



# Wetland Biological Conditions EA Report

<b>Project Name</b>	H-600 Pipeline Spread C	<b>AFE</b>	124300131	<b>Spread</b>	H-600 Pipeline Spread C
<b>Contractor</b>	Precision	<b>Report #</b>	45		
<b>Environmental Auditor</b>	Todd Grant			<b>Date/Time</b>	9/6/2023 9:51 AM
<b>Wetland ID</b>	W-B39	<b>Crossing Start Date</b>	9/6/2023	<b>Crossing Completion Date</b>	9/10/2023
<b>Milepost</b>	96.71	<b>Pre-Con Assessment Date</b>	9/5/2023	<b>Post-Con Assessment Date</b>	9/10/2023
<b>Station</b>	5106+38	<b>Cowardin Classification</b>	PEM	<b>Wetland Impact Area(acres)</b>	0.0906
<b>State</b>	WV				
<b>County</b>	Webster				

### 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

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**Additional Notes**

9/5/2023- Preconstruction assessment for crossing W-B39 was conducted and pictures were taken. T. Grant

9/6/2023- Commenced crossing of W-B39. The top 12" of wetland topsoil was segregated and stockpiled within the wetland boundaries. Trenching of the wetland was completed with trench spoil segregated and stockpiled on top of geotextile fabric in an upland area. T. Grant


9/7/2023- The contractor completed exposure of existing pipe and ditch excavation was completed connecting wetland ditch to pipe bell hole. The wetland pipe section was lowered in and welding activities began on the GAS of the wetland. The contractor completed the first weld and X-Ray testing was done. T. Grant

9/8/2023- The contractor completed welding activities. X-Ray and coating activities were completed and cathodic protection was installed. Trench breakers were installed and locations verified by the survey crew at Sta. #5106+51 and Sta. #5107+06. The contractor started padding and backfilling the ditch. T. Grant

9/9/2023- The contractor completed padding, backfilling, and compacting the ditch. The previously segregated wetland topsoil was replaced and wetland contours were reestablished to preconstruction conditions. Wetland boundaries were reestablished in the disturbed area of the centerline at Sta. #5106+57 using preconstruction photos for reference. Rain and Lightning forced the contractor to stop work for the day before seeding of W-B39 or seeding and stabilization of the adjacent upland areas could be completed. T. Grant







9/10/2023- The previous day's rain total was 2.8". On arrival it was observed that the ditch had settled on the GAS wetland boundary. The ECD's that were installed as the rain event started appeared in good condition and functioning. After consulting with the contractor and Environmental Inspector, it was decided that the topsoil in the subsided area of the ditch should be removed and additional ditch spoil would need to be added to bring the low area up to original grade. The contractor removed the topsoil from the low area and segregated it inside the wetland. Once the area was filled with additional ditch spoil, the wetland topsoil was replaced. The contractor made all efforts to recontour the area to original condition without compacting the soil. Due to the wet conditions, there are visible marks in the wetland from equipment that could not be entirely removed. Conditions 18 and 19 were given a rating of 4 due to lack of vegetation in the disturbed permitted impact area following the crossing and restoration efforts. The W-B39 PEM topsoils have 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. Buffer zones to wetland W-B39 were seeded and stabilized. T. Grant

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
Todd Grant		SWCA	9/10/2023



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**Required Photos**

<p>9/5/23 08:37:57 38.5083N 80.5593W 197° S W-B39 (Pre_RG)</p> 		<p>06/09/2023 08:13:42 +38.508099,-80.559285 123° SE W-B39 (Pre_TG)</p> 	
<b>GPS Location</b>	In Photo	<b>GPS Location</b>	In Photo
<b>Description</b>	View of permitted resource impact area during pre-construction assessment. View down LOD from center line pre-construction.	<b>Description</b>	At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment. Left side of the LOD edge of unimpacted resource pre-construction.
<p>09/10/2023 14:27:17 +38.508312,-80.559222 198° S W-B39 (Pos_TG)</p> 		<p>09/10/2023 14:29:35 +38.508060,-80.559301 129° SE W-B39 (Pos_TG)</p> 	
<b>GPS Location</b>	In Photo	<b>GPS Location</b>	In Photo
<b>Description</b>	View of permitted resource impact area during post-construction assessment. Viewing down LOD from center line post-construction.	<b>Description</b>	At edge of LOD, view of unimpacted resource area conditions during post-construction assessment. Left side of the LOD edge of unimpacted resource post-construction.
<p>09/07/2023 13:06:13 +38.508275,-80.559216 197° S W-B39 (Dur_TG)</p> 		<p>09/07/2023 13:22:03 +38.508385,-80.559195 206° SW W-B39 (Dur_TG)</p> 	
<b>GPS Location</b>	In Photo	<b>GPS Location</b>	In Photo
<b>Description</b>	View of wetland topsoil segregated inside wetland boundary.	<b>Description</b>	View of contractor lowering pipe into ditch and preparing to begin welding.

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**Optional Photos**

<p>09/07/2023 18:25:12 +38.508321,-80.559236 201° S W-B39 (Dur TG)</p> 		<p>09/09/2023 11:07:35 +38.508707,-80.558902 212° SW W-B39 (Dur TG)</p> 	
<b>GPS Location</b>	In Photo	<b>GPS Location</b>	In Photo
<b>Description</b>	View of welding activities on GAS of wetland.	<b>Description</b>	View of trench breakers and the contractor padding the pipe to complete subsoil back filling.
<p>09/08/2023 13:45:56 +38.508122,-80.559297 210° SW W-B39 (Dur TG)</p> 		<p>09/08/2023 15:49:53 +38.508028,-80.559372 218° SW W-B39 (Dur TG)</p> 	
<b>GPS Location</b>	In Photo	<b>GPS Location</b>	In Photo
<b>Description</b>	View of installed trench breakers outside the wetland boundaries.	<b>Description</b>	View of survey crew recording the location of trench breakers outside of the wetland boundaries.
<p>09/10/2023 08:11:19 +38.508177,-80.559361 137° SE W-B39 (Dur TG)</p> 		<p>09/10/2023 09:08:18 +38.508121,-80.552502 223° SW W-B39 (Dur TG)</p> 	
<b>GPS Location</b>	In Photo	<b>GPS Location</b>	In Photo
<b>Description</b>	View of wetland with ditch subsidence on GAS following 2.8" rain event.	<b>Description</b>	View of contractor beginning repair of ditch subsidence following 2.8" rain event.