# **BASELINE ASSESSMENT – WETLAND ATTRIBUTES**

# ATTACHMENT L MONTGOMERY COUNTY, VIRGINIA

# WETLAND SWVM FORMS/WETLAND DELINEATION FORMS/PHOTOS

Wetland ID	Wetland SWVM Form Provided	Delineation Data/Photos
W-IJ46-PEM	<b>✓</b>	<b>✓</b>
W-AD4	<b>√</b>	✓
W-NN6	✓	✓
W-F9-PFO	N/A – Permanent Conversion	N/A – Permanent Conversion
W-C12-PEM	<b>√</b>	✓
W-C12	N/A – Permanent Conversion	N/A – Permanent Conversion
W-C11	N/A – Permanent Conversion	N/A – Permanent Conversion
W-C6	✓	✓
W-C5	✓	✓
W-AB7	<b>√</b>	<b>✓</b>
W-EF5-PFO	N/A – Permanent Conversion	N/A – Permanent Conversion

USACE FILE NO./Project Name:	Mountain Valley Pipeline			COORDINATES:	Lat.	37.296153	Lon.	-80.367508
STREAM/SITE ID AND SITE DESCR	IPTION:					W-IJ46-PEM, Pipeline ROW		
(% stream slope, watershed size {ad	creage}, unaltered	l or impairments)						
FORM OF MITIGATION:								
DATE:	9/28	/2021	WEATHER CONDITIONS:			PRECIPITATION PAST 48 HRS:		
	PART I - Wetl	and Indicators						
Impact Wetland ID:	Impact Wetland Classification	Impacts (acreage)	Mitigation Wetland Classification					
W-IJ46-PEM	Emergent	0.0294	Emergent					
						PART III - Advanced	Mitigatio	n
						Sustainable Determination Made on Advanced Mitigation (Y or N)		Υ
Total Impact		0.0294						
		Jnit Scores				Estimated		
Wetland Cla	ssification		Replacement Unit(s)			ILF Costs		
Total Emergent			0.0294			<b>64 704 00</b>		
Total Scrub-Shrub			0			\$1,764.00		
Total Forested			0					

Total Open Water

Project/Site: MVP	City/County: Mo	ontgomery	Sampling Date: 08/09/2016			
Applicant/Owner: MVP	licant/Owner: MVP					
Investigator(s): E. Foster, S. Ryan, A. Carra	INO Section Townsh		Sampling Point: W-IJ46			
Landform (hillslope, terrace, etc.): Floodplain			Slope (%): 5			
Subregion (LRR or MLRA): LRR N						
Soil Map Unit Name: 11B - Duffield-Ernest com						
Are climatic / hydrologic conditions on the site typic			,			
Are Vegetation, Soil, or Hydrology						
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	ers in Remarks.)			
SUMMARY OF FINDINGS – Attach sit	e map showing sampling po	oint locations, transect	s, important features, etc.			
Hydrophytic Vegetation Present? Yes	✓ No Is the Sa					
Hydric Soil Present? Yes	/ No is the Sa	mpled Area Wetland? Yes ✓	, N			
Wetland Hydrology Present? Yes	√ No within a	Wetland? Yes <u>√</u>	No			
Remarks: Cowardin Code: PEM	HGM: Riverine W	/ater Type: RPWWD				
Rain in past 24 hours. Very wet s		• •				
Haiii iii past 24 flours. Very wet s	unimer season. Abuts 3-1332	•				
HYDROLOGY						
Wetland Hydrology Indicators:			cators (minimum of two required)			
Primary Indicators (minimum of one is required; of		Surface Soi				
Surface Water (A1)	True Aquatic Plants (B14)		egetated Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Odor (C1)		atterns (B10)			
Saturation (A3)	✓ Oxidized Rhizospheres on Livin					
Water Marks (B1)	Presence of Reduced Iron (C4)		Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction in Tilled					
Drift Deposits (B3)	Thin Muck Surface (C7)		/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Remarks)		Stressed Plants (D1)			
Iron Deposits (B5)		✓ Geomorphi				
Inundation Visible on Aerial Imagery (B7)		Shallow Aq				
Water-Stained Leaves (B9)			raphic Relief (D4)			
Aquatic Fauna (B13)		✓ FAC-Neutra	ai Test (D5)			
Field Observations: Surface Water Present? Yes No	✓ Depth (inches):					
	Depth (inches):					
	Depth (inches):					
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland Hydrology Prese	nt? Yes <u>√</u> No			
Describe Recorded Data (stream gauge, monitor	ng well, aerial photos, previous inspe	ections), if available:				
Remarks:						
Nemarks.						

		Indicator	Dominance Test worksheet:
% Cover	Species?		Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
			Total Number of Dominant Species Across All Strata:3 (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
20% of	total cover	:0	OBL species x 1 =
			FACW species x 2 = FAC species x 3 =
		·	FACU species x 4 =
		·	UPL species x 5 =
		·	Column Totals: (A) (B)
			Column rotals (A) (D)
			Prevalence Index = B/A =
		· ——	Hydrophytic Vegetation Indicators:
		·	1 - Rapid Test for Hydrophytic Vegetation
	-	· -	✓ 2 - Dominance Test is >50%
	Total Cox		3 - Prevalence Index is ≤3.0 <sup>1</sup>
			4 - Morphological Adaptations <sup>1</sup> (Provide supportin
	10101 00701		data in Remarks or on a separate sheet)
30	✓	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
30	<b>√</b>	FAC	
30	✓	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
15		FAC	Definitions of Four Vegetation Strata:
15		FAC	
5		FACU_	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of
	-		height.
			Sapling/Shrub – Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
	-		Herb – All herbaceous (non-woody) plants, regardless
125	= Total Cov	er 0.5	of size, and woody plants less than 3.28 ft tall.
<u>.5</u> 20% of	total cover	25	Woody vine – All woody vines greater than 3.28 ft in
			height.
		·	
	-		Hydrophytic
			Vegetation Present? Yes ✓ No
		_	Present? Yes <u>√</u> No
7/11% 01	total cover	: 0	
	0 20% of 30 30 30 15 15 5 5 20% of		

Depth inches)	Matrix Color (moist)	%	Redo Color (moist)	x Features	Type <sup>1</sup>	Loc²	Texture		Remark	0
0-2	10YR 2/2	100	Color (moist)	%	Type	LUC	SiL		Nemark	5
							-	<u> </u>		
2-8	10YR 3/2	30					SiL			
	10YR 4/2	60	10YR 3/6	10	<u>C</u>	M/PL	SiL			
								_		
					-	-		-		
								-		
								_		
pe: C=Co	oncentration, D=Depl	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lin	ing, M=Matr	x.
	Indicators:	,	•							Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)			_	2 cm Muck (	A10) (MLRA	147)
	pipedon (A2)		Polyvalue Be				148)		e Redox (A1	6)
Black His			Thin Dark Su			47, 148)		(MLRA 1		
	n Sulfide (A4)		Loamy Gleye		<del>-</del> 2)		_		oodplain Soi	ls (F19)
	d Layers (A5) ick (A10) <b>(LRR N)</b>		✓ Depleted Ma Redox Dark	. ,	6)			(MLRA 1:	v Dark Surfa	ce (TF12)
	d Below Dark Surface	e (A11)	Depleted Dai	,	,		_		ain in Remar	
	ark Surface (A12)	,	Redox Depre				_	( ] .		-,
Sandy M	lucky Mineral (S1) <b>(L</b>	.RR N,	Iron-Mangan	ese Masse	es (F12) <b>(</b> I	LRR N,				
	A 147, 148)		MLRA 13	•			2			
Sandy C	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) (I	MI RA 13	6. 122)	³lr	dicators of h	vdrophytic v	egetation and
										-
Sandy R	tedox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	<b>B)</b> v	etland hydro	ology must b	e present,
Sandy R Stripped	ledox (S5) Matrix (S6)			odplain So	oils (F19)	(MLRA 14	<b>B)</b> v	etland hydro		e present,
Sandy R Stripped strictive L	edox (S5) Matrix (S6) Layer (if observed):		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	<b>B)</b> v	etland hydro	ology must b	e present,
Sandy R Stripped strictive L Type: CC	dedox (S5) Matrix (S6) Layer (if observed): parse fragments,		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped <b>strictive L</b> Type: <u>CC</u> Depth (inc	dedox (S5) Matrix (S6) Layer (if observed): parse fragments,		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	B) v ) u	etland hydro	ology must b	e present,
Sandy R Stripped strictive L Type: CC Depth (incomarks:	dedox (S5) Matrix (S6) Layer (if observed): parse fragments,	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed): Darse fragments, Ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed): Darse fragments, Ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped Strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed): Darse fragments, Ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped Strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed): Darse fragments, Ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed): Darse fragments, Ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed): Darse fragments, Ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed): Darse fragments, Ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.
Sandy R Stripped strictive L Type: CC Depth (incomarks:	Matrix (S6)  Matrix (S6)  Layer (if observed):  parse fragments,  ches): 8	gravel	Piedmont Flo Red Parent N	odplain So	oils (F19)	(MLRA 14	B) v ) u	vetland hydro nless disturb	blogy must b	e present, matic.



Photograph Direction North

Comments:			

USACE FILE NO./Project Name:	Mountain Valley Pipeline			COORDINATES:	Lat.	37.286984	Lon.	-80.330124
STREAM/SITE ID AND SITE DESCR	RIPTION:				V	V-AD4, Temporary Access Road		
(% stream slope, watershed size {a	creage}, unaltered	d or impairments)						
FORM OF MITIGATION:								
DATE:	9/28	3/2021	WEATHER CONDITIONS:			PRECIPITATION PAST 48 HRS:		
	PART I - Wet	land Indicators						
Impact Wetland ID:	Impact Wetland Classification	Impacts (acreage)	Mitigation Wetland Classification					
W-AD4	Emergent	0.0069	Emergent					
						PART III - Advanced	NA:4: a. a.4: a.	
						Sustainable Determination Made or		II.
						Advanced Mitigation	•	Υ
						(Y or N)		
Total Impact		0.0069						
		Unit Scores				Estimated		
	assification		Replacement Unit(s)			ILF Costs		
Total Emergent			0.0069					
Total Scrub-Shrub			0			\$414.00		
Total Forested			0					
Total Open Water			0					

Project/Site: MVP	City/County: Montgomery		Sampling Date: 06/15/2017
Applicant/Owner: MVP			Sampling Point: W-AD4
Investigator(s): L.Canty, K. Gracie, R. Sparhawk	Section, Township, Range: N		
Landform (hillslope, terrace, etc.): Hillslope			Slope (%): 1
Subregion (LRR or MLRA): LRR N Lat: 37.286987	Long: <u>-80</u>	.330144	Datum: NAD 83
Soil Map Unit Name: Caneyvill-Opequon-Rock outcrop complex,			
Are climatic / hydrologic conditions on the site typical for this time of			
		· ·	,
Are Vegetation, Soil, or Hydrology significant			
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, e	explain any answer	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ig sampling point location	ons, transects	, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes   ✓ No  Yes  ✓ No  No	Is the Sampled Area within a Wetland?	Yes_ ✓	No
Remarks: Cowardin Code: PEM HGM: Slop	oe Water Type:	NRPWW	
Site occurs on gravel road, topsoil has been rer survey area then flows overland onto road where wetla		is from seep th	at begins outside of
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	r)	Surface Soil	Cracks (B6)
✓ Surface Water (A1) True Aquatic			etated Concave Surface (B8)
	Ifide Odor (C1)	Drainage Pat	
	zospheres on Living Roots (C3)	Moss Trim Li	
	Reduced Iron (C4) Reduction in Tilled Soils (C6)	Crayfish Burr	Water Table (C2)
Drift Deposits (B3) Thin Muck Su		=	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explai			ressed Plants (D1)
Iron Deposits (B5)		Geomorphic	
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui	tard (D3)
Water-Stained Leaves (B9)			phic Relief (D4)
Aquatic Fauna (B13)		✓ FAC-Neutral	Test (D5)
Field Observations:	. 0.5		
Surface Water Present? Yes   Yes   No   Depth (inche Yes   No   Depth (inche	(s):		
/	:S):		10 V / N
Saturation Present? Yes <u>▼</u> No Depth (inche (includes capillary fringe)	s): Wetland F	Hydrology Presen	t? Yes <u>√</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if ava	ilable:	
Remarks:			
Wetland is spring fed and adjacent to gravel road			

Sampling	Point-	W-AD4

10'	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:10')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata:3 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6				That Are OBL, FACW, OF FAC.
3		-		Prevalence Index worksheet:
1	0	= Total Cov	or	Total % Cover of: Multiply by:
50% of total cover:0				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10' )	2070 01	total cover.		FACW species x 2 =
<u>Japinig/Jiriub Stratum</u> (Flot Size				FAC species x 3 =
1				FACU species x 4 =
2		· -		UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				
	^	= Total Cov	er	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:0				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5' )				data in Remarks or on a separate sheet)
1. Scirpus atrovirens	15	✓	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Tussilago farfara	10		FACU	
3. Carex vulpinoidea	20		OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4 Juncus tenuis	25			be present, unless disturbed or problematic.
·			FAC	Definitions of Four Vegetation Strata:
5. Carex lurida	3		OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Sphagnum sp.	10		FACW_	more in diameter at breast height (DBH), regardless of
7. Alisma subcordatum	10		OBL	height.
8				Conling/Chrub Woody plants evaluding vines loss
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Houle All boule cooks (non-viscols) vilente noncedicos
	93	= Total Cov	or	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 46.5				or size, and woody plants loss than 0.20 it tall.
Woody Vine Stratum (Plot size: 15' )		10141 00101		Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cov	er	Present? Yes No
50% of total cover:0	20% of	total cover	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: W-AD4

Depth	Matrix	0/	Redo	x Features	S1	Loc <sup>2</sup>	Tauduma	Damadia
(inches) 0-5	Color (moist) 5YR 4/4	80	Color (moist) 10YR 5/6	<u>%</u>	Type <sup>1</sup>	M	Texture C	Remarks
0-5	<u> </u>			10_	С			
			10YR 5/1	10_	D	M		-
								-
					-			
							2	
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	3=Masked	Sand G	rains.		PL=Pore Lining, M=Matrix.
-	Indicators:							eators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol			Dark Surface		- (CO) (	MI DA 147		2 cm Muck (A10) (MLRA 147)
	oipedon (A2) stic (A3)		Polyvalue Be Thin Dark Su				, 148) (	Coast Prairie Redox (A16) (MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			147, 140)		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		1 2)		_ '	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		6)		\	Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar					Other (Explain in Remarks)
_ Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	3)			
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12)	(LRR N,		
	A 147, 148)		MLRA 13	-			2	
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		✓ Red Parent N	/laterial (F2	21) (MLI	RA 127, 14	/) ur	nless disturbed or problematic.
	Layer (if observed): gh coarse frag co	ntent						
J		Jilleill	<del></del>					
Depth (inc	ches): <u>3</u>		<u> </u>				Hydric Soi	I Present? Yes <u>√</u> No
oil is >60' aterial pr		ained. W	etland soil pit oo	curs on	edge (	of gravel	road. Comp	pacted soils with gravel road

Wetland ID \_\_\_\_\_ Date \_\_\_\_



Photograph Direction West

Comments:			

USACE FILE NO./Project Name:		Mountain \	Valley Pipeline	COORDINATES:	Lat.	37.268174	Lon.	-80.316468
STREAM/SITE ID AND SITE DESCF (% stream slope, watershed size {a		d or impairments)				W-NN6, Timber Mat Crossing		
FORM OF MITIGATION:								
DATE:	9/28	3/2021	WEATHER CONDITIONS:			PRECIPITATION PAST 48 HRS:		
	PART I - Wetl	and Indicators						
Impact Wetland ID:	Impact Wetland Classification	Impacts (acreage)	Mitigation Wetland Classification					
W-NN6	Emergent	0.0083	Emergent					
						PART III - Advanced	Mitigatio	on
						Sustainable Determination Made on		.,
						Advanced Mitigation (Y or N)		Υ
Total Impact		0.0083						
		Unit Scores				Estimated		
	assification		Replacement Unit(s)			ILF Costs		
Total Emergent Total Scrub-Shrub			0.0083			\$498.00		
างเลา อังเนม-อิกเนม			U			9430.UU		
Total Forested			0					

Project/Site: MVP	City/County: Montgomery Sampling Date: 08/25/2			
Applicant/Owner: MVP		State:	VA Sampling Point: W-NN06	
Investigator(s): D. Mccullough, D Hadersbeck,				
Landform (hillslope, terrace, etc.): Slope	Local relie	f (concave, convex, none): Noi	ne Slope (%): 1	
Subregion (LRR or MLRA): LRRN Lat			4 Datum:	
Soil Map Unit Name: McGary and Purdy soils	·	NW		
Are climatic / hydrologic conditions on the site typical for				
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology				
SUMMARY OF FINDINGS – Attach site n				
Solvilviant of Findings – Attach site in		ning point locations, tra	insects, important reatures, etc.	
Hydrophytic Vegetation Present? Yes	No	Is the Sampled Area		
Hydric Soil Present? Yes   ✓	No \	within a Wetland?	es No	
Wetland Hydrology Present? Yes   ✓	No			
Remarks: Cowardin Code:PEM; HGM: slope; WT:RP	WWN			
The wetland was revisited on 10/29/2019. F		d hydrology, hydrophytic y	vegetation, and hydric soils was	
confirmed using the USACE EMP Regional			rogotation, and nyanto sollo mas	
	- Сарриони асти	, and		
HYDROLOGY				
Wetland Hydrology Indicators:		Second	ary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; chec	k all that apply)	Sur	rface Soil Cracks (B6)	
Surface Water (A1)	True Aquatic Plants (B	14) Spa	arsely Vegetated Concave Surface (B8)	
High Water Table (A2)	Hydrogen Sulfide Odor		ninage Patterns (B10)	
Saturation (A3)	Oxidized Rhizospheres	s on Living Roots (C3) Mos	ss Trim Lines (B16)	
	Presence of Reduced I	_	y-Season Water Table (C2)	
	Recent Iron Reduction		ayfish Burrows (C8)	
	Thin Muck Surface (C7		turation Visible on Aerial Imagery (C9)	
_	Other (Explain in Rema		inted or Stressed Plants (D1)	
Iron Deposits (B5)			omorphic Position (D2)	
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)			allow Aquitard (D3) crotopographic Relief (D4)	
Aquatic Fauna (B13)			C-Neutral Test (D5)	
Field Observations:			5 (10di.d. 10st (20)	
	_ Depth (inches):			
Water Table Present? Yes No ✓	_ Depth (inches):			
Saturation Present? Yes No _ ✓	_ Depth (inches):		gy Present? Yes ✓ No	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring)				
Describe Recorded Data (Stream gauge, Monitoring)	well, aeriai priotos, previ	ous irispections), ir available.		
Remarks:				
Corresponds/overlaps partially with NWI PE	ΞM wetland.			

Sampling	Point-	W	/-1	11	40	6

30'	Absolute Dominant Indicato	
Tree Stratum (Plot size:)	% Cover Species? Status	I Number of Dominant Species
1		_ That Are OBL, FACW, or FAC:2 (A)
2		T. IN I CD I
3		Total Number of Dominant Species Across All Strata: 2 (B)
		Species Across Air Strata (b)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 100 (A/B)
6		Prevalence Index worksheet:
7	·	
	= Total Cover	Total % Cover of: Multiply by:
50% of total cover:0	20% of total cover: 0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')		FACW species x 2 =
1		FAC species x 3 =
		FACU species x 4 =
2		UPL species x 5 =
3		<del>-</del>
4		Column Totals: (A) (B)
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		
9		- ✓ 2 - Dominance Test is >50%
<u></u>	0 = Total Cover	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 0		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
E!	20% of total cover	data in Remarks or on a separate sheet)
Tierb Stratum (Flot Size)	40 <b>√</b> FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Carex lurida		_
2. Juncus effusus	30 <b>✓</b> FACW	Indicators of hydric soil and wetland hydrology must
3. Vernonia noveborensis	5 F <u>ACW</u>	<ul> <li>be present, unless disturbed or problematic.</li> </ul>
4		Definitions of Four Vegetation Strata:
5		_
6		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7		<ul><li>more in diameter at breast height (DBH), regardless of height.</li></ul>
		_   neight.
8		Sapling/Shrub – Woody plants, excluding vines, less
9		than 3 in. DBH and greater than or equal to 3.28 ft (1
10		_ m) tall.
11		Herb – All herbaceous (non-woody) plants, regardless
	75 = Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>37.5</u>	5 20% of total cover: 15	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')		height.
1		- · · · · · · · · · · · · · · · · · · ·
2		
		_
3		_
4		Hydrophytic
5		_ Vegetation
	= Total Cover	Present? Yes _ V No
50% of total cover:0	20% of total cover:0	_
Remarks: (Include photo numbers here or on a separate s	heet.)	

SOIL Sampling Point: W-NN06

Profile Desc	ription: (Describe t	o the dep	th needed to docur	nent the	indicator	or confirm	n the absence	e of indicators.)
Depth	Matrix			x Feature		3		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type'	Loc <sup>2</sup>	<u>Texture</u>	<u>Remarks</u>
0-4	10 YR 3/2	96	5 YR 5/8	4	<u>C</u>	<u>M</u>	SiL	
4-10	10 YR 3/1	90	5 YR 4/6	10	C	M	SiL	
10-18	10 YR 3/1	93	5 YR 5/8	7	С	M	SiL	
				-				
					· ·	· ———		
				-	· ·			
				-	· ·			
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Maske	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface		(= -) (-			2 cm Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Be				, 148) (	Coast Prairie Redox (A16)
Black His	stic (A3) n Sulfide (A4)		Thin Dark Su Loamy Gleye			147, 148)		(MLRA 147, 148) Piedmont Floodplain Soils (F19)
_ , ,	Layers (A5)		Depleted Ma		(1 2)		'	(MLRA 136, 147)
	ck (A10) (LRR N)		✓ Redox Dark :		F6)		\	/ery Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dar				(	Other (Explain in Remarks)
	rk Surface (A12)		Redox Depre					
	lucky Mineral (S1) (L	.RR N,	Iron-Mangan		ses (F12)	LRR N,		
	(147, 148) leyed Matrix (S4)		MLRA 13 Umbric Surfa	-	/MI DA 1	26 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
-	Matrix (S6)		Red Parent N					nless disturbed or problematic.
	ayer (if observed):							·
Type:								
Depth (inc	ches):						Hydric Soi	I Present? Yes <u>√</u> No
Remarks:								

# **Wetland Photograph Page**

### Wetland ID W-NN06



Photograph Direction South

Date: 08/25/2015

Comments: 2015 wetland delineation.



Photograph Direction South

Date: 10/29/19

Comments: 2019 wetland delineation confirmation.

USACE FILE NO./Project Name:		Mountain \	/alley Pipeline	COORDINATES:	Lat.	37.257265	Lon.	-80.281667
STREAM/SITE ID AND SITE DESCR (% stream slope, watershed size {a		d or impairments)				W-C12-PEM, Pipeline ROW		
FORM OF MITIGATION:								
DATE:	9/28	3/2021	WEATHER CONDITIONS:			PRECIPITATION PAST 48 HRS:		
	PART I - Wet	land Indicators						
Impact Wetland ID:	Impact Wetland Classification	Impacts (acreage)	Mitigation Wetland Classification					
W-C12-PEM	Emergent	0.2066	Emergent					
						PART III - Advanced	Mitigatio	n
						Sustainable Determination Made on		
						Advanced Mitigation (Y or N)		Y
					'			
Fotal Impact		0.2066			_			
		0.2066 Unit Scores				Estimated		
Wetland C	PART II -		Replacement Unit(s)			Estimated ILF Costs		
Wetland C  Total Emergent			0.2066			ILF Costs		
Total Impact  Wetland C  Total Emergent  Total Scrub-Shrub  Total Forested			. ,					

Project/Site: MVP	City/County: Montgomery Sampling Date: 11/				
Investigator(s): R. Sparhawk, W. Jackson					
Landform (hillslope, terrace, etc.): Valley bottom	Local relief (concave, convex, n	one): Concave	Slope (%): 2		
Subregion (LRR or MLRA): LRRN Lat:	37.257205 Long: -8	0.281473	Datum: NAD 83		
Soil Map Unit Name: McGary and Purdy soils		NWI classific	ation: None		
Are climatic / hydrologic conditions on the site typical for					
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norm	al Circumstances" p	resent? Yes ✓ No		
Are Vegetation, Soil, or Hydrology		explain any answer			
SUMMARY OF FINDINGS – Attach site m		-			
	No is the Sampled Area within a Wetland?  HGM: Riverine Water Type	Yes _ ✓	No		
Additional areas of wetland abutting wetland surveys. W-C11 and W-C12 wetlands were which time thearea now delineated as W-C in this area in 2019 is likely due to tree clea	ds W-C11 and W-C12 were observed previously confirmed by USACE Not 12-PEM did not meet all 3 wetland or ring and other habitat alterations in the second control of the second c	ed during 2019 D orfolk District dur oriteria. The obse the vicinity.	Delineation Confirmation ring 2015 field reviews, at ervation of wetland criteria		
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of one is required; check	k all that apply)	Surface Soil	Cracks (B6)		
	True Aquatic Plants (B14)	Sparsely Veg	etated Concave Surface (B8)		
	Hydrogen Sulfide Odor (C1)	Drainage Pat			
	Oxidized Rhizospheres on Living Roots (C3)		` '		
1 —	Presence of Reduced Iron (C4)	Dry-Season \			
	Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)	Crayfish Burr	sible on Aerial Imagery (C9)		
<u> </u>	Other (Explain in Remarks)		ressed Plants (D1)		
Iron Deposits (B5)	Carlo (Enplair III remaine)	✓ Geomorphic			
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui			
Water-Stained Leaves (B9)		Microtopogra	phic Relief (D4)		
Aquatic Fauna (B13)		✓ FAC-Neutral	Test (D5)		
Field Observations:	_				
Surface Water Present? Yes No	•				
Water Table Present? Yes No	_				
Saturation Present? Yes   ✓ No (includes capillary fringe)	Depth (inches): 0 Wetland	Hydrology Presen	t? Yes <u></u> No		
Describe Recorded Data (stream gauge, monitoring v	well, aerial photos, previous inspections), if a	/ailable:			
Remarks:					

Sampling	Point: W-C12-PEM
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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:8 (A)
2		-		Total Number of Dominant
3				Species Across All Strata: 8 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6				mat Are ODE, I ACW, OF I AC.
7		-		Prevalence Index worksheet:
/	0	= Total Cov	or	Total % Cover of: Multiply by:
50% of total cover: 0				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )	2070 01	total cover.		FACW species x 2 =
Platanus occidentalis	10	1	FACW	FAC species x 3 =
"			7.011	FACU species x 4 =
2				UPL species x 5 =
3		•		Column Totals: (A) (B)
4				Column Totals (A) (B)
5		-		Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9.				
	10	= Total Cov	er	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:5	20% of	total cover:		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5' )				data in Remarks or on a separate sheet)
1. Eupatorium perfoliatum	10	✓	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Scirpus atrovirens	10		OBL	
3. Dicanthelium acuminatum	15		FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4 Scirpus plyphyllus	5		OBL	be present, unless disturbed or problematic.
5. Dicanthelium clandestinum	15			Definitions of Four Vegetation Strata:
	3		FAC FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Ludwigia alternifolia				more in diameter at breast height (DBH), regardless of
7. Solidago rugosa	10		FAC	height.
8. Agrostis capillaris	10		FAC	Sapling/Shrub – Woody plants, excluding vines, less
<sub>9.</sub> Carex lurida	15	_ ✓	OBL	than 3 in. DBH and greater than or equal to 3.28 ft (1
10. Prunella vulgaris	2		FACU	m) tall.
11. Andropogon virginicus	5		FACU_	Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	W
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height.
1.				neight
2				
3				
4		(		
4				Hydrophytic
5	0	Tatal Cau		Vegetation Present? Yes ✓ No
50% of total cover: 0		= Total Cov total cover:		100
		total cover.		
Remarks: (Include photo numbers here or on a separate s	neet.)			

Profile Desc	cription: (Describe to	o the depth	needed to docun	nent the in	ndicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redox	x Features	5 1			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-2	10YR 4/2	100					L	
2-20	10YR 4/2	90	10YR 5/6	10	D	M	L	
-							-	
					-	· ——		-
							-	
							-	
	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil								ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface					cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be				148) <u> </u>	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su			147, 148)	_	(MLRA 147, 148)
	en Sulfide (A4) d Layers (A5)		✓ Loamy Gleye Depleted Mat		F2)		F	Piedmont Floodplain Soils (F19)
	ick (A10) (LRR N)		Redox Dark S		6)		V	(MLRA 136, 147) /ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar	•	,			Other (Explain in Remarks)
	ark Surface (A12)	,	Redox Depre				<del></del>	,
Sandy M	Mucky Mineral (S1) (L	RR N,	Iron-Mangane			LRR N,		
	A 147, 148)		MLRA 136					
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
_	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 147	7) un	less disturbed or problematic.
	Layer (if observed):							
Type: N/			_					
Depth (inc	ches):		_				Hydric Soil	Present? Yes No
Remarks:								

# **Wetland Photograph Page**

Wetland ID W-C12-PEMCowardin Code PEM Date 11/01/2019



Photograph Number \_\_1\_\_\_

Photograph Direction North

Comments:



Photograph Number 2

Photograph Direction ENE

Comments:

USACE FILE NO./Project Name:		Mountain \	/alley Pipeline	COORDINATES:	Lat.	37.25586	Lon.	-80.275715
STREAM/SITE ID AND SITE DESCF (% stream slope, watershed size {a		d or impairments)				W-C6, Timber Mat Crossing		
FORM OF MITIGATION:								
DATE:	9/28	3/2021	WEATHER CONDITIONS:			PRECIPITATION PAST 48 HRS:		
	PART I - Wet	land Indicators						
Impact Wetland ID:	Impact Wetland Classification	Impacts (acreage)	Mitigation Wetland Classification					
N-C6	Emergent	0.0139	Emergent					
						PART III - Advanced	Mitigatio	n
						Sustainable Determination Made on Advanced Mitigation (Y or N)		Υ
						(1 31 11)		
Fotal Impact		0.0139						
		Unit Scores				Estimated		
	assification		Replacement Unit(s)			ILF Costs		
otal Emergent			0.0139			\$834.00		
Fotal Scrub-Shrub  Fotal Forested			0			\$654.00		

Project/Site: MVP	_ City/County: Montgomery	Samplir	ng Date: 04/08/2015
Applicant/Owner: MVP	St.		
Investigator(s): L.Harloe, K.Lamontagne, L. Summers	Section, Township, Range: N/A		
Landform (hillslope, terrace, etc.): Toe Slope		Concave	Slope (%): 2
Subregion (LRR or MLRA): LRRN Lat: 37.25536			
Soil Map Unit Name: Berks-Clymer complex, 7 to 15 perce	_	NWI classification: N	
Are climatic / hydrologic conditions on the site typical for this time of	/		
Are Vegetation, Soil, or Hydrology significan	tly disturbed? Are "Normal Circ	umstances" present?	Yes _ ✓ No
Are Vegetation, Soil, or Hydrology naturally		in any answers in Rer	
SUMMARY OF FINDINGS – Attach site map showing		-	•
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes   ✓ No  Yes  ✓ No  Remarks:	<ul><li>Is the Sampled Area</li><li>within a Wetland?</li></ul>	Yes <u> </u> No	
Cowardin Code: PEM; HGM: Depressional; WT: NRP	WW		
The wetland was revisited on 11/1/2019. The presence was unable to be confirmed because the wetland was	e of wetland hydrology, hydrop	hytic vegetation,	and hydric soils
HYDROLOGY			
Wetland Hydrology Indicators:	<u></u>		nimum of two required)
Primary Indicators (minimum of one is required; check all that apply		Surface Soil Cracks (	
✓       Surface Water (A1)       True Aquatic         ✓       High Water Table (A2)       Hydrogen Su		Sparsely Vegetated C Drainage Patterns (B	Concave Surface (B8)
		Moss Trim Lines (B16	
		Dry-Season Water Ta	
		Crayfish Burrows (C8	
Drift Deposits (B3) Thin Muck S		Saturation Visible on	
Algal Mat or Crust (B4) Other (Expla		Stunted or Stressed F	
Iron Deposits (B5)	<u> </u>	Geomorphic Position	(D2)
Inundation Visible on Aerial Imagery (B7)	_	Shallow Aquitard (D3)	
Water-Stained Leaves (B9)		Microtopographic Rel	
Aquatic Fauna (B13)	<u> </u>	FAC-Neutral Test (D5	5)
Field Observations:	. 0.5		
Surface Water Present? Yes No Depth (inch			
Water Table Present? Yes No Depth (inch	<u>-</u>		
Saturation Present? Yes   ✓ No Depth (inching line)	es): Wetland Hydro	ology Present? Yes	s_ <b>√</b> No
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available	<u>;</u> :	
Remarks:			
Area gets bush hogged annually by landowner, per dis	scussion with landowner.		

Sampling	Point-	W-C6
Jannonna	I OIIII.	

301	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30')	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Deminant
3		Total Number of Dominant Species Across All Strata: 2 (B)
		Species ricioss rili strata.
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC:100% (A/B)
6		Prevalence Index worksheet:
7		
	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0	20% of total cover: 0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )		FACW species x 2 =
1		FAC species x 3 =
		FACU species x 4 =
2		UPL species x 5 =
3		Column Totals: (A) (B)
4		Column rotals (A) (B)
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		
8		√ 1 - Rapid Test for Hydrophytic Vegetation
		✓ 2 - Dominance Test is >50%
9	•	3 - Prevalence Index is ≤3.0 <sup>1</sup>
5000 61.11		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
<i>E</i> !	20% of total cover:0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')		✓ Problematic Hydrophytic Vegetation¹ (Explain)
1. Carex stricta	10✓OBL	Froblematic Trydrophytic Vegetation (Explain)
2. Scirpus atrovirens	10 <b>√</b> <u>OBL</u>	1
3		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4		be present, unless disturbed or problematic.
4		Definitions of Four Vegetation Strata:
5		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		more in diameter at breast height (DBH), regardless of
7		height.
8		Continue/Charle Mandy plants avaluating visco loss
9		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11		Herb – All herbaceous (non-woody) plants, regardless
10	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover:10	20% of total cover:4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:15')		height.
1		
2		
3		
4		Hydrophytic
5		Vegetation Present? Yes ✓ No
	= Total Cover	Present? Yes <u>√</u> No
50% of total cover: 0	20% of total cover: 0	
Remarks: (Include photo numbers here or on a separate si Unknown grasses with no flowering heads not u include Juncus effusus (FACW) and Toxicodence	heet.) tilized for dominance test.	Other species present but not in sample plot

SOIL Sampling Point: W-C6

Profile Desc	cription: (Describe t	o the dep	th needed to docun	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Feature:		-		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-12"	10 YR 3/1	90	7.5 YR 6/8	10	С	M/PL	SiLo	Fe Mn Masses
12-20"	10 YR 4/1	90	7.5 YR 5/8	10	С	M	SiLo	C M
1Type: C-C	oncentration, D=Depl	etion PM-	- Paducad Matrix MS		I Sand Gr		<sup>2</sup> Location: DI	L=Pore Lining, M=Matrix.
Hydric Soil		ellon, Rivi=	Reduced Matrix, Mis	S=Waske0	i Sanu Gr	all 15.		terore Lining, Mematrix.  ators for Problematic Hydric Soils <sup>3</sup> :
Histosol Histic E Black H Hydroge Stratifier 2 cm Mt Deplete Thick D Sandy M MLRA Sandy G Strippec Restrictive		RR N,	Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Ma Redox Dark Su V Depleted Dar Redox Depre V Iron-Mangan MLRA 13 Umbric Surfa Piedmont Flo	low Surface (S9) and Matrix (F3) Surface (F6) Surface (F6) Surface (F6) Cessions (F6) Ces (F13) (podplain S	(MLRA 1) (F2) (F6) (F7) (8) (es (F12) ( (MLRA 13) (ils (F19)	47, 148) LRR N, 6, 122) (MLRA 14	2 148) 2	cm Muck (A10) (MLRA 147) oast Prairie Redox (A16) (MLRA 147, 148) iedmont Floodplain Soils (F19) (MLRA 136, 147) ery Shallow Dark Surface (TF12) other (Explain in Remarks) icators of hydrophytic vegetation and tland hydrology must be present, less disturbed or problematic.
Remarks:								



Photograph Direction NE

Date: 04/08/2015

Comments: 2015 wetland delineation.



Photograph Direction ENE

Date: 11/01/19

Comments: 2019 wetland delineation confirmation.

USACE FILE NO./Project Name:	Mountain Valley Pipeline			COORDINATES:	Lat.	37.255606	Lon.	-80.274237
STREAM/SITE ID AND SITE DESCE (% stream slope, watershed size {a					W-C5, Pipeline ROW			
FORM OF MITIGATION:								
DATE:	9/28	3/2021	WEATHER CONDITIONS:			PRECIPITATION PAST 48 HRS:		
	PART I - Wet	and Indicators						
Impact Wetland ID:	Impact Wetland Classification	Impacts (acreage)	Mitigation Wetland Classification					
N-C5	Emergent	0.0454	Emergent					
						PART III - Advanced	Mitigatio	n
						Sustainable Determination Made or		
						Advanced Mitigation		Υ
						(Y or N)		
						(Y or N)		
						(Y or N)		
Total Impact		0.0454						
		0.0454 Unit Scores				Estimated		
Wetland C	PART II -		Replacement Unit(s)					
Wetland Cl otal Emergent			0.0454			Estimated ILF Costs		
Total Impact  Wetland Cl Total Emergent Total Scrub-Shrub Total Forested						Estimated		

Project/Site: MVP	City/County: Montgome	ery	Sampling Date: 04/08/2015
Applicant/Owner: MVP		State: VA	Sampling Point: W-C5
Investigator(s): L.Harloe, K.Lamontagne, L. S	Summers Section Township Range		<u> </u>
Landform (hillslope, terrace, etc.): Toeslope			Slone (%): 5
Subregion (LRR or MLRA): LRRN L			Datum: NAD 83
Soil Map Unit Name: Berks-Weikert complex,			
	_		
Are climatic / hydrologic conditions on the site typica			,
Are Vegetation, Soil, or Hydrology	-	•	
Are Vegetation, Soil, or Hydrology	naturally problematic? (If need	led, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling point loc	ations, transects	s, important features, etc.
Lindranh, dia Vanatatian Brasanta Van	, No.		
Hydrophytic Vegetation Present? Yes▼ Hydric Soil Present? Yes▼	No Is the Sampled Ar	rea	
Wetland Hydrology Present? Yes ✓	No within a Wetland?	? Yes <u> </u>	No
Remarks:			
Cowardin Code:PEM			
HGM:slope			
WT:NRPWW			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Soil	Cracks (B6)
✓ Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)	_ Hydrogen Sulfide Odor (C1)	Drainage Pa	
✓ Saturation (A3)	Oxidized Rhizospheres on Living Roots (		
Water Marks (B1)	Presence of Reduced Iron (C4)	=	Water Table (C2)
Sediment Deposits (B2) Drift Deposits (B3)	<ul><li>Recent Iron Reduction in Tilled Soils (C6)</li><li>Thin Muck Surface (C7)</li></ul>	=	isible on Aerial Imagery (C9)
1	Other (Explain in Remarks)		tressed Plants (D1)
Iron Deposits (B5)	_ = 0.1101 (2.1p.a 11.1101)		Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqu	
Water-Stained Leaves (B9)		Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)
Field Observations:	0.5		
	Depth (inches):0.5		
	Depth (inches):0		
Saturation Present? Yes _ V No (includes capillary fringe)	Depth (inches):0 Wetla	ınd Hydrology Preser	nt? Yes ✓ No
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspections), if	f available:	
Remarks: Spring and ephemeral creek upslope, tho	ugh creek is covered in debris Are:	a gete bueh hogge	d annually by landowner
per discussion with landowner. Wetland for			
ROW.		ar arrange pressure	

Sampling	Point:	W-C5
----------	--------	------

30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC:2 (A)
2				Total Number of Dominant
3	-			Species Across All Strata:3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 67 (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x 2 =
1. Toxicodendron vernix			OBL	FAC species x 3 =
2. Rosa multiflora	5		FACU	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				5
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9	15	= Total Cov		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5' )	2070 01	total cover.		data in Remarks or on a separate sheet)
1. Arthraxon hispidus	15	1	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Microstegium vimineum	5		FAC	
3. Juncus effusus				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4 Carex lurida	5		FACW_	be present, unless disturbed or problematic.
"			OBL	Definitions of Four Vegetation Strata:
				_
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
6				more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less
6				more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
6				more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less
6				more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless
6	30	= Total Cov		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
6	30			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6	30	= Total Cov		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless
6		= Total Cov		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	30 20% of	= Total Cov		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	30 20% of	= Total Cov		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	30 20% of	= Total Cov		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6	30 20% of	= Total Cov		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cov	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6		= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	30 20% of	= Total Cover:	er 6	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation

Sampling Point: W-C5

Profile Desc	ription: (Describe t	o the depth	needed to docum	ent the ir	ndicator	or confirm	the absence of	of indicators.)	
Depth	Matrix		Redox	Features	6				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks	
0-6"	10YR4/2	90	7.5YR6/8	10	С	M/PL	Silty loam	FeMn masses	
6-8"	10YR7/3	90	10YR5/8	10	С	M/PL	Sandy loa		
8-20"	10YR5/1	80	7.5YR6/8	20	С	M/PL	Loam		
					-				
					-				
					-				
·							-		
					-				
1							2		
	ncentration, D=Depl	etion, RM=Re	duced Matrix, MS	=Masked	Sand Gra	ains.		=Pore Lining, M=Matrix.	_3.
Hydric Soil I			5	(0=)				tors for Problematic Hydric Soil	S:
Histosol			Dark Surface		oo (CO) (N	MIDA 147		cm Muck (A10) (MLRA 147) past Prairie Redox (A16)	
Black His	ipedon (A2)		Polyvalue Bel Thin Dark Sur					(MLRA 147, 148)	
	n Sulfide (A4)		Loamy Gleyed			47, 140)		edmont Floodplain Soils (F19)	
, ,	Layers (A5)		✓ Depleted Matr		_,		· · · · · · · · · · · · · · · · · · ·	(MLRA 136, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark S		6)			ery Shallow Dark Surface (TF12)	
	Below Dark Surface	e (A11)	Depleted Dark				Ot	her (Explain in Remarks)	
	rk Surface (A12)		Redox Depres						
	ucky Mineral (S1) (L	RR N,	✓ Iron-Mangane		es (F12) (	LRR N,			
	. 147, 148) leyed Matrix (S4)		MLRA 136 Umbric Surfac		MI DA 12	6 122)	<sup>3</sup> India	cators of hydrophytic vegetation a	nd
	edox (S5)		Piedmont Floo					land hydrology must be present,	iiu
-	Matrix (S6)		Red Parent M					ess disturbed or problematic.	
	ayer (if observed):			•		<u> </u>	1	·	
Type: NA	١		_						
Depth (inc	hes):		_				Hydric Soil I	Present? Yes <u>√</u> No	
Remarks:									



Photograph Direction SE

Comments:

USACE FILE NO./Project Name:	Mountain Valley Pipeline			COORDINATES:	Lat.	37.231426	Lon.	-80.198615
STREAM/SITE ID AND SITE DESCR					W-AB7, Timber Mat Crossing			
(% stream slope, watershed size {a	creage}, unaltered	d or impairments)						
FORM OF MITIGATION:								
DATE:	9/28	3/2021	WEATHER CONDITIONS:			PRECIPITATION PAST 48 HRS:		
	PART I - Wetl	and Indicators						
Impact Wetland ID:	Impact Wetland Classification	Impacts (acreage)	Mitigation Wetland Classification					
W-AB7	Emergent	0.004	Emergent					
						PART III - Advanced	Mitigatio	n
						Sustainable Determination Made or		
						Advanced Mitigation		Υ
						(Y or N)		
Total Impact		0.004						
		Unit Scores				Estimated		
	assification		Replacement Unit(s)			ILF Costs		
Total Emergent			0.004			_		
Total Scrub-Shrub			0			\$240.00		
Total Forested			0					
Total Open Water			0					

Project/Site: MVP	City/County: Montgomery Sampling Date: 04/11/20					
Applicant/Owner: MVP		· -				
Investigator(s): J. Hart, A. Larson, T. Woods Section, Township, Range: N/A						
Landform (hillslope, terrace, etc.): Flat	-	Slope (%): 1				
Subregion (LRR or MLRA): LRR N	at: 37.231334	Long: -80.198782	Datum: NAD 83			
Soil Map Unit Name: 29 - Udorthents and Urba		NWI classific				
Are climatic / hydrologic conditions on the site typica						
Are Vegetation, Soil, or Hydrology _			_			
Are Vegetation, Soil, or Hydrology _						
SUMMARY OF FINDINGS – Attach site						
	,	,				
	No Is the Sam	oled Area				
Wetland Hydrology Present?	, within a vv	etland? Yes <u>▼</u>	No			
Remarks: Cowardin Code: PEM		ter Type: RPWWD				
Wetland functions as a roadside ditch but contributes flows to Roanoke River.	'	• •	ons from upslope. Likely			
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)			
Primary Indicators (minimum of one is required; ch	eck all that apply)	Surface Soil	Cracks (B6)			
✓ Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Ve	getated Concave Surface (B8)			
	Hydrogen Sulfide Odor (C1)		atterns (B10)			
	Oxidized Rhizospheres on Living F					
	Presence of Reduced Iron (C4)		Water Table (C2)			
	Recent Iron Reduction in Tilled So					
Drift Deposits (B3)	Thin Muck Surface (C7)		isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Remarks)		Stressed Plants (D1)			
Iron Deposits (B5)			Position (D2)			
Inundation Visible on Aerial Imagery (B7)		Shallow Aqu				
Water-Stained Leaves (B9)		<del></del>	aphic Relief (D4)			
Aquatic Fauna (B13)		✓ FAC-Neutra	Trest (D5)			
Field Observations:  Surface Water Present? Yes ✓ No	Depth (inches): +1					
	Depth (inches): 0					
	Depth (inches): 0	Wetland Hydrology Prese	nt? Yes ✓ No			
(includes capillary fringe)	Depth (mones)		III: 165 <u>v</u> 110			
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspect	ions), if available:				
Remarks:						

#### VEGETATION (Four Strata) - Use scientific names of plants.

30'

Sapling/Shrub Stratum (Plot size: 15')

2. Equisetum arvense

3. Cyperus esculentus

Tree Stratum (Plot size: \_\_

Herb Stratum (Plot size: \_ 1. Typha angustifolia

4. Eleocharis acicularis

\_\_\_)

% Cover Species? Status

= Total Cover

0 = Total Cover

10 OBL

80 = Total Cover

0 = Total Cover

✓ OBL

√ FAC

FACW

50% of total cover: 0 20% of total cover: 0

50% of total cover: 0 20% of total cover: 0

50% of total cover: 40 20% of total cover: 16

50% of total cover: 0 20% of total cover:

15

	Sampling Po	int: W-AB7					
	Dominance Test worksheet:						
	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)				
-	Total Number of Dominant Species Across All Strata:	2	(B)				
-	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)				
-	Prevalence Index worksheet:						
-	Total % Cover of:	Multiply by:					
		1 =					
-							
	FACW species x						
-		3 =					
_		4 =	_				
-	UPL species x	5 =	_				
	Column Totals: (A	.)	_ (B)				
-	Prevalence Index = B/A =	-	_				
-	Hydrophytic Vegetation Indica	tors:					
-	✓ 1 - Rapid Test for Hydrophytic Vegetation						
-	✓ 2 - Dominance Test is >50%						
-	3 - Prevalence Index is ≤3.0 <sup>1</sup>						
	4 - Morphological Adaptation	ns¹ (Provide sup	porting				
-	data in Remarks or on a	separate sheet)					
1	Problematic Hydrophytic Ve	getation <sup>1</sup> (Explai	in)				
-	<sup>1</sup> Indicators of hydric soil and wet be present, unless disturbed or p	land hydrology r	nust				
_	Definitions of Four Vegetation						
	Tree – Woody plants, excluding more in diameter at breast heigh height.	vines, 3 in. (7.6					
	Sapling/Shrub – Woody plants, than 3 in. DBH and greater than m) tall.						
	<b>Herb</b> – All herbaceous (non-woo of size, and woody plants less th		rdless				
1	<b>Woody vine</b> – All woody vines g height.	reater than 3.28	ft in				
-							
-							
-							
_	Hydrophytic						
	Hydrophytic Vegetation						
	Present? Yes   ✓	No					
-							

Remarks: (Include photo numbers here or on a separate sheet.)

Remaining cover in herb stratum is thatch

Woody Vine <u>Stratum</u> (Plot size: \_\_\_\_\_\_)

Sampling Point: W-AB7

SOIL

Profile Desc	ription: (Describe t	to the dept	h needed to docur	nent the i	ndicator	or confirr	m the absence	of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	10YR 2/2	90	10YR 4/1	10	D	M	SiL	
2-10	10YR 4/2	65	10YR 6/6	5_	С	M	SiL	
			10YR 5/1	30	D	M	SiL	
					-			
						·		
1 <sub>Tympo</sub> , C. C.	ancontrotion D. Donl	ation DM	Dadwaad Matrix M		Cond Cr		<sup>2</sup> l coetion. Di	Doro Lining M. Motriy
Hydric Soil	oncentration, D=Depl	etion, RM=	Reduced Matrix, Mi	S=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(97)				cm Muck (A10) <b>(MLRA 147)</b>
	oipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	/ILRA 147		oast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				, <b>.,</b> 0	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, : . <b>-</b> /	P	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		•			(MLRA 136, 147)
2 cm Mu	ıck (A10) (LRR N)		Redox Dark	Surface (F	6)		V	ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Da				0	ther (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	.RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 13	-	MI DA 40	oc 400\	31	
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo					icators of hydrophytic vegetation and tland hydrology must be present,
	I Matrix (S6)		Red Parent N					less disturbed or problematic.
	Layer (if observed):		Ned i alcili i	viatoriai (i	21) (IVILIV	A 121, 14		ices disturbed of problematic.
	ches):						Hydric Soil	Present? Yes ✓ No
Remarks:	Ci les).		<del></del>				Tiyane 3011	riesent: les <u>v</u> No
Remarks.								



Photograph Direction NE

Comments:			