



# Wetland Biological Conditions EA Report

<b>Project Name</b>	H-600 Pipeline Spread D	<b>AFE</b>	124300132	<b>Spread</b>	H-600 Pipeline Spread D
<b>Contractor</b>	Precision	<b>Report #</b>	149		
<b>Environmental Auditor</b>	Scott Wessel			<b>Date/Time</b>	11/25/2023 8:12 PM
<b>Wetland ID</b>	W-FF3	<b>Crossing Start Date</b>	11/25/2023	<b>Crossing Completion Date</b>	12/21/2023
<b>Milepost</b>	114.43	<b>Pre-Con Assessment Date</b>	11/15/2023	<b>Post-Con Assessment Date</b>	12/21/2023
<b>Station</b>	6041+82	<b>Cowardin Classification</b>	PEM	<b>Wetland Impact Area(acres)</b>	0.0444
<b>State</b>	WV				
<b>County</b>	Nicholas				

### 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?	See Below
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

<b>AFE</b> 124300132	<b>Date/Time</b> 11/25/2023 8:12 PM	<b>Report #</b> 149
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**Additional Notes**

11/25/23 – At the commencement of wetland crossing W-FF3, the top 12" of wetland soil was segregated and stockpiled on plastic that was surrounded by silt fence on the coming in side (CIS) of the resource. The loose ends on the CIS and going away side (GAS) of crossing were excavated.

11/26/23 to 11/28/23- In the process of excavating the ditch line, a solid rock layer was hit that required the use of a rock hammer for the remainder of the trenching operations. Once the proper depth was achieved, the ditch was lined with interval spaced sandbags.

11/29/23 to 11/30/23 – The contractor focused their efforts on welding together the pipe sections for the wetland crossing. X-ray, coating, and rock shield activities were carried out once the welds were completed.

12/1/23 to 12/4/23 - The pipe section for W-FF3 was lowered into the ditch and welding operations on the CIS and GAS loose ends commenced during these days. Once the welds were confirmed by x-ray, coating and rock shields were applied to the pipe.

12/5/23 – No work was conducted on Sunday.


12/6/23 to 12/9/23 – The trench breakers were installed outside of the wetland boundaries at 50' on the CIS and 4' on the GAS. Once the bentonite trench breakers on the CIS and GAS were installed, the padding of the pipe and backfilling of the trench began.

12/10/23 to 12/20/23 – Due to inclement weather, saturated soils, and problems with welding on nearby resource crossings, most of the construction efforts were focused on those areas during these days.







12/21/23 – Civil survey verified that the top 12" of wetland soil was replaced to its original elevations and contours. The proper seed mix was applied to the topsoil and silt fence was installed along the wetland boundaries.

Conditions 18 and 19 were given a rating of 4 due to the lack of vegetation in the disturbed permitted impact area following completion of the crossing and restoration efforts. The W-FF3 PEM topsoil was properly stabilized and the disturbed area was 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
Scott Wessel		SWCA	12/21/2023

<b>Required Photos</b>	
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 <p>11/15/2023 13:57:53 +38.332797,-80.669013 251° W W-FF3(pre-SW)</p>	 <p>11/15/2023 13:59:10 +38.332747,-80.669037 111° E W-FF3(pre-SW)</p>
<b>GPS Location</b> See coordinates in above photo.	<b>GPS Location</b> See coordinates in above 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>12/21/2023 15:28:39 +38.332774,-80.668985 248° W W-FF3(post-SW)</p>	 <p>12/21/2023 15:25:06 +38.332746,-80.669076 120° SE W-FF3(post-SW)</p>
<b>GPS Location</b> See coordinated in above photo.	<b>GPS Location</b> See coordinates in above 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>11/25/2023 14:19:47 +38.332732,-80.669174 10° N W-FF3(dur-SW)</p>	 <p>11/28/2023 15:49:50 +38.332858,-80.669143 194° S W-FF3(dur-SW)</p>
<b>GPS Location</b> See coordinates in above photo.	<b>GPS Location</b> See coordinates in above photo.
<b>Description</b> Removing topsoil from resource area.	<b>Description</b> Contractor removing ditch spoils after hammering rock.

<b>Optional Photos</b>		
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 <p>12/01/2023 15:18:20 +38.332785,-80.669345 104° E W-FF3(dur-SW)</p>		 <p>12/06/2023 13:41:37 +38.332819,-80.669199 290° W W-FF3(dur-SW)</p>	
<b>GPS Location</b>	See coordinates in above photo.	<b>GPS Location</b>	See coordinates in above photo.
<b>Description</b>	Pipe lowered into ditch being welded to loose ends.	<b>Description</b>	Trench breakers being installed on the CIS of wetland.
 <p>12/08/2023 09:39:24 +38.332880,-80.669052 114° SE W-FF3(dur-SW)</p>		 <p>12/21/2023 12:10:19 +38.332765,-80.669173 23° NE W-FF3(dur-SW)</p>	
<b>GPS Location</b>	See coordinates in above photo.	<b>GPS Location</b>	See coordinates in above photo.
<b>Description</b>	Contractor padding pipe and backfilling on the CIS of wetland.	<b>Description</b>	Topsoil for wetland being put back using original survey data.
 <p>12/21/2023 15:29:23 +38.332713,-80.669183 345° N W-FF3(post-SW)</p>		 <p>12/21/2023 15:31:48 +38.332710,-80.669136 118° SE W-FF3(post-SW)</p>	
<b>GPS Location</b>	See coordinates in above photo.	<b>GPS Location</b>	See coordinates in above photo.
<b>Description</b>	Installing silt fence at the end of wetland boundary. Area getting stabilized was outside of the resource crossing.	<b>Description</b>	Wetland after topsoil was put back to original grade.