



# 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>	47		
<b>Environmental Auditor</b>	Elyse Johnston			<b>Date/Time</b>	9/5/2023 10:07 AM
<b>Wetland ID</b>	W-VV8	<b>Crossing Start Date</b>	9/5/2023	<b>Crossing Completion Date</b>	10/11/2023
<b>Milepost</b>	61.20	<b>Pre-Con Assessment Date</b>	9/5/2023	<b>Post-Con Assessment Date</b>	10/11/2023
<b>Station</b>	3231+36	<b>Cowardin Classification</b>	PEM	<b>Wetland Impact Area(acres)</b>	0.0708
<b>State</b>	WV				
<b>County</b>	Lewis				

### 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?	See Below
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)	No		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		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**

9/5 The contractor removed the topsoil from W-VV8, stockpiled the wetland topsoil within the wetland boundaries, and placed filter sock around the stockpile for stabilization. - E. Johnston

9/6 Contractor worked on installing sheet piling in the wetland.- E. Johnston

9/7 Contractor continued work on sheet piling in the wetland. Minor turbidity in the adjacent stream S-VV12 was observed upon completion of sheet piling wetland W-VV8 at end of day, likely associated with the ground vibrations during sheet piling. - E. Johnston

9/8 Turbidity observed in stream had settled overnight, stream clear this morning. Sheet piling of wetland W-VV8 continued, no additional turbidity in the stream was observed. - E. Johnston

9/9 -9/10 Contractor worked on excavating the trench through the access road and the exit side of the bore under stream S-VV13. - E. Johnston

9/11-9/13 The contractor worked on dewatering groundwater from the bore trench and work in adjacent upland areas. - E. Johnston

9/14 The contractor worked on dewatering groundwater from the trench within the wetland and welding for the bore for nearby S-VV13. No work within wetland W-VV8 occurred. - C. Calmindon

9/15-9/16 No work within wetland W-VV8 occurred. General site activities include welding and X-Ray. - C. Calmindon

9/18 No work within wetland W-VV8 occurred. General site activities included sheet piling section leading from S-VV13. - C. Calmindon

9/19 Contractor dewatered groundwater from W-VV8 and worked on nearby associated crossings. - C. Calmindon

9/20-9/27 Contractor continued work on associated crossings in the adjacent area, no work within wetland W-VV8 specifically. - C. Calmindon

9/28 Following completion of sheet piling in stream S-VV12, the contractor excavated the trench in S-VV12 and W-VV8, placed pipe connection, and began welding. - C. Calmindon

9/29 Contractor continued work on welding. - C. Calmindon

9/30 Contractor completed crossing of stream S-VV12, which included partial backfill of the adjacent portion of wetland W-VV8. -J. Pokorny

10/2-10/9 No work within wetland W-VV8 was conducted, contractor worked on nearby associated crossings. -C. Winchester and A. Dunn

10/10 The crew removed the sheet piling, backfilled the trench, and replaced the 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. - A. Dunn

Post construction assessment

10/11 Conditions 18 and 19 were given a rating of 4 during post-construction assessment due to lack of vegetation in the disturbed permitted impact area following the completion of the crossing efforts. The W-VV8 wetland topsoils have been properly restored 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. -A. Dunn

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	10/11/2023

**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>	View of wetland W-VV8 after topsoil removal and stabilization.	<b>Description</b>	View of sheet piling installed in W-VV8.

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**Optional Photos**



<b>GPS Location</b>	See Photo.
<b>Description</b>	View of water pumped from W-VV8.



<b>GPS Location</b>	See Photo.
<b>Description</b>	View of W-VV8 on 9/18/2023.



<b>GPS Location</b>	See Photo.
<b>Description</b>	View of W-VV8 on 9/25/2023.



<b>GPS Location</b>	See Photo.
<b>Description</b>	View of W-VV8 on 10/2/2023.



<b>GPS Location</b>	See Photo.
<b>Description</b>	View of W-VV8 on 10/10/2023.

Insert image here

<b>GPS Location</b>	
<b>Description</b>	