' buffer to avoid existing utilities.

9/30 No work occurred in wetland today due to delays related to foreign utility crossings..

10/2 Same work as 9/29 (completed in Spread B, & occurred in Spread A). Crews maintained a 2-3' buffer from stream S-A111.

10/3-4 Sheet piling and bracing occurred. Sock added to topsoil removed on 10/2.

10/5 Bracing of sheet piling through the wetland W-A23 occurred. Excavation of trench began. Portions of W-A23 immediately adjacent to the trench were covered with plastic cover to prevent splatter being discharged into these resources during excavation.

10/6 Excavation of wetland subsoil within the trench occurred.

10/7 A segment of the pipe was installed. Welding occurred.

10/9 Welding work continued, and trench breaker was installed.

10/10-10/11 Backfilling of trench occurred. W-A23 protected from splatter. Welding, coating, & X-ray occurred. Trench breakers installed.

10/12 Same as 10/11. Crew installed silt fence upslope of wetland to protect exposed subsoil and resources overnight.

10/13 Sheet piling removed from portion of W-A23. Portion of W-A23 restored with respective topsoil. Backfill of wetland occurred.

10/14, 16 Sheet piling removal through wetland W-A23 occurred.

10/17-18 Backfilling of wetland occurred.

10/19-21 No work in wetland occurred due to ongoing precipitation.

10/23 Removal of several timber mats occurred.


10/24 Topsoil restoration occurred. Removal of remainder of timber mats occurred.

10/25 Topsoil restoration completed. Wetland was seeded with appropriate seed mix, and properly stabilized.

10/26 Post-construction assessment occurred. Survey verified post-construction/as-built conditions. No other compliance concerns related to the crossing were observed by the auditor.

#18 and #19 were rated as "poor" due to the lack of vegetation in the disturbed permitted impact area following the completion of the crossing and restoration efforts. The W-A23 PEM wetland topsoil has 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.

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
Elyse Johnston		ERM	10/26/2023



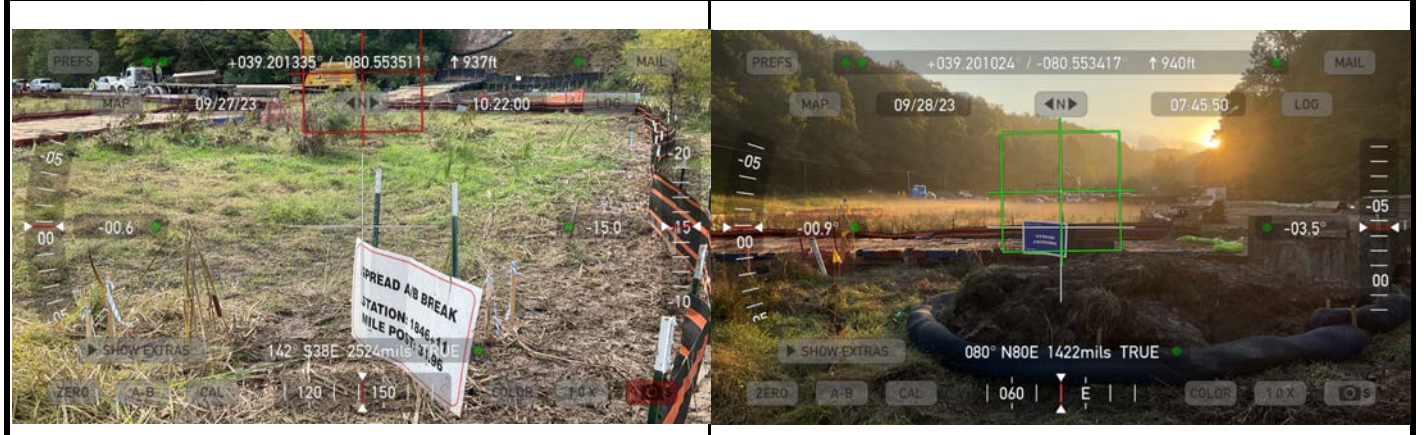
**Required Photos**



<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.

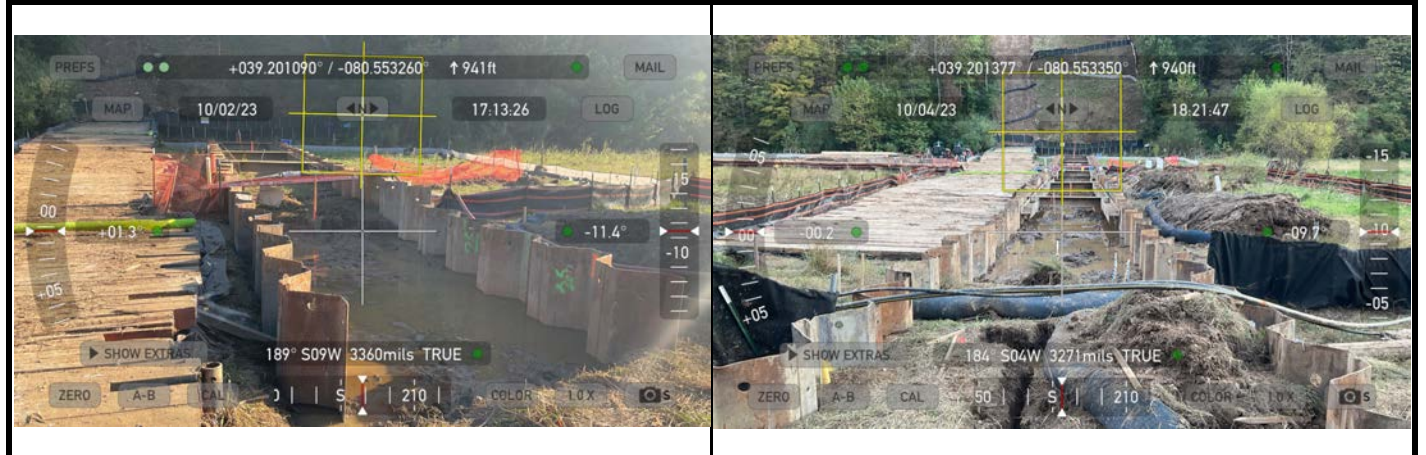


<b>GPS Location</b>	See photo	<b>GPS Location</b>	See photo
<b>Description</b>	Alternate view of wetland W-A23.	<b>Description</b>	View of wetland topsoil segregated, stockpiled, stabilized, and labeled.



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**Optional Photos**



<b>GPS Location</b>	See photo	<b>GPS Location</b>	See photo
<b>Description</b>	View of sheet piling prior to removing S-A110/K62 topsoil and subsequent sheet piling.	<b>Description</b>	View of sheet piling through wetland W-A23 & S-A110/K62.



<b>GPS Location</b>	See photo	<b>GPS Location</b>	See photo
<b>Description</b>	View of segregated, stabilized, and labeled topsoil.	<b>Description</b>	View of resource post-sheet piling.



<b>GPS Location</b>	See photo	<b>GPS Location</b>	See photo
<b>Description</b>	View of sheet piling removal effort.	<b>Description</b>	View of crew stabilizing wetland with native seed mix.