Project/Site: MVP	City/County: Giles	s	campling Date: 07/17/2015
Applicant/Owner: MVP			Sampling Point: W-Z11
Investigator(s): SET, SJT, DM	Section, Township, Range: N/	A	
Landform (hillslope, terrace, etc.): Valley bottom			Slope (%): 8
Subregion (LRR or MLRA): LRRN La			Datum: NAD 83
Soil Map Unit Name: Nolichucky very stony sa			
	_		
Are climatic / hydrologic conditions on the site typical			
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology		xplain any answers	
SUMMARY OF FINDINGS – Attach site	map showing sampling point locatio	ns, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area		
Hydric Soil Present? Yes	Is the Sampled Area No within a Wetland?	Yes 🗸	No
Wetland Hydrology Present? Yes	No		
Remarks:			
Cowardin Code: PEM; HGM: Depressiona			
The wetland was revisited on 10/27/2019.			ation, and hydric soils
was unable to be confirmed because the v	wetland was obstructed by timber matti	ng.	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicato	rs (minimum of two required)
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Soil Cr	<u> </u>
✓ Surface Water (A1)	_ True Aquatic Plants (B14)		tated Concave Surface (B8)
High Water Table (A2)	_ Hydrogen Sulfide Odor (C1)	Drainage Patte	
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Line	
	Presence of Reduced Iron (C4)	Dry-Season Wa	
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrov	vs (C8)
Drift Deposits (B3)	_ Thin Muck Surface (C7)	Saturation Visit	ole on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stre	ssed Plants (D1)
Iron Deposits (B5)		Geomorphic Po	
Inundation Visible on Aerial Imagery (B7)		Shallow Aquita	
Water-Stained Leaves (B9)		Microtopograph	
Aquatic Fauna (B13)		FAC-Neutral Te	est (D5)
Field Observations:	5 4 6 1 2 1		
Surface Water Present? Yes No			
_			
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	ydrology Present?	Yes No
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if ava	lable:	
Barrela			
Remarks: Highly disturbed wetland area that has like	ely been filled and is regularly grazed.	. 6" channel exit	s wetland (french drain)
I lightly disturbed welland area that has like	by been filled and is regularly grazed. F	to chamicical	3 Welland (Henen drain).

Sampling	Point: W-Z11

	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: 2 (A)
2				Total Newhord Davidson
3		·		Total Number of Dominant Species Across All Strata: 2 (B)
4				eposico / toroco / tir etrata.
5			· ——	Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6		-		Prevalence Index worksheet:
7	0	T-1-1-0		Total % Cover of: Multiply by:
50% of total cover: 0		= Total Cov		OBL species x 1 =
451	20% 01	total cover		FACW species x 2 =
Saping/Sitrab Stratum (1 lot size)				FAC species x 3 =
1				FACU species x 4 =
2		-		-
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9.				✓ 2 - Dominance Test is >50%
-	0	= Total Cov	/er	3 - Prevalence Index is ≤3.01
50% of total cover: 0		total cover	_	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')		10101 00101		data in Remarks or on a separate sheet)
1. Solanum carolinense	15		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Phleum pratense	10		FACU	
3. Polygonum sp.	5			¹ Indicators of hydric soil and wetland hydrology must
4 Poa trivialis	45		ND	be present, unless disturbed or problematic.
5. Panicum virgatum	30		FACW_	Definitions of Four Vegetation Strata:
· · · · · · · · · · · · · · · · · · ·			F <u>AC</u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
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
	105	= Total Cov	er er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>52.5</u>	20% of	total cover	21	Was decided. Allowed by the sector than 0.00 ft.
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height.
1.				To ignat
2				
3				
4	-			
4 5.				Hydrophytic
5	0	Tatal Car		Vegetation Present? Yes ✓ No
50% of total cover: 0		= Total Cover	_	
		total cover	<u> </u>	
Remarks: (Include photo numbers here or on a separate s	neet.)			
ND- Species not determined				

SOIL Sampling Point: W-Z11

Profile Desc	ription: (Describe t	o the depth	n needed to docum	nent the inc	dicator o	or confirm	the absenc	e of indicators.)
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 5/3	99	10YR 5/6	1			SiL	
6-18	10YR 5/2	97	10YR 5/6	3			SiL	
	101111072		10111070	<u> </u>				
								-
	-							
	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	S=Masked S	Sand Gra	ins.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indi	cators for Problematic Hydric Soils ³ :
Histosol			Dark Surface					2 cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	,	2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark					Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar					Other (Explain in Remarks)
	ark Surface (A12)	DD 14	Redox Depre			DD 11		
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		(F12) (I	LRK N,		
	A 147, 148)		MLRA 13	•	I D A 42	6 400)	31	ndicators of hydrophytic vegetation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo					vetland hydrology must be present,
	Matrix (S6)		Red Parent N					Inless disturbed or problematic.
	Layer (if observed):		Red r arent n	naterial (i Z	i) (WILIX	7 121, 141	, u	inless disturbed of problematic.
Type:	Layer (ii observea).							
	- I \						United a On	11 Page 20010 - Van - V
	ches):		<u> </u>				Hydric 50	il Present? Yes No
Remarks:								

Wetland Photograph Page

Wetland ID W-Z11



Photograph Direction North

Date: 07/17/2015

Comments: 2015 wetland delineation.



Photograph Direction NE

Date: 10/27/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP		City/C	County: Giles		Sampling Date: 07/17/2015
Applicant/Owner: MVP					Sampling Point: W-Z11-UP1
Investigator(s): SET, SJT, DM					
Landform (hillslope, terrace, etc.): Valle					Slope (%): 10
Subregion (LRR or MLRA): LRRN					
Soil Map Unit Name: Frederick-Carb					
Are climatic / hydrologic conditions on the					
Are Vegetation, Soil, or H					
Are Vegetation, Soil, or H		-		explain any answer	
SUMMARY OF FINDINGS – Att	-				
				,	, .p
Hydrophytic Vegetation Present?	Yes Yes		Is the Sampled Area		
Hydric Soil Present? Wetland Hydrology Present?	Yes		within a Wetland?	Yes	No
Remarks:	103				
HYDROLOGY					
Wetland Hydrology Indicators:					tors (minimum of two required)
Primary Indicators (minimum of one is r	-			Surface Soil (
Surface Water (A1)		True Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pat	
Saturation (A3) Water Marks (B1)		Presence of Reduced	es on Living Roots (C3)	Moss Trim Li	Nater Table (C2)
Sediment Deposits (B2)	·	Recent Iron Reduction	` '	Crayfish Burr	
Drift Deposits (B3)		Thin Muck Surface (0		· ·	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer			ressed Plants (D1)
Iron Deposits (B5)			,	Geomorphic	
Inundation Visible on Aerial Imager	y (B7)			Shallow Aqui	tard (D3)
Water-Stained Leaves (B9)				Microtopogra	phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:					
		Depth (inches):			
		Depth (inches):			
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Presen	t? Yes No
Describe Recorded Data (stream gauge	e, monitoring w	vell, aerial photos, pre	evious inspections), if ava	nilable:	
Remarks:					

Sampling	Point: W-Z11-UP1
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201	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
2				Total Number of Dominant Species Across All Strata: 2* (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:0 (A/B)
7	-			Prevalence Index worksheet:
	0	= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')	2070 01	10101 00101		FACW species x 2 =
`				FAC species x 3 =
1				FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4 5				
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	_	T-1-1-0		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 0		= Total Cov	_	4 - Morphological Adaptations ¹ (Provide supporting
l ei	20% 01	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5) 1. Solanum carolinense	35	~	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Phleum pratense	10		FACU	
3. Polygonum sp.	5		ND	¹ Indicators of hydric soil and wetland hydrology must
4. Poa pratensis	45			be present, unless disturbed or problematic.
5. Panicum sp.*	30		F <u>ACU</u>	Definitions of Four Vegetation Strata:
			ND	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Trifolium repens	15		F <u>ACU</u>	more in diameter at breast height (DBH), regardless of
7. Taraxacum officionale	5	. <u></u>	F <u>ACU</u>	height.
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
	145	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>72.5</u>	20% of	total cover	29	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')				height.
1				
2				
3	-			
4				Hydrophytic
5				Hydrophytic Vegetation
	_	= 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.)			L
ND - Not determined	,			
*Not identified to species level, not included in d	ominano	e test		
and the special section in the moral and				

Sampling Point: W-Z11-UP1

	Matrix		Redox Features	T 1 1 2	T 1		D	_	
(inches)	Color (moist)	<u>%</u>	Color (moist) %	Type ¹ Loc ²	Texture SiL		Remarks	5	
0-4	10YR 4/3	100							
5-18	10YR 4/4	100			SiL				
						-			
						-			
						-			
						-			
						-			
						-			
		letion, RM=	Reduced Matrix, MS=Masked S	Sand Grains.	² Location: Pl				. 3
dric Soil Ir			D 1 0 1 10-1				oblematic l	-	ls":
_ Histosol (•		Dark Surface (S7)	(CO) (MI DA 447			10) (MLRA		
Black His	pedon (A2)		Polyvalue Below SurfaceThin Dark Surface (S9) (146) C	MLRA 14)	Redox (A16	5)	
	Sulfide (A4)		Loamy Gleyed Matrix (F)		Р		odplain Soil	s (F19)	
	Layers (A5)		Depleted Matrix (F3)	,	_	(MLRA 13		- (- /	
_	ck (A10) (LRR N)		Redox Dark Surface (F6			•	Dark Surfac	, ,	
	Below Dark Surfac	e (A11)	Depleted Dark Surface (•	0	ther (Explai	n in Remark	rs)	
	k Surface (A12)		Redox Depressions (F8)						
	ucky Mineral (S1) (L 147, 148)	LRR N,	Iron-Manganese Masses MLRA 136)	6 (F12) (LRR N,					
	eyed Matrix (S4)		Umbric Surface (F13) (N	II RA 136, 122)	³ Ind	icators of h	/drophytic ve	egetation a	and
_ Sandy Re			Piedmont Floodplain Soi				logy must be	-	iiia
-	Matrix (S6)		Red Parent Material (F2			-	ed or proble		
estrictive L	ayer (if observed):								
Туре:						Dracanta	Yes	No	<u> </u>
Type: Depth (incl	nes):		_		Hydric Soil	Present?	163		
Depth (incl	nes):				Hydric Soil	Present?	103		
Depth (incl	nes):				Hydric Soil	Present?	103		
Depth (incl	nes):				Hydric Soil	Present?	103		
Depth (incl	nes):		<u> </u>		Hydric Soil	Fresent?	103		
Depth (incl	nes):				Hydric Soil	Present?	163		
Depth (incl	nes):				Hydric Soil	Present?	163		
Depth (incl	nes):				Hydric Soil	Present?	163	- 333 	
Depth (incl	nes):				Hydric Soil	Present?	163		
Depth (incl	nes):				Hydric Soil	Present?			
Depth (incl	nes):				Hydric Soil	Present?			
Depth (incl	hes):				Hydric Soil	Present?			
Depth (incl	nes):				Hydric Soil	Present?			
Depth (incl	nes):				Hydric Soil	Present?			
Depth (incl	nes):				Hydric Soil	Present?		- · · · · -	
Depth (incl	nes):				Hydric Soil	Present?			
Depth (incl	hes):				Hydric Soil	Present?			
Depth (incl	nes):				Hydric Soil	Present?			
••	nes):				Hydric Soil	Present?			
Depth (incl	hes):				Hydric Soil	Present?			
Depth (incl	hes):				Hydric Soil	Present?			
Depth (incl	nes):				Hydric Soil	Present?			

Project/Site: MVP		City/C	_{ounty:} Giles		Sampling Date: 07/12/2015
Applicant/Owner: MVP					Sampling Point: W-Z3
Investigator(s): SET, SJT, D					_
					Slope (%): 3-5%
Subregion (LRR or MLRA): LF					Datum: NAD 83
Soil Map Unit Name: Nolichu					
Are climatic / hydrologic condition					<u></u>
Are Vegetation, Soil		-			resent? Yes No
Are Vegetation, Soil				·	·
_				explain any answe	, important features, etc.
	.,		pg pe		,po
Hydrophytic Vegetation Prese		No	Is the Sampled Area	,	
Hydric Soil Present?	Yes	No	within a Wetland?	Yes	No
Wetland Hydrology Present? Remarks:		No			
Cowardin Code: PSS; Ho	GM: Riverine; WT: F	RPWWD			
The wetland was revisite was unable to be confirm	d on 10/27/2019. The dbecause of cons	he presence of w struction activity v	etland hydrology, hywithin the LOD.	ydrophytic veg	etation, and hydric soils
HYDROLOGY					
Wetland Hydrology Indicato	rs:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum o	of one is required; check	all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	¬	True Aquatic Plants (I	B14)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odd		✓ Drainage Par	` '
Saturation (A3)			es on Living Roots (C3)	Moss Trim Li	
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Buri	
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9) cressed Plants (D1)
Algal Mat or Crust (B4) Iron Deposits (B5)	— '	Other (Explain in Ren	iaiks)	Geomorphic	` '
Inundation Visible on Aeri	ial Imagery (B7)			Shallow Aqui	
Water-Stained Leaves (B					phic Relief (D4)
Aquatic Fauna (B13)	-,			FAC-Neutral	
Field Observations:				<u> </u>	, ,
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No V		6"		
Saturation Present?			O" Wetland H	lydrology Presen	t? Yes 🗸 No
(includes capillary fringe) Describe Recorded Data (stre		ell aerial photos pre	vious inspections) if ava	ilahla:	
Describe Necorded Data (Sire	am gauge, monitoring w	cii, acriai priotos, pre	vious irispections), ir ava	illabic.	
Remarks:					

San	nnlind	Point:	W-Z3
van	IDIII IC	ı ı Ollit.	••

Troo Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1 Acer saccharum		Species?		Number of Dominant Species
	60	- V	<u>FACU</u>	That Are OBL, FACW, or FAC:3 (A)
2. Aesculus pavia	30		FAC	Total Number of Dominant
3				Species Across All Strata: 4 (B)
4		-		Percent of Dominant Species
5		-		That Are OBL, FACW, or FAC: 75 (A/B)
6				Prevalence Index worksheet:
7				
		= Total Cov		
50% of total cover: 45	20% of	total cover:	18	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Lindera benzoin	40		FAC	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7		-		1 - Rapid Test for Hydrophytic Vegetation
8		-		✓ 2 - Dominance Test is >50%
9	40			3 - Prevalence Index is ≤3.0 ¹
50% () 20		= Total Cov	_	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 20	20% of	total cover:	8	data in Remarks or on a separate sheet)
TIEID Stratum (FIOL SIZE)	00			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Carex vulpinoidea			OBL	<u> </u>
2. Impatiens capensis	5		F <u>ACW</u>	¹ Indicators of hydric soil and wetland hydrology must
3. Leersia oryzoides	5	-	OBL	be present, unless disturbed or problematic.
4. Athyrium filix-femina	5		<u>UPL</u>	Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
8				
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	35	T-1-1-0		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 17.5		= Total Cov		of size, and woody plants less than 3.26 it tall.
	<u>) </u>	total cover.		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
	0	= Total Cov	er	Present? Yes V No 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-Z3

Profile Desc	ription: (Describe t	o the dep	th needed to docun	nent the	indicator	or confirn	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	7.5YR 3/2	90	7.5YR 4/6	10	С	M	SL	
4-16	10YR 3/2	95	5YR 4/4	5	С	М	SL	Gravelly
					. <u>-</u>			
								
					·	·		
				-				
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Maske	d Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indica	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfa	ace (S8) (I	/ILRA 147	, 148) C	oast Prairie Redox (A16)
	stic (A3)		Thin Dark Su	rface (S9) (MLRA	147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		P	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat					(MLRA 136, 147)
	ıck (A10) (LRR N)		Redox Dark S	,	,			ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar		. ,		0	ther (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		ses (F12) (LRR N,		
	A 147, 148)		MLRA 130	-	/MI D A 4/	100	31	Section of books who discounted in a section
	Gleyed Matrix (S4)		Umbric Surfa					icators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6) Layer (if observed):		Red Parent N	nateriai (r	-21) (IVILI	A 121, 14	<i>i</i>) uni	less disturbed or problematic.
Type: Co								
	ches): 16"						Hydric Soil	Present? Yes No
Remarks:								



Photograph Direction SE

Date: 07/12/2015

Comments: 2015 wetland delineation.



Photograph Direction North

Date: 10/27/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP	City/C	county: Giles	Sampling Date: 07/12/2015			
Applicant/Owner: MVP		State	e: VA Sampling Point: W-Z3-UP			
• • • • • • • • • • • • • • • • • • • •	Section Section		<u></u>			
Landform (hillslope, terrace, etc.): Hill-slop			oncave Slope (%): 4-6%			
Subregion (LRR or MLRA): LRRN	37 342264	er (concave, convex, none). <u> </u>	91 Datum: NAD 83			
Soil Map Unit Name: Nolichucky very st			<u></u>			
Are climatic / hydrologic conditions on the sit			_			
Are Vegetation, Soil, or Hydro	ology significantly distur	bed? Are "Normal Circur	nstances" present? Yes No			
Are Vegetation, Soil, or Hydro	ology naturally problema	atic? (If needed, explain	any answers in Remarks.)			
SUMMARY OF FINDINGS – Attac	h site map showing san	npling point locations, t	ransects, important features, etc.			
	/es No/ /es No/	Is the Sampled Area				
Hydric Soil Present? Y Wetland Hydrology Present? Y	'es No	within a Wetland?	Yes No			
Remarks:	es 110 <u> </u>					
Remarks.						
HYDROLOGY						
Wetland Hydrology Indicators:		Secor	ndary Indicators (minimum of two required)			
Primary Indicators (minimum of one is requ	ired: check all that apply)		urface Soil Cracks (B6)			
Surface Water (A1)	True Aquatic Plants (parsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Od		rainage Patterns (B10)			
Saturation (A3)			loss Trim Lines (B16)			
Water Marks (B1)	Presence of Reduced		ry-Season Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction		rayfish Burrows (C8)			
Drift Deposits (B3)	Thin Muck Surface (0		aturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Rer		tunted or Stressed Plants (D1)			
Iron Deposits (B5)	отног (Ехріанії ії тког		Geomorphic Position (D2)			
Inundation Visible on Aerial Imagery (E	37)		hallow Aquitard (D3)			
Water-Stained Leaves (B9)	,		Microtopographic Relief (D4)			
Aquatic Fauna (B13)			AC-Neutral Test (D5)			
Field Observations:						
	No Depth (inches):					
Water Table Present? Yes	No Depth (inches):					
	No Depth (inches):		ogy Present? Yes No			
(includes capillary fringe)		_				
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, pre	vious inspections), if available:				
Remarks:						
			!			

Sampling Point: W-Z3-UF	Sampling	Point:	W-Z3-	UP
-------------------------	----------	--------	-------	----

Troo Stratum (Plot size: 30'	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tiee Stratum (Fibt Size)		Species?		Number of Dominant Species
1. Acer saccharum	90		FACU	That Are OBL, FACW, or FAC:1 (A)
2				
3				Total Number of Dominant Species Across All Strata: 2 (B)
				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
	90	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 45		total cover:		OBL species x 1 =
451	20 /0 01	iolai covei.		FACW species x 2 =
Sapinig/Situb Stratum (Flot size)	60		- 40	
1. Linderia benzoin	60		FAC	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
<u> </u>				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
9.		-		2 - Dominance Test is >50%
·	00	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 30				4 - Morphological Adaptations ¹ (Provide supporting
<u></u>	20% 01	total cover:	12	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5				Problematic Hydrophytic Vegetation ¹ (Explain)
1				1 Toblematic Hydrophytic Vegetation (Explain)
2				
3				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Woody plants evaluding vines 2 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
7				height.
8				
•				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
	0	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:0	20% of	total cover:	0	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2				
3				
4				Hydrophytic
5.				Hydrophytic Vegetation
·	0	= Total Cov		Present? Yes No
50% of total cover: 0		total cover:	_	
		total cover.		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: W-Z3-UP

Profile Desc	ription: (Describe t	to the depth	needed to docun	nent the i	ndicator	or confirm	the absence	e of indicat	ors.)		
Depth	Matrix		Redo	x Features	3						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture		Remar	ks	
0-8	10YR 2/2	100					L	_			
								_			
					-			_			
			_		-						
1= 0.0			and the second Marketin MC		010		21	DI Danielli	NA .NA-1		
Hydric Soil I	ncentration, D=Depl	etion, RM=R	educed Matrix, MS	s=Masked	Sand Gra	ains.		PL=Pore Lir			oile ³ :
-			David Overs	(07)			iliui			-	JIIS .
Histosol			Dark Surface		oo (CO) /N	II D A 447	440\	2 cm Muck			
Black His	ipedon (A2)		Polyvalue BeThin Dark Su				146)	Coast Prairi		10)	
	n Sulfide (A4)		Loamy Gleye			47, 140)		(MLRA 1 Piedmont F		sile (F10)	
	Layers (A5)		Depleted Mat		1 2)			(MLRA 1) (1 1 <i>3)</i>	
	ck (A10) (LRR N)		Redox Dark \$		·6)			Very Shallo		ace (TF12)	١
	Below Dark Surface	e (A11)	Depleted Dar					Other (Expl			,
	rk Surface (A12)		Redox Depre					(-,	
	ucky Mineral (S1) (L	RR N,	Iron-Mangane			LRR N,					
	147, 148)		MLRA 130								
Sandy G	leyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	6, 122)	³ lı	ndicators of I	nydrophytic	vegetation	and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	. 8) \	vetland hydr	ology must l	be present	,
Stripped	Matrix (S6)		Red Parent M	faterial (F	21) (MLR	A 127, 147	') (ınless distur	bed or probl	ematic.	
	ayer (if observed):										
_{Туре:} <u>Со</u>	bble										
Depth (inc	_{hes):} <u>8"</u>		<u></u>				Hydric So	oil Present?	Yes	No _	✓
Remarks:	·						1 -				

Project/Site: MVP	City/County: Giles	Sampling Date: 04/14/2016				
Applicant/Owner: MVP	, , ,	State: VA Sampling Point: W-CD12				
	ator(s): HS,CW,AC Section, Township, Range: N/A					
Landform (hillslope, terrace, etc.): Slope						
The state of the s	Lat: 37.318644Long:80					
Soil Map Unit Name: 30D		NWI classification: None				
Are climatic / hydrologic conditions on the site ty	pical for this time of year? Yes No					
Are Vegetation, Soil, or Hydrolo	gy significantly disturbed? Are "Norma	I Circumstances" present? Yes No				
Are Vegetation, Soil, or Hydrolo		explain any answers in Remarks.)				
	site map showing sampling point location					
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area					
, , ,	Is the Sampled Area	Yes No				
	No within a Wetland?	res No				
Remarks: 0 !! 0 !	HGM: Riverine Water Type:	RPWWD				
Abutting S-OO14	71					
/ touting & COTT						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is require	d: check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)				
Saturation (A3)	 Oxidized Rhizospheres on Living Roots (C3) 	Moss Trim Lines (B16)				
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)		Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)				
Water-Stained Leaves (B9)		Microtopographic Relief (D4)				
Aquatic Fauna (B13)		FAC-Neutral Test (D5)				
Field Observations:	.,					
	Depth (inches):					
	Depth (inches):					
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): Wetland I	Hydrology Present? Yes No				
	toring well, aerial photos, previous inspections), if ava	ailable:				
Description						
Remarks:						

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201	Absolute			Dominance Test worksheet:		
ree Stratum (Plot size: 30')	% Cover	Species?	Status	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/E
			·	Prevalence Index worksheet:		
				Total % Cover of:	Multiply by:	
500/ /		= Total Cov		OBL species x		
50% of total cover: 0	20% of	total cover	:0	FACW species x		
apling/Shrub Stratum (Plot size: 15')	10					
Lindera benzoin	10		FAC	FAC species x		
				FACU species x		
				UPL species x	5 =	_
			<u> </u>	Column Totals: (A)	(B)
			<u> </u>	Prevalence Index = B/A =		
				Hydrophytic Vegetation Indica		
			·	1 - Rapid Test for Hydrophyt		
			·	✓ 2 - Dominance Test is >50%		
	10	= Total Cov	/or	3 - Prevalence Index is ≤3.0		
50% of total cover:5		total cover:		4 - Morphological Adaptation	ns¹ (Provide sup	portin
erb Stratum (Plot size: 5')	2070 01	total oover.		data in Remarks or on a	separate sheet)	1
Poa trivialis	80	~	FACW	Problematic Hydrophytic Ve	getation ¹ (Expla	ıin)
Galium aparine			FACU			
·		-	r <u>ACU</u>	¹ Indicators of hydric soil and wetl	and hydrology	must
·				be present, unless disturbed or p	roblematic.	
		· 	·	Definitions of Four Vegetation	Strata:	
·	-			Trae Woody plants avaluding	vince 2 in (7.6	om) c
				Tree – Woody plants, excluding more in diameter at breast heigh		
				height.	,, -3	
				Continue/Charle Manda de alondo		
				Sapling/Shrub – Woody plants, than 3 in. DBH and greater than		
0				m) tall.		(.
1.			·	Haule All bank account (account	-l.) -lt	
· ·	85	= Total Cov	/Or	Herb – All herbaceous (non-woo of size, and woody plants less th		ıraies
50% of total cover: <u>42.5</u>						
/oody Vine Stratum (Plot size: 15')		total oovo		Woody vine – All woody vines g	reater than 3.28	3 ft in
				height.		
·						
·		-				
						
			. ——	Hydrophytic		
·			<u> </u>	Vegetation		
		= Total Cov	_	Present? Yes	No	
50% of total cover:0	20% of	total cover	:0			
emarks: (Include photo numbers here or on a separate s	neet.)			•		

Profile Desc	ription: (Describe to	o the dept	h needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	k Features	3			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	7.5YR 3/1	70_	7.5YR 5/6	30	С	M/PL	SiCL	
10-18	10Y 4/1	80	7.5YR 5/6	20	С	M/PL	SiCL_	
¹ Type: C=Co	oncentration, D=Deple	etion RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil		50011, TOVI—	reduced Waths, We	z-Maskea	Ourid Or	unio.		ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(S7)				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel	. ,	ce (S8) (N	/ILRA 147.		coast Prairie Redox (A16)
Black Hi			Thin Dark Su				0	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			,,	Р	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		-,		 ·	(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S		6)		V	ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar	,	,			Other (Explain in Remarks)
	ark Surface (A12)	,	Redox Depre				· 	,
	lucky Mineral (S1) (L l	RR N,	Iron-Mangane			LRR N,		
	\ 147, 148)		MLRA 136		` , ,			
	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	86, 122)	³ Ind	icators of hydrophytic vegetation and
	tedox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6)		Red Parent M					less disturbed or problematic.
Restrictive I	_ayer (if observed):							
Type:								
	ches):		<u></u>				Hydric Soil	Present? Yes V No No
Remarks:	,							
rtomanto.								



Photograph Direction SE

Comments:		

Project/Site: MVP	City/County: Giles	Sampling Date: 04/11/2016
Applicant/Owner: MVP		State: VA Sampling Point: W-CD12-U
-	Section, Township, Range: N	·
	Local relief (concave, convex, nor	
	Lat: 37.318669° Long: -80	
Soil Map Unit Name: 30D		NWI classification: None
	ical for this time of year? Yes No	
	/significantly disturbed? Are "Normal	· · · · · · · · · · · · · · · · · · ·
Are Vegetation, Soil, or Hydrology		explain any answers in Remarks.)
	te map showing sampling point location	
	No Is the Sampled Area	
	No within a Wetland?	Yes No
Wetland Hydrology Present? Yes _ Remarks: Cowardin Code: UPLAND		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)	Surface Soil Clacks (B6) Sparsely Vegetated Concave Surface (B8)
Surface Water (A1) High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Sparsely vegetated concave surface (B6) Drainage Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16)
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)		Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)		Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5)
Field Observations:		The-ineutial rest (50)
	Depth (inches):	
	Depth (inches):	
Saturation Present? Yes No _		Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous inspections), if ava	ailable:
3 3	3 - , ,	
Remarks:		
l l		

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-CD12-UP

Tree Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:		
Tiee Stratum (Flot Size.	% Cover		·	Number of Dominant Species	4	
1			·	That Are OBL, FACW, or FAC:	1	(A)
2				Total Number of Dominant		
3				Species Across All Strata:	1	(B)
4				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC:	100	(A/B)
6						` ′
7				Prevalence Index worksheet:		
	0 _	= Total Cov	/er	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	i =	_
2				FACU species x 4	· =	_
3				UPL species x 5	i =	_
				Column Totals: (A)		
4				、 ,		_ ` '
5				Prevalence Index = B/A = _		_
6		-	· ——	Hydrophytic Vegetation Indicate	ors:	
7				1 - Rapid Test for Hydrophytic	c Vegetation	
8				✓ 2 - Dominance Test is >50%		
9		-		3 - Prevalence Index is ≤3.0 ¹		
2		= Total Cov		4 - Morphological Adaptations	s1 (Provide sup	portina
50% of total cover:0	20% of	total cover	:0	data in Remarks or on a se		,
Herb Stratum (Plot size: 5'				Problematic Hydrophytic Veg		in)
1. Poa trivialis	70		FACW_	1 Toblematic Hydrophytic vegi	etation (Expla	"",
2. Trifolium repens	5		FACU_	11 - 42 - 42		
3. Andropogon virginicus	5		FACU_	¹ Indicators of hydric soil and wetla be present, unless disturbed or pr		nust
4				Definitions of Four Vegetation S		
5				Deminions of Four Vegetation C	Juliata.	
6				Tree – Woody plants, excluding v		
7				more in diameter at breast height height.	(DBH), regard	ess of
			-	noight.		
8			· ——	Sapling/Shrub – Woody plants, e		
				than 3 in. DBH and greater than o m) tall.	r equal to 3.28	ft (1
10				m, tan.		
11	90		· ——	Herb – All herbaceous (non-wood		rdless
500% of total account 40		= Total Cov		of size, and woody plants less tha	in 3.28 ft tail.	
50% of total cover: 40	20% 01	total cover	<u> 10 </u>	Woody vine - All woody vines gro	eater than 3.28	ft in
Woody Vine Stratum (Plot size: 15')				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.)			1		

Depth	Matrix		needed to document the indicator or co			•	
(inches)	Color (moist)	%	Color (moist) % Type ¹ Lo	c ² Textu		Remarks	
8-0	10YR 5/6	100		SiL			
Type: C=Co	oncentration, D=Depl	letion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Locatio	on: PL=Pore Lini	ng, M=Matrix.	
Hydric Soil					Indicators for Pr		
Histosol	(A1)		Dark Surface (S7)		2 cm Muck (/	A10) (MLRA 1	47)
	oipedon (A2)		Polyvalue Below Surface (S8) (MLRA	147, 148)	Coast Prairie	, .	•
Black Hi			Thin Dark Surface (S9) (MLRA 147, 1		 (MLRA 14		
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)	_		odplain Soils	(F19)
	Layers (A5)		Depleted Matrix (F3)		(MLRA 13		
2 cm Mu	ick (A10) (LRR N)		Redox Dark Surface (F6)	_	Very Shallow	Dark Surface	e (TF12)
Depleted	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)	_	Other (Expla	in in Remarks)
	ark Surface (A12)		Redox Depressions (F8)				
Sandy M	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LRR	N,			
MLRA	A 147, 148)		MLRA 136)				
	Bleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 12		³ Indicators of hy		
	tedox (S5)		Piedmont Floodplain Soils (F19) (MLI		wetland hydro		
	Matrix (S6)		Red Parent Material (F21) (MLRA 12	7, 147)	unless disturb	ed or problem	atic.
Restrictive I	_ayer (if observed):						
Type: Ro			<u></u>				
Depth (inc	ches): <u>8"</u>			Hydric	Soil Present?	Yes	No 🗸
Remarks:							<u> </u>

Project/Site: MVP		City/C	ounty: Giles		Sampling Date: 08/29/2015	
Applicant/Owner: MVP					Sampling Point: W-MM10	
Investigator(s): A. Grech, A. Stott, M. Whitten Section, Township, Range: N/A						
Landform (hillslope, terrace, etc.): Va					Slope (%): 0-2%	
Subregion (LRR or MLRA): LRRN						
Soil Map Unit Name: Shottower-La						
Are climatic / hydrologic conditions on	the site typical for	r this time of year? Y	es No (I	f no, explain in R	emarks.)	
Are Vegetation, Soil, o					_	
Are Vegetation, Soil, o						
SUMMARY OF FINDINGS – A						
Hydrophytic Vegetation Present?	Voc. V	No	<u> </u>			
Hydric Soil Present?	Yes 🗸		Is the Sampled Area	Yes 🗸		
Wetland Hydrology Present?	Yes 🗸	No No	within a Wetland?	Yes	No	
Remarks:						
Cowardin Code: PEM; HGM: r	riverine; WT: I	RPWWD				
The wetland was revisited on	10/28/2019. Pi	resence of wetlar	nd hydrology, hydrop	hytic vegetati	on, and hydric soils was	
confirmed using the USACE E	MP Regional	Supplement delir	neation methodology		-	
	· ·		•			
HYDROLOGY						
Wetland Hydrology Indicators:			<u>, </u>	Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum of one	is required; check	all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)		True Aquatic Plants (I	B14)	Sparsely Ve	getated Concave Surface (B8)	
✓ High Water Table (A2)	۱	Hydrogen Sulfide Odd	or (C1)	Drainage Pa	tterns (B10)	
Saturation (A3)	<u>~</u> (Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim L	ines (B16)	
Water Marks (B1)	1	Presence of Reduced	I Iron (C4)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	!	Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)		Thin Muck Surface (C	27)	Saturation V	isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	(Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)	
Iron Deposits (B5)			-		Position (D2)	
Inundation Visible on Aerial Imag	gery (B7)		-	Shallow Aqu		
Water-Stained Leaves (B9)			-		aphic Relief (D4)	
Aquatic Fauna (B13)			<u> </u>	FAC-Neutral	Test (D5)	
Field Observations:						
		Depth (inches):				
		Depth (inches):			,	
Saturation Present? Yes_	No	Depth (inches):	Wetland Hy	drology Preser	nt? Yes V No	
(includes capillary fringe) Describe Recorded Data (stream gain	uge, monitoring w	ell, aerial photos, pre	I vious inspections), if avail	able:		
, ,	3	, , , , , , ,	, ,,			
Remarks:						

VEGETATION (Four Strata) – Use scientific names of plants.

/EGETATION (Four Strata) – Use scientific n		Sampling Point: W-MM10			
201	Absolute			Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species	
1				That Are OBL, FACW, or FAC: 6 (A)	
2				Total Number of Dominant	
3		· <u></u>		Species Across All Strata: 6 (B)	
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 100% (A/B)	
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
50% of total cover:0		= Total Cov		OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: 15')	20% 01	iolai covei		FACW species x 2 =	
				FAC species x 3 =	
1				FACU species x 4 =	
2			· ——	UPL species x 5 =	
3				Column Totals: (A) (B)	
4			· ——	()	
5			· ——	Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
8			-	✓ 2 - Dominance Test is >50%	
9	0	= Total Cov		3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: 0			_	4 - Morphological Adaptations ¹ (Provide supporting	
Herb Stratum (Plot size: 5')	2070 01	10101 00101	-	data in Remarks or on a separate sheet)	
1. Leersia oryzoides	50	~	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)	
2. Juncus effusus	10		FACW		
3. Persicaria pennsylvanica	10		FACW	¹ Indicators of hydric soil and wetland hydrology must	
4. Mentha spicata	10		FACW	be present, unless disturbed or problematic.	
5. Cyperus esculentes	10		FACW	Definitions of Four Vegetation Strata:	
6. Eupatorium perfoliatum	10		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or	
7			1 7 10 11	more in diameter at breast height (DBH), regardless of height.	
8			-	noight.	
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.			-		
	100	= Total Cov	/er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
50% of total cover:50		total cover			
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height.	
1				···-g····	
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-MM10

SOIL

Profile Desc	ription: (Describe t	o the dept	h needed to docun	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	K Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3"	10YR 3/2	100					SiL	
3-12"	10YR 4/2	90	7.5YR 4/6	10	С	M/PL	GrSiL	
	1011111/2		7.011(1/0		<u> </u>	IVI/I L		Defined OF
12+"								Refusal:CF
								
						· ——		
					-			
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indica	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (N	/ILRA 147,	148) C	oast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		P	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S	,	,			ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar		. ,		0	ther (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			LDD N		
	/lucky Mineral (S1) (L \ 147, 148)	KK N,	Iron-Mangane MLRA 136		es (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa		MIRA 13	86 122)	3Ind	icators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6)		Red Parent M					ess disturbed or problematic.
	Layer (if observed):		110011 0101111	iatoriai (i			, u	oss distarbed of problematic.
Type:								
Depth (in	ohoo):						Hydric Soil	Present? Yes V No No
							Tiyunc 3011	riesent: res No
Remarks:								

Wetland Photograph Page

Wetland ID W-MM10



Photograph Direction SE

Date: 08/29/2015

Comments: 2015 wetland delineation.



Photograph Direction NW

Date: 10/28/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP	City/County: Giles	Sampling Date: 08/29/2015				
Applicant/Owner: MVP		State: VA Sampling Point: W-MM10 upl				
Investigator(s): A. Grech, A. Stott, M. Whitten	• -					
Landform (hillslope, terrace, etc.): Valley bottom						
Subregion (LRR or MLRA): LRRN Lat:		480446 Datum: NAD 83				
Soil Map Unit Name: Frederick gravelly silt loam						
Are climatic / hydrologic conditions on the site typical for	•	(If no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology		Circumstances" present? Yes No				
Are Vegetation, Soil, or Hydrology						
SUMMARY OF FINDINGS – Attach site ma		explain any answers in Remarks.)				
		ins, transcots, important reatures, etc.				
Hydrophytic Vegetation Present? Yes	is the Sampled Area					
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	, within a wettana:	Yes No				
Remarks:						
HADBOTOCA						
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check		Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)				
	True Aquatic Plants (B14)	Surface Sur Gracks (B6) Sparsely Vegetated Concave Surface (B8)				
	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)				
		Moss Trim Lines (B16)				
	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)				
	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)		Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)				
Water-Stained Leaves (B9) Aquatic Fauna (B13)		Microtopographic Relief (D4) FAC-Neutral Test (D5)				
Field Observations:		TAC-Neutral Test (D3)				
_	Depth (inches):					
Water Table Present? Yes No	Depth (inches):					
		lydrology Present? Yes No_ 🗸				
(includes capillary fringe)		, , ,				
Describe Recorded Data (stream gauge, monitoring w	eli, aeriai pnotos, previous inspections), if ava	liable:				
Remarks:						
1						

Sampling Point: V	N-MM10 up	l
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Tree Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC:0 (A)
2				Total Number of Dominant
3				Species Across All Strata:1 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:0 (A/B)
6				That Are OBE, FACW, OF FAC.
				Prevalence Index worksheet:
7	0 :	Tatal Car		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	= Total Cov		OBL species x 1 =
4.51	20 /6 01	total cover		FACW species x 2 =
Caping/Ornab Ottatam (1 lot 3/26				FAC species x 3 =
1,				
2		-		FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
<u> </u>	0 :	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 0				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	2070 01	10101 00101		data in Remarks or on a separate sheet)
1. Dactylis glomerata	60	~	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Daucus carota	10			
3. Trifolium pratense	10	-	UPL	¹ Indicators of hydric soil and wetland hydrology must
4. Melilotus officinalis	10	-	FACU FACU	be present, unless disturbed or problematic.
		-	FACU_	Definitions of Four Vegetation Strata:
5. Cichorium intybus			F <u>ACU</u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Plantago lanceolata			<u>UPL</u>	more in diameter at breast height (DBH), regardless of
7. Solanum carolinense	5		F <u>ACU</u>	height.
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
	105	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 52.5	20% of	total cover	: 21	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in
				height.
1 2.				
3				
4				Hydrophytic
5				Vegetation No.
•		= Total Cov	_	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-MM10 upl

SOIL

Profile Desc	ription: (Describe t	o the depth	n needed to docum	ent the ir	ndicator o	or confirm	the absence	of indicate	ors.)		
Depth	Matrix			c Features	<u> </u>						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remark	(S	
0-4"	10YR 3/3	100					SiL				
4-12"	10YR 4/4	100					SiL				
12+"									Refusa	I: CF	
			_								
											_
¹ Type: C=C	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	=Masked	Sand Gra	ins.	² Location: P	L=Pore Lin	ing, M=Matı	ix.	
Hydric Soil	Indicators:						Indica	ators for P	roblematic	Hydric Soil	s³:
Histosol	(A1)		Dark Surface					cm Muck (A10) (MLR	A 147)	
	oipedon (A2)		Polyvalue Be				148) C		e Redox (A1	6)	
	stic (A3)		Thin Dark Su			47, 148)		(MLRA 14			
	en Sulfide (A4)		Loamy Gleye		- 2)		P		oodplain So	ils (F19)	
	d Layers (A5)		Depleted Mat	. ,	0)			(MLRA 13		(TE40)	
	ick (A10) (LRR N) d Below Dark Surface	. (Δ11)	Redox Dark S Depleted Dar						v Dark Surfa iin in Remai		
	ark Surface (A12)	5 (ATT)	Redox Depre					ziriei (Expia	iiii iii Neiliai	NS)	
	Mucky Mineral (S1) (L	RR N.	Iron-Mangane			RR N.					
	A 147, 148)	,	MLRA 136		· · · · · / (-	· · · · · · · · · · · · · · · · ·					
	Gleyed Matrix (S4)		Umbric Surfa	-	MLRA 130	6, 122)	³ Ind	licators of h	ydrophytic v	egetation ar	nd
Sandy F	Redox (S5)		Piedmont Flo	odplain Sc	oils (F19)	(MLRA 14	8) we	etland hydro	ology must b	e present,	
Stripped	l Matrix (S6)		Red Parent M	laterial (F2	21) (MLR	A 127, 147	') un	less disturb	ed or proble	ematic.	
Restrictive	Layer (if observed):										
Type:											
Depth (in	ches):						Hydric Soil	Present?	Yes	No	
Remarks:							1				

Project/Site: MVP		City/C	county: Giles		Sampling Date: 09/09/2015		
Applicant/Owner: MVP					Sampling Point: W-RR01B		
Investigator(s): Cook, Foster	r, Keyser						
Landform (hillslope, terrace, etc					Slope (%): 0		
Soil Map Unit Name: Chagrin		37.296330 Long: -80.494054 Datum: NAD8 NWI classification: None					
Are climatic / hydrologic condition							
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No		
Are Vegetation, Soil							
_					s, important features, etc.		
Hydrophytic Vegetation Prese	nt? Yes 🗸	No					
Hydric Soil Present?	Yes 🗸		Is the Sampled Area	Yes 🗸	, No.		
Wetland Hydrology Present?		No	within a Wetland?	res	No		
Remarks:							
Cowardin Code: PEM; H			•				
The wetland was revisite	d on 10/28/2019. P	resence of wetlar	nd hydrology, hydro <mark>i</mark>	ohytic vegeta	tion, and hydric soils was		
confirmed using the USA	CE EMP Regional	Supplement delir	neation methodology	′ .			
HYDROLOGY							
Wetland Hydrology Indicato					ators (minimum of two required)		
Primary Indicators (minimum o				Surface Soi			
Surface Water (A1)		True Aquatic Plants (egetated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od		_	atterns (B10)		
Saturation (A3)			• , ,	Moss Trim I			
Water Marks (B1)		Presence of Reduced			Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Bu			
Drift Deposits (B3)		Thin Muck Surface (C Other (Explain in Rer			/isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Iron Deposits (B5)	_	Other (Explain in Nei	naiks)		Stressed Plants (D1) c Position (D2)		
Inundation Visible on Aeri	al Imagery (R7)				` '		
Water-Stained Leaves (B)	= : : :				Aquitard (D3) ographic Relief (D4)		
Aquatic Fauna (B13)	5)			FAC-Neutra			
Field Observations:							
Surface Water Present?	Yes No	Depth (inches):	0				
Water Table Present?	Yes No No		6				
Saturation Present?	Yes No	Depth (inches):	0 Wetland H	ydrology Prese	nt? Yes ✓ No		
(includes capillary fringe)					165 115		
Describe Recorded Data (stre	am gauge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	lable:			
Remarks:							
Abutting creek/stream. S	mall unit of wetland	d, north/west of ro	ad mapped as part	of this wetlan	d. Wetland is abutting		
green briar branch creek	,which flows into sin	nking creek. Oth	er wetland names as	s W-RR01b	_		
Most of the wetland is ma	apped east of road						

VEGETATION (Four Strata) - Use scientific names of pla

Tree Stratum (Plot size: 30')

Sapling/Shrub Stratum (Plot size: 15') 1. Salix nigra

2. Cardemine rotundifolia 3. Lemna minor (aquatic) 5

5. Eleocharis obtusa 3 6. Fragaria virginiana 1

2. Iva frutescend 7

·	Absolute	Dominant	Indicator	Dominance Test work	chooti		
30')		Species?		Number of Dominant Sp That Are OBL, FACW, o	pecies	4	(A)
				Total Number of Domina Species Across All Stra		5	(B)
				Percent of Dominant Sp That Are OBL, FACW, o		80%	(A/B
				Prevalence Index work	ksheet:		
	0 :	= Total Cov	er	Total % Cover of:	M	lultiply by:	
50% of total cover: 0			_	OBL species	x 1 =		_
(Plot size: 15')				FACW species	x 2 =		_
	7		FACW_	FAC species	x 3 =		
	7		FACW_	FACU species	x 4 =		
				UPL species	x 5 =		_
			· ·	Column Totals:	(A)		(B)
				Prevalence Index	= B/A =		_
				Hydrophytic Vegetation	n Indicators	s:	
				1 - Rapid Test for H	lydrophytic √	/egetation	
				✓ 2 - Dominance Tes:	t is >50%		
	11	T	· 	3 - Prevalence Inde			
50% of total cover: 7		= Total Cov		3 - Prevalence Inde	ex is ≤3.0 ¹	(Provide su	oportir
50% of total cover:					ex is ≤3.0 ¹ adaptations ¹ (
:)	20% of		2.8	4 - Morphological A	ex is ≤3.0 ¹ daptations ¹ (s or on a separations)	arate sheet)
			2.8 F <u>ACW</u>	4 - Morphological A	ex is ≤3.0 ¹ daptations ¹ (s or on a separations)	arate sheet)
olia	20% of 50		FACW OBL	4 - Morphological A data in Remarks Problematic Hydrop 1 Indicators of hydric soil	ex is ≤3.0 ¹ daptations ¹ (s or on a separation) by tic Vegeta and wetlance	arate sheet; ation ¹ (Expla	ain)
olia	20% of5020		FACW OBL OBL	4 - Morphological A data in Remarks Problematic Hydrop Indicators of hydric soil be present, unless distu	ex is ≤3.0 ¹ daptations ¹ (s or on a sepandatic Vegetal) and wetland	arate sheet; ation ¹ (Expland d hydrology blematic.	ain)
:)	20% of 50 20 5 2		FACW OBL OBL FACU	4 - Morphological A data in Remarks Problematic Hydrop 1 Indicators of hydric soil	ex is ≤3.0 ¹ daptations ¹ (s or on a sepandatic Vegetal) and wetland	arate sheet; ation ¹ (Expland d hydrology blematic.	ain)
olia	20% of505		FACW OBL OBL FACU OBL	4 - Morphological A data in Remarks Problematic Hydrop Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e	ex is ≤3.0 ¹ daptations ¹ (s or on a sep- ohytic Vegeta I and wetland urbed or prob getation Str xcluding vine	arate sheet, ation (Explaid hydrology olematic.	must
olia	20% of 50 20 5 2		FACW OBL OBL FACU	4 - Morphological A data in Remarks Problematic Hydrop Indicators of hydric soil be present, unless distu Definitions of Four Ve	ex is ≤3.0 ¹ daptations ¹ (s or on a sep- ohytic Vegeta I and wetland urbed or prob getation Str xcluding vine	arate sheet, ation (Explaid hydrology olematic.	must
olia	20% of 50 20 5 2		FACW OBL OBL FACU OBL	4 - Morphological A data in Remarks Problematic Hydrog Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e more in diameter at breaheight. Sapling/Shrub – Wood than 3 in. DBH and great	ex is ≤3.0 ¹ daptations ¹ (s or on a sep- phytic Vegeta I and wetland bribed or prob getation Str xcluding vine ast height (D	arate sheet, ation (Explaid hydrology blematic. rata: es, 3 in. (7.6 BH), regard	must c cm) c lless o
olia	20% of 50 20 5 2		FACW OBL OBL FACU OBL	4 - Morphological A data in Remarks Problematic Hydrog Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e more in diameter at bresheight. Sapling/Shrub – Wood than 3 in. DBH and gream) tall.	ex is ≤3.0¹ daptations¹ (s or on a seption of the control of the	arate sheet, ation (Explaid hydrology olematic. rata: es, 3 in. (7.6 BH), regard cluding vines equal to 3.26	must compositions significantly displayed by sig
olia	20% of	total cover:	FACW OBL FACU OBL FACU OBL	4 - Morphological A data in Remarks Problematic Hydrop Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e more in diameter at bresheight. Sapling/Shrub – Wood than 3 in. DBH and gream) tall. Herb – All herbaceous (ex is ≤3.0¹ daptations¹ (s or on a seption of the control of the	arate sheet; ation¹ (Explaid hydrology olematic. ata: es, 3 in. (7.6 in) BH), regard cluding vines equal to 3.26 plants, regard	must compositions significantly displayed by sig
olia ttic)	20% of	total cover:	FACW OBL FACU OBL FACU OBL FACU OBL	4 - Morphological A data in Remarks Problematic Hydrop ¹Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e more in diameter at bresheight. Sapling/Shrub – Wood than 3 in. DBH and gream) tall. Herb – All herbaceous of size, and woody plants	ex is ≤3.0¹ daptations¹ (s or on a sep- ohytic Vegeta l and wetland urbed or prob getation Str xcluding vine ast height (D ly plants, excepte than or excepte (non-woody) ts less than 3	arate sheet, ation (Explaid hydrology blematic. ata: es, 3 in. (7.6 BH), regard cluding vines equal to 3.26 plants, regard 3.28 ft tall.	must cm) com) com) com) com) com) com) com)
50% of total cover: 40.5	20% of 50 20 5 2 3 1	total cover:	FACW OBL OBL FACU OBL FACU OBL FACU	4 - Morphological A data in Remarks Problematic Hydrop Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e more in diameter at bresheight. Sapling/Shrub – Wood than 3 in. DBH and gream) tall. Herb – All herbaceous (ex is ≤3.0¹ daptations¹ (s or on a sep- ohytic Vegeta l and wetland urbed or prob getation Str xcluding vine ast height (D ly plants, excepte than or excepte (non-woody) ts less than 3	arate sheet, ation (Explaid hydrology blematic. ata: es, 3 in. (7.6 BH), regard cluding vines equal to 3.26 plants, regard 3.28 ft tall.	must cm) com) com) com) com) com) com) com)
olia tic) 50% of total cover: 40.5	20% of	total cover:	FACW OBL FACU OBL FACU OBL FACU OBL	4 - Morphological A data in Remarks Problematic Hydrog ¹Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e more in diameter at bresheight. Sapling/Shrub – Wood than 3 in. DBH and gream) tall. Herb – All herbaceous of size, and woody plant Woody vine – All wood height.	ex is ≤3.0¹ daptations¹ (s or on a sep- ohytic Vegeta l and wetland urbed or prob getation Str xcluding vine ast height (D ly plants, excepte than or excepte (non-woody) ts less than 3	arate sheet, ation (Explaid hydrology blematic. ata: es, 3 in. (7.6 BH), regard cluding vines equal to 3.26 plants, regard 3.28 ft tall.	must cm) compared to the compa
olia stic) 50% of total cover: 40.5	20% of 50 20 5 2 3 1	total cover:	FACW OBL OBL FACU OBL FACU OBL FACU	4 - Morphological A data in Remarks Problematic Hydrop Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e more in diameter at bresheight. Sapling/Shrub – Wood than 3 in. DBH and gream) tall. Herb – All herbaceous of size, and woody plant Woody vine – All wood height. Hydrophytic Vegetation	ex is ≤3.0¹ daptations¹ (s or on a seption of the control of the	arate sheet, ation (Explaid hydrology blematic. ata: es, 3 in. (7.6 BH), regard cluding vines equal to 3.26 plants, regard 3.28 ft tall.	must cm) colless of s, less 8 ft (1
olia stic) 50% of total cover: 40.5	20% of 50 5 1 81 5 20% of 5	total cover:	FACU OBL FACU OBL FACU OBL FACU FACU	4 - Morphological A data in Remarks Problematic Hydrop Indicators of hydric soil be present, unless distu Definitions of Four Ve Tree – Woody plants, e more in diameter at bresheight. Sapling/Shrub – Wood than 3 in. DBH and gream) tall. Herb – All herbaceous of size, and woody plant Woody vine – All wood height. Hydrophytic Vegetation	ex is ≤3.0¹ daptations¹ (s or on a seption of the control of the	arate sheet, ation (Explaid hydrology blematic. ata: es, 3 in. (7.6 BH), regard cluding vines equal to 3.26 plants, regard 3.28 ft tall.	must cm) compared to the compa

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

Woody Vine Stratum (Plot size: ______)

1. Rosa multiflora 5

Mowed, impossible to determine grass species with seed he

Herb Stratum (Plot size: _ 1. Impatiens capensis

4. Trilobium repens

SOIL Sampling Point: W-RR01B

Profile Desc	cription: (Describe	to the dept	h needed to docum	nent the i	ndicator o	or confirm	the abs	ence of indicators.)
Depth	Matrix			x Feature:	-			
(inches) 0-2	Color (moist) 10YR 2/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	Textu Loar	
2-8	10YR 3/2	100					SaL	
8-16	2.5Y 4/3	100					SaL	
0-10	2.51 4/3	100					Sal	
	oncentration, D=Dep	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ins.		on: PL=Pore Lining, M=Matrix.
Hydric Soil							ı	Indicators for Problematic Hydric Soils ³ :
Histosol			Dark Surface				-	2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		-	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark	•	,		_	Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar				-	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (I	_RR N,		
	A 147, 148)		MLRA 13					3
	Gleyed Matrix (S4)		Umbric Surfa					³ Indicators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	Matrix (S6)		Red Parent N	/laterial (F	21) (MLR	A 127, 147	7)	unless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:			<u> </u>					
Depth (in	ches):						Hydric	Soil Present? Yes 🖊 No
Remarks:								

Wetland Photograph Page

Wetland ID W-RR01B



Photograph Direction NE

Date: 09/09/2015

Comments: 2015 wetland delineation.



Photograph Direction North

Date: 10/28/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP		County: Giles		Sampling Date: 09/09/2015				
Applicant/Owner: MVP					VA Sampling Point: W-RR01A, W-RR01B U			
Investigator(s): Cook, Foster, Ke	yser	Secti	on, Township, Range: N	₁ /A				
Landform (hillslope, terrace, etc.): Hi			Local relief (concave, convex, none): None Slope (%): 20					
Subregion (LRR or MLRA): LRRN		•						
Soil Map Unit Name: Frederick gra		n, 25 to 35 percer	nt slopes	NWI classific				
Are climatic / hydrologic conditions or			4					
Are Vegetation, Soil,								
Are Vegetation, Soil,				explain any answe				
SUMMARY OF FINDINGS –	Attach site m	iap snowing san	npling point location	ons, transects	s, important features, etc.			
Hydrophytic Vegetation Present? Yes			Is the Sampled Area					
Hydric Soil Present?	Yes	4	within a Wetland?	Yes	No			
Wetland Hydrology Present? Remarks:	Yes	No						
HYDROLOGY								
Wetland Hydrology Indicators:					ators (minimum of two required)			
Primary Indicators (minimum of one	-		(5.4.4)	Surface Soil				
Surface Water (A1)		True Aquatic Plants			getated Concave Surface (B8)			
High Water Table (A2) Saturation (A3)		Hydrogen Sulfide Od	res on Living Roots (C3)	Drainage Pa				
Water Marks (B1)		Presence of Reduce	-		Water Table (C2)			
Sediment Deposits (B2)			on in Tilled Soils (C6)	Crayfish Bur				
Drift Deposits (B3)		Thin Muck Surface (/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Rei	marks)	Stunted or S	Stressed Plants (D1)			
Iron Deposits (B5)				Geomorphic	Position (D2)			
Inundation Visible on Aerial Ima	ıgery (B7)				allow Aquitard (D3)			
Water-Stained Leaves (B9)				· -	aphic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutral	l Test (D5)			
Field Observations: Surface Water Present? Yes	No. V	Depth (inches):						
		Depth (inches):						
		Depth (inches):		Hydrology Preser	nt? Yes No			
(includes capillary fringe)	NO	_ Deptit (inches)	Wetland	hydrology Fresei	it: lesNo			
Describe Recorded Data (stream ga	uge, monitoring v	well, aerial photos, pre	evious inspections), if ava	ailable:				
Remarks:								
None								

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30')			Status	Number of Dominant Species
1. Carya glabra	15	V	FACU	That Are OBL, FACW, or FAC: 2 (A)
2. Tsuga canadensis	8		FACU	(1)
3. Acer saccharum	15		· ·	Total Number of Dominant
			FACU_	Species Across All Strata:7 (B)
4. Juglans nigra	20		<u>UPL</u>	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 29% (A/B)
6				
7				Prevalence Index worksheet:
	58	= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 29				OBL species x 1 =
	20 /6 01	total cover.	11.0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15')	20		E4 01 1	FAC species x 3 =
1. Cercis canadensis	20		FACU_	·
2				FACU species x 4 =
3				UPL species x 5 =
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				3 - Prevalence Index is ≤3.0 ¹
	20	= Total Cov	er	
50% of total cover:10				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
Tiorb Ottatam (Flot Size:				Problematic Hydrophytic Vegetation ¹ (Explain)
1				
2				¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Definitions of Four Vegetation Strata.
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
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
	0	= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 0		total cover:		Γ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ
Woody Vine Stratum (Plot size: 15')	2070 01	total oover.		Woody vine – All woody vines greater than 3.28 ft in
yvoody vine Stratum (Flot Size)	12	~	540	height.
1. Lonicera japonica			<u>FAC</u>	
2. Parthenocissus quinquefolia	4		<u>FACU</u>	
3. Smilax rotundifolia	5		FAC	
4. Hedera helix	5	✓	FACU	
5.				Hydrophytic Vegetation
<u>.</u>	26	= Total Cov		Present? Yes No
50% of total cover: 13		total cover:		
		total cover.	<u> </u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: W-RR01A, W-RF

SOIL

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the i	ndicator	or confirm	the absence	e of indicato	ors.)		
Depth	Matrix			x Features	_						
(inches)	Color (moist)	<u></u> %	Color (moist)	%	Type ¹	Loc ²	Texture		Remark	S	-
0-10	10YR 2/2						CL				
>10									Bedro	ck	
	-							_			-
											-
											.
											-
							-				-
											.
					-						-
											-
	oncentration, D=Depl	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location:	PL=Pore Lini	ng, M=Matri	X.	
Hydric Soil				(0=)						Hydric Soils ³ :	
Histosol			Dark Surface		, 			2 cm Muck (
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie		6)	
Black Hi			Thin Dark Su			47, 148)		(MLRA 14		I- (F40)	
	n Sulfide (A4)		Loamy Gleye	,	- 2)		_	Piedmont Flo		ls (F19)	
	Layers (A5)		Depleted Mar	, ,	0)			(MLRA 13		(TE40)	
	ck (A10) (LRR N) Below Dark Surface	(//11)	Redox Dark S Depleted Dar					Very Shallow Other (Expla			
	ark Surface (A12)	(A11)	Redox Depre				_	Otriei (Expia	III III Neman	NS)	
	lucky Mineral (S1) (L	RR N	Iron-Mangan			RRN					
	147, 148)	,	MLRA 13		75 (1 12) (1						
	leyed Matrix (S4)		Umbric Surfa		MLRA 13	6. 122)	³ lr	ndicators of h	vdrophytic v	egetation and	
	edox (S5)		Piedmont Flo					vetland hydro		-	
-	Matrix (S6)		Red Parent N					ınless disturb			
	ayer (if observed):		_		, (1				
Type: Be											
, , <u> </u>	ches): 10		_				Hydric Sc	oil Present?	Yes	No 🗸	
Remarks:			_				11,4				-
Remarks.											

Project/Site: MVP	City/Cour	City/County: Montgomery Sampling		
Applicant/Owner: MVP		State: VA	· -	
Investigator(s): E. Foster, S. Ryan, A. Carrano Section, Township, Range: N/A				
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 5				
Subregion (LRR or MLRA): LRR N		Long: -80.367493		
Soil Map Unit Name: 11B - Duffield-Ernest complex, 2 to 7 percent slopes NWI classification: None				
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology significantly disturbed?				
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No No Is the Sampled Area				
_ , , , ,	No.	the Sampled Area		
Wetland Hydrology Present? Yes _		thin a Wetland? Yes	No	
Demonitor		Water Type: RPWWD		
Remarks: Cowardin Code: PEM HGM: Riverine Water Type: RPWWD Rain in past 24 hours. Very wet summer season. Abuts S-IJ52.				
Hair in past 24 hours. Very wet summer season. Abuts 0 1002.				
HYDROLOGY				
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)			oil Cracks (B6)	
Surface Water (A1) True Aquatic Plants (B14)			/egetated Concave Surface (B8)	
. ,	High Water Table (A2) Hydrogen Sulfide Odor (C1)		Patterns (B10)	
Saturation (A3) V Oxidized Rhizospheres on Living Roots (C3)			Lines (B16)	
Water Marks (B1) Presence of Reduced Iron (C4)			on Water Table (C2)	
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6)			Burrows (C8)	
Drift Deposits (B3) Thin Muck Surface (C7)			Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Other (Explain in Remarks)			Stressed Plants (D1)	
Iron Deposits (B5)			nic Position (D2)	
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)			quitard (D3)	
Water-Stained Leaves (B9)		Microtopo	Microtopographic Relief (D4)	
Aquatic Fauna (B13)		✓ FAC-Neut	ral Test (D5)	
Field Observations:				
	Depth (inches):			
	✓ Depth (inches):			
	Depth (inches):	Wetland Hydrology Pres	sent? Yes 🗸 No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

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

30'

Sapling/Shrub Stratum (Plot size: 15')

2. Dichanthelium clandestinum

5. Amphicarpaea bracteata

Woody Vine Stratum (Plot size: 15')

Tree Stratum (Plot size: __

Herb Stratum (Plot size: 1. Verbesina alternifolia

3. Impatiens capensis

4. Commelina communis

6. Tussilago farfara

___)

50% of total cover: ___0

50% of total cover: 62.5 20% of total cover: 25

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

50% of total cover: ___0 __ 20% of total cover: ___0

nes of	plants.		Sampling P	oint: W-IJ46	
bsolute			Dominance Test worksheet:		
6 Cover	Species?	Status	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/E
	-		Prevalence Index worksheet:		
			Total % Cover of:		
	= Total Cov	^		x 1 =	
20% 01	total cover			x 2 =	
			· —	x 3 =	
			· —	x 4 =	_
			' <u></u>	x 5 =	_
			Column Totals:		— (В
			Column rotals.	(A)	(B
		·	Prevalence Index = B/A	=	_
			Hydrophytic Vegetation India	cators:	
		· ——	1 - Rapid Test for Hydroph	ytic Vegetation	
			✓ 2 - Dominance Test is >50	1%	
0			3 - Prevalence Index is ≤3	.0 ¹	
	= Total Cov total cover	_	4 - Morphological Adaptati	ons ¹ (Provide su	pportir
20% 01	total cover		data in Remarks or on	a separate sheet)
30	/	FAC	Problematic Hydrophytic V	egetation ¹ (Expla	ain)
30		FAC			
30		FACW	¹ Indicators of hydric soil and w		must
15		FAC	be present, unless disturbed or	r problematic.	
15	-	FAC	Definitions of Four Vegetation	n Strata:	
		· · · · · ·	Tree - Woody plants, excludin	avines 3 in <i>(</i> 76	cm) c
5		F <u>ACU</u>	more in diameter at breast height.	•	,
			Sapling/Shrub – Woody plant than 3 in. DBH and greater tham) tall.		
	= Total Cov	0.5	Herb – All herbaceous (non-woof size, and woody plants less		ardles
20% of	total cover	: 25	Woody vine – All woody vines height.	greater than 3.2	8 ft in
	= Total Cov	^	Hydrophytic Vegetation Present? Yes	No	

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

Profile Desc	ription: (Describe t	o the dept	h needed to docun	nent the i	ndicator	or confirm	the absence	of indicate	ors.)		
Depth	Matrix		Redox	K Feature:	S						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Rema	arks	
0-2	10YR 2/2	100					SiL				
2-8	10YR 3/2	30					SiL				_
	10YR 4/2	60	10YR 3/6	10	С	M/PL	SiL				
											_
·											_
1- 0.0							21 (1				
Hydric Soil	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: Pl	_=Pore Lin itors for P			Soile ³ :
-			Dorle Curfoso	(07)				cm Muck (-	Julis .
Histosol	oipedon (A2)		Dark Surface Polyvalue Be		ca (S8) (N	II R A 147		oast Prairie	, .		
Black Hi			Tolyvalde Be		. , .		140) 0	(MLRA 14		110)	
	n Sulfide (A4)		Loamy Gleye			,,	Р	iedmont Fl		Soils (F19))
	d Layers (A5)		Depleted Mat		,			(MLRA 13		(,	
	ick (A10) (LRR N)		Redox Dark S		6)		V	ery Shallov		rface (TF1	12)
	d Below Dark Surface	e (A11)	Depleted Dar		. ,		0	ther (Expla	in in Rem	ıarks)	
	ark Surface (A12)		Redox Depre								
	lucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (LRR N,					
	A 147, 148)		MLRA 136	•	MI DA 40	0 400\	31		la a a la d'		
	Sleyed Matrix (S4)		Umbric Surfa					cators of h		-	
	ledox (S5) Matrix (S6)		Piedmont Flo Red Parent M					tland hydro ess disturb			nt,
	_ayer (if observed):		Ned Falentiv	iateriai (i	21) (WILK	A 121, 141) uiii	ess distuit	ed of pro	Diemanc.	
	parse fragments,	aravel									
Depth (inc		9.4.0.	<u> </u>				Hydric Soil	Drocont?	Yes_	✓ No	,
Remarks:	511e3). <u>-</u>						Tiyunic 30ii	r resent:	163_		' ——
	acila Campactad	biah ar	avel content								
Disturbed	soils. Compacted	, nign gra	avei content								



Photograph Direction North

Comments:		

Project/Site: MVP		City/C	ounty: Montgomery		Sampling Date: 08/10/2016	
Applicant/Owner: MVP			,		Sampling Point: W-IJ46 UP	
Investigator(s): E. Foster, S. Ryan	, A. Carrano	on, Township, Range: N/	<u> </u>			
Landform (hillslope, terrace, etc.): Hill					Slope (%): 5-10	
Subregion (LRR or MLRA): LRR N						
Soil Map Unit Name: 24D - Jefferson						
Are climatic / hydrologic conditions on t						
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	oresent? Yes No	
Are Vegetation, Soil, or	Hydrology	naturally problema	atic? (If needed, e	xplain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – A	ttach site m	ap showing sam	pling point location	ns, transects	s, important features, etc.	
Hydrophytic Vegetation Present?	Yes	No. 🗸				
Hydric Soil Present?	Yes		Is the Sampled Area	V = =	No	
Wetland Hydrology Present?		No 🗸	within a Wetland?	Yes	No	
Remarks: Cowardin Code: UF			Water Type:			
Cowardin Code. Of	LAND	i iGivi.	water Type.			
Mowed field/driveway						
wowed held/driveway						
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum of one is	required; check	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 Ode	or (C1)	Drainage Pa	itterns (B10)	
Saturation (A3)	'	Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim L	ines (B16)	
Water Marks (B1)	!	Presence of Reduced	I Iron (C4)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	!	Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)		Thin Muck Surface (C			isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	'	Other (Explain in Ren	narks)		tressed Plants (D1)	
Iron Deposits (B5)					Position (D2)	
Inundation Visible on Aerial Image	ery (B7)			Shallow Aqu		
Water-Stained Leaves (B9)				Microtopographic Relief (D4) FAC-Neutral Test (D5)		
Aquatic Fauna (B13)				FAC-Neutral	Tilest (D5)	
Field Observations: Surface Water Present? Yes	No. V	Danth (inch so)				
Surface Water Present? Yes	No	Depth (inches):				
	_					
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Preser	nt? Yes No	
Describe Recorded Data (stream gauge	ge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:		
Pomorko:						
Remarks:						

EGETATION (Four Strata) – Use scientific na	Absolute	Dominant	Indicator	Sampling Point: W-IJ-	10 01
<u>Free Stratum</u> (Plot size:30')		Species?		Number of Dominant Species	
Juglans nigra	30	V	FACU	That Are OBL, FACW, or FAC: 2	(A)
<u>. </u>	-			Total Number of Dominant Species Across All Strata: 7	(D)
s 1.				Species / toross / till otrata.	(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 29	(A/B)
5				Prevalence Index worksheet:	
•	30	= Total Cov		Total % Cover of: Multiply	by:
50% of total cover: 15		total cover:		OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: 15')	20 /6 01	total cover.		FACW species x 2 =	
Eleagnus umbellata	10	✓	FACU	FAC species x 3 =	
Rubus phoenicolasius	12	<u> </u>	FACU	FACU species x 4 =	
- Trabado princonacido			r <u>ACU</u>	UPL species x 5 =	
1				Column Totals: (A)	(B)
5				Prevalence Index = B/A =	
S				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegeta	tion
3				2 - Dominance Test is >50%	
9				3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: 11		= Total Cov total cover:		4 - Morphological Adaptations ¹ (Provide	de supporting
Herb Stratum (Plot size: 5')	20% 01	total cover.		data in Remarks or on a separate s	sheet)
Microstegium vimineum	20	/	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
Trifolium repens	5		FACU		
Poa pratensis	20		FACU	¹ Indicators of hydric soil and wetland hydro	ology must
Coleataenia rigidula	30		FACW	be present, unless disturbed or problemati	C.
Tridens flavus	30	<u> </u>	FACU	Definitions of Four Vegetation Strata:	
5.				Tree – Woody plants, excluding vines, 3 in	
7.				more in diameter at breast height (DBH), re height.	egardless of
3.					
9				Sapling/Shrub – Woody plants, excluding than 3 in. DBH and greater than or equal to	
10				m) tall.	
11				Herb – All herbaceous (non-woody) plants	regardless
	105	= Total Cov	er	of size, and woody plants less than 3.28 ft	
50% of total cover: <u>52.5</u>	20% of	total cover	21	Manda di Man	- 0.00 (t i -
Noody Vine Stratum (Plot size:15')				Woody vine – All woody vines greater tha height.	n 3.28 π in
l. <u> </u>					
2					
3					
4				Hydrophytic	
-				Vegetation	

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

50% of total cover: ___

USDA lists four subspecies of P. rigidulum, with variable wetland status. Habitat suggests this specimen prefers drier soils (i.e. P. rigidulum var. combsii, NOT LISTED or P. rigidulum var. pubescens, FACU). However, sample not identified to subspecies and therefore not included in dominance test calculations.

= Total Cover 20% of total cover:_

Present?

0

No 🗸

Depth	Matrix		needed to document the indicator or c Redox Features			•	
(inches)	Color (moist)	%	Color (moist) % Type ¹ Lo		ture	Remarks	
0-6	10YR 4/4	100		S	<u>iL</u>		
	•						
	-						
	•						
							
ype: C=Co	oncentration, D=Dep	etion, RM=Re	educed Matrix, MS=Masked Sand Grains.	² Loca	tion: PL=Pore Lin		
ydric Soil I	ndicators:				Indicators for P	roblematic H	ydric Soils³:
Histosol	(A1)		Dark Surface (S7)		2 cm Muck (A10) (MLRA	147)
_ Histic Ep	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	A 147, 148)	Coast Prairie	e Redox (A16)
_ Black Hi	stic (A3)		Thin Dark Surface (S9) (MLRA 147,	148)	(MLRA 14	l7, 148)	
_ Hydroge	n Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Flo	oodplain Soils	s (F19)
_ Stratified	l Layers (A5)		Depleted Matrix (F3)		(MLRA 13	86, 147)	
	ck (A10) (LRR N)		Redox Dark Surface (F6)			v Dark Surfac	
	Below Dark Surface	(A11) ∈	Depleted Dark Surface (F7)		Other (Expla	in in Remark	s)
	ark Surface (A12)		Redox Depressions (F8)				
	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LRR	Ν,			
	l 147, 148)		MLRA 136)		•		
	leyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 13		³ Indicators of h		
	edox (S5)		Piedmont Floodplain Soils (F19) (ML		wetland hydro		
	Matrix (S6)		Red Parent Material (F21) (MLRA 12	27, 147)	unless disturb	ed or problen	natic.
	ayer (if observed):						
	arse fragment, g	gravel fill	_				
Depth (ind	ches): <u>6</u>		<u>_</u>	Hydr	ic Soil Present?	Yes	_ No <u> </u>
emarks:				I			

Project/Site: MVP		City/County: Montgomery			Sampling Date: 06/15/2017
Applicant/Owner: MVP		State: VA			
		vk Section, Township, Range: N/A			
Landform (hillslope, terrace, etc.): H					Slope (%): 1
Subregion (LRR or MLRA): LRR N					Datum: NAD 83
Soil Map Unit Name: Caneyvill-Ope					
Are climatic / hydrologic conditions or	n the site typical for this	time of year? Yes	s <u> </u>	(If no, explain in R	emarks.)
Are Vegetation, Soil,	or Hydrologysi	gnificantly disturbe	ed? Are "Normal	Circumstances" p	present? Yes No
Are Vegetation, Soil,					
SUMMARY OF FINDINGS –					
Hydrophytic Vegetation Present?	Yes _ V No				
Hydric Soil Present?	Yes V No		Is the Sampled Area	V	No
Wetland Hydrology Present?	Yes V No		within a Wetland?	Yes	NO
Description	PEM HGN	L.	Water Type:	NRPWW	
Site occurs on gravel r survey area then flows overla				is from seep th	nat begins outside of
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one	is required; check all th	at apply)		Surface Soil	Cracks (B6)
✓ Surface Water (A1)	True	Aquatic Plants (B	14)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)	Hydro	ogen Sulfide Odor	(C1)	Drainage Pa	tterns (B10)
Saturation (A3)	Oxidi:	zed Rhizospheres	on Living Roots (C3)	Moss Trim L	ines (B16)
Water Marks (B1)	Prese	ence of Reduced I	ron (C4)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Rece	nt Iron Reduction	in Tilled Soils (C6)	Crayfish Bur	rows (C8)
Drift Deposits (B3)	Thin !	Muck Surface (C7	")	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other	r (Explain in Rema	arks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)				Geomorphic	Position (D2)
Inundation Visible on Aerial Ima	agery (B7)			Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)					aphic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:	•	0	5		
	No Dept		<u>5</u>		
	No Dept				
Saturation Present? Yes (includes capillary fringe)	No Dept	th (inches):0	Wetland H	lydrology Preser	nt? Yes <u> </u>
Describe Recorded Data (stream ga	auge, monitoring well, a	erial photos, previ	ous inspections), if ava	ilable:	
Demodes					
Remarks: Wetland is spring fed and adj	acent to gravel roa	d			
Victiana is spring rea and adj	accin to graver roa	u			

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-AD4

Troo Stratum (Plot cizo: 10'	Absolute	Dominant		Dominance Test worksheet:		
Tiee Stratum (Flot Size)	% Cover			Number of Dominant Species	0	
1				That Are OBL, FACW, or FAC:	3	(A)
2				Total Number of Dominant		
3				Species Across All Strata:	3	(B)
4				5 . (5		
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)
6				mat Are OBE, I AGW, OF I AG.		(٨/١٥)
				Prevalence Index worksheet:		
7	0 .	= Total Co	·	Total % Cover of:	Multiply by:	
50% of total cover:0				OBL species x	1 =	
Sapling/Shrub Stratum (Plot size: 10')	20 /6 01	total cover		FACW species x		
Caping/ornas etratam (1 lot size				FAC species x		
1						
2				FACU species x		
3				UPL species x		
4				Column Totals: (A)	_ (B)
5				Dravalance Index D/A		
6				Prevalence Index = B/A =		_
7				Hydrophytic Vegetation Indica		
				1 - Rapid Test for Hydrophyt	-	
8				✓ 2 - Dominance Test is >50%	,	
9	^			3 - Prevalence Index is ≤3.0	1	
500/ of total account 0		= Total Co	_	4 - Morphological Adaptation	ns ¹ (Provide sup	porting
50% of total cover: 0	20% 01	total cover	:	data in Remarks or on a s	separate sheet)	
TIEID Stratuiii (1 lot size.	15			Problematic Hydrophytic Veg	getation¹ (Expla	in)
1. Scirpus atrovirens	15		OBL		()	,
2. Tussilago farfara	10		F <u>ACU</u>	¹ Indicators of hydric soil and wetl	land hydrology r	nuet
3. Carex vulpinoidea	20		OBL	be present, unless disturbed or p		iiust
4. Juncus tenuis	25		FAC	Definitions of Four Vegetation		
_{5.} Carex Iurida	3		OBL			
6. Sphagnum sp.	10		FACW_	Tree – Woody plants, excluding		
7. Alisma subcordatum	10		OBL	more in diameter at breast height height.	t (DBH), Tegardi	622 OI
8						
9				Sapling/Shrub – Woody plants,		
				than 3 in. DBH and greater than m) tall.	or equal to 3.26	11 (1
				,		
11	03			Herb – All herbaceous (non-woo		rdless
500% of total account AG E	93	= Total Co	ver 196	of size, and woody plants less the	an 3.28 π tall.	
50% of total cover: 46.5	20% or	total cover	10.0	Woody vine – All woody vines g	reater than 3.28	ft in
Woody Vine Stratum (Plot size: 15')				height.		
1						
2						
3						
4				Hydrophytic		
5				Vegetation		
	0 .	= Total Co	ver .	Present? Yes	No	
50% of total cover:0	20% of	total cover	: 0			
Remarks: (Include photo numbers here or on a separate sh	neet.)					

Sampling Point: W-AD4

SOIL

Depth (inches) Matrix (inches) Redox Features Type¹ Loc² Texture Remarks 0-5 5YR 4/4 80 10YR 5/6 10 C M C M C 10YR 5/1 10 D M M C M C
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks 0-5 5YR 4/4 80 10YR 5/6 10 C M C
10YB 5/1 10 D M
·
,
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147)
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks)
Thick Dark Surface (A12) Redox Depressions (F8)
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,
MLRA 147, 148) MLRA 136)
Sandy Gleyed Matrix (S4) — Umbric Surface (F13) (MLRA 136, 122) — Umbric Surface (F13) (MLRA 136, 122) — Sandy Gleyed Matrix (S4) — Umbric Surface (F13) (MLRA 136, 122) — Sandy Gleyed Matrix (S4) — Umbric Surface (F13) (MLRA 136, 122) — Sandy Gleyed Matrix (S4) — Umbric Surface (F13) (MLRA 136, 122) — Sandy Gleyed Matrix (S4) — Umbric Surface (F13) (MLRA 136, 122) — Sandy Gleyed Matrix (S4) — Umbric Surface (F13) (MLRA 136, 122) — Umbric Surface (F13) (MLRA 136, 122)
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic.
Stripped Matrix (S6)
Type: High coarse frag content
·· —
Remarks: Soil is >60% clay. Poorly drained. Wetland soil pit occurs on edge of gravel road. Compacted soils with gravel road
material present.

Wetland ID _____ Date ____



Photograph Direction West

Comments:		

Project/Site: MVP	City/County:	City/County: Montgomery		
Applicant/Owner: MVP			Sampling Point: W-AD4-UP	
Investigator(s): L.Canty, K. Gracie, R. Spar				
Landform (hillslope, terrace, etc.): Hillslope			Slope (%): 0	
Subregion (LRR or MLRA): LRR N		Long: -80.330134	Datum: NAD 83	
Soil Map Unit Name: Caneyvill-Opequon-Rock		_		
Are climatic / hydrologic conditions on the site typi	cal for this time of year? Yes	No (If no, explain i	n Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstance	s" present? Yes V No	
Are Vegetation, Soil, or Hydrology				
SUMMARY OF FINDINGS – Attach sit				
Hydrophytic Vegetation Present? Yes	No ls the			
Hydric Soil Present? Yes	No.	Sampled Area	No	
Wetland Hydrology Present? Yes	No within	a Wetland? Yes	NO	
Remarks: Cowardin Code: UPLAND	.	Water Type:		
Sampling point is on gravel road.	. Topsoil has been removed,	compacted and road bas	se material added to surface.	
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Inc	dicators (minimum of two required)	
Primary Indicators (minimum of one is required;	check all that apply)	<u></u>	Soil Cracks (B6)	
Surface Water (A1)	True Aquatic Plants (B14)		Vegetated Concave Surface (B8)	
High Water Table (A2)	Hydrogen Sulfide Odor (C1)		Patterns (B10)	
Saturation (A3)	Oxidized Rhizospheres on Liv		n Lines (B16)	
Water Marks (B1)	Presence of Reduced Iron (C-	1) Dry-Seas	on Water Table (C2)	
Sediment Deposits (B2)	Recent Iron Reduction in Tille	d Soils (C6) Crayfish E	Burrows (C8)	
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation	n Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted o	r Stressed Plants (D1)	
Iron Deposits (B5)		Geomorp	hic Position (D2)	
Inundation Visible on Aerial Imagery (B7)		Shallow A	Aquitard (D3)	
Water-Stained Leaves (B9)			ographic Relief (D4)	
Aquatic Fauna (B13)		FAC-Neut	tral Test (D5)	
Field Observations:				
	Depth (inches):			
	Depth (inches):		. 4	
Saturation Present? Yes No _ (includes capillary fringe)	Depth (inches):	Wetland Hydrology Pres	sent? Yes No	
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous ins	pections), if available:		
Remarks:				
Remarks.				

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-AD4-UP	
t worksheet:	

20'	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species
1. Platanus occidentalis	15		<u>FACW</u>	That Are OBL, FACW, or FAC:1 (A)
2. Liriodendron tulipifera	15		FACU_	Total Number of Dominant
3				Species Across All Strata:6 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7 (A/B)
				That Ale OBL, FACW, of FAC. (A/B)
		-		Prevalence Index worksheet:
7	30	T-1-1-0		Total % Cover of: Multiply by:
50% of total cover: 15		= Total Cov		OBL species x 1 =
4.51	20% 01	total cover:		FACW species x 2 =
Sapinig/Stridb Stratum (1 lot size	-		- 4011	
1. Ailanthus altissima	5		F <u>ACU</u>	FAC species x 3 =
2. Cercis canadensis	5		F <u>ACU</u>	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
_		= Total Cov	_	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:5	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')				Problematic Hydrophytic Vegetation¹ (Explain)
1. Solidago canadensis	15		F <u>ACU</u>	Problematic Hydrophytic Vegetation (Explain)
2. Trifolium repens	5	~	FACU	4
3				¹ Indicators of hydric soil and wetland hydrology must 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				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
	20	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 10		total cover:		
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height.
1				neight.
		-		
3				
4		-		Hydrophytic
5				Vegetation
		= Total Cov	_	Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate sl	heet.)			

Profile Desc	ription: (Describe to	o the depti	n needed to docun	nent the i	ndicator	or confirm	the absence	of indicate	ors.)		
Depth	Matrix		Redox	k Features	3						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarl	KS	
0-4	10YR 3/4	100					С				
4-5	10YR 3/6	90	10YR 5/6	10		M					
<u>4-5</u>	101113/0	90	101113/0			IVI		-			
						-					
			-		-						
						• •		-			
			_								
¹Type: C=Co	oncentration, D=Deple	etion RM-I	Reduced Matrix MS		Sand Gr	ains	² Location: Pl	-Pore Lini	ing M-Mat	riy	_
Hydric Soil		Juon, min-	reduced Matrix, Me	J-Maskea	Odrid Oi	airio.				Hydric Soi	ils³:
_			Dork Surface	(07)				cm Muck (•	
Histosol	oipedon (A2)		Dark Surface Polyvalue Be		oo (CO) (N	AI DA 147		oast Prairie	, .	•	
			Thin Dark Su				140) C	MLRA 14)	•	10)	
Black Hi	en Sulfide (A4)					147, 140)	Р	iedmont Flo		ilo (E10)	
	d Layers (A5)		Loamy Gleye Depleted Mat		F2)		<u> </u>	(MLRA 13		лі 5 (Г 19)	
	ick (A10) (LRR N)		Redox Dark S		·6)		\/			ace (TF12)	
	d Below Dark Surface	(A11)	Depleted Dar	•	,			ther (Expla		. ,	
	ark Surface (A12)	(Д11)	Redox Depre				_ 0	illei (Expia	iii iii ixeiiia	iko)	
	fucky Mineral (S1) (L l	RR N	Iron-Mangane			IRRN					
	147, 148)	ixix i v ,	MLRA 136		53 (1 12 <i>)</i> (LIXIX IV,					
	Gleyed Matrix (S4)		Umbric Surfa		MIRA 13	86 122)	3Ind	icators of h	vdrophytic	vegetation a	and
	Redox (S5)		Piedmont Flo					tland hydro		-	anu
	Matrix (S6)		Red Parent M					less disturb			
	Layer (if observed):		Red r drent iv	iatoriai (i z	21) (III 2 1)		, u	icoo diotarb	ca or probr	omatio.	
	gh coarse frag co	ntent									
	_						11	D	V	NI -	/
Depth (inc	cnes): <u> </u>		<u> </u>				Hydric Soil	Present?	Yes	No	
Remarks:	l mit in lanatad in .		- d								
Opiana soi	l pit is located in (graverio	au								

Project/Site: MVP	City/County: Montgomery Sampling Date: 08/25/2					
Applicant/Owner: MVP	•	Stat				
Investigator(s): D. Mccullough, D Hadersbeck				· · · —		
Landform (hillslope, terrace, etc.): Slope				Slope (%): 1		
Subregion (LRR or MLRA): LRRN La				Datum:		
Soil Map Unit Name: McGary and Purdy soils		N				
Are climatic / hydrologic conditions on the site typical						
Are Vegetation, Soil, or Hydrology						
Are Vegetation, Soil, or Hydrology						
SUMMARY OF FINDINGS – Attach site						
		pinig point locations, i		inportant reatures, etc.		
Hydrophytic Vegetation Present? Yes		Is the Sampled Area				
Hydric Soil Present? Yes	No	within a Wetland?	Yes	No		
Wetland Hydrology Present? Yes	No					
Remarks: Cowardin Code:PEM; HGM: slope; WT:R	D\Λ/\Λ/ N I					
The wetland was revisited on 10/29/2019.		d hydrology, hydronhyti	c vegetation	and hydric soils was		
confirmed using the USACE EMP Region			c vegetation	, and flydric solis was		
Committee using the OSACE Livil Region	ai Supplement delin	eation methodology.				
HYDROLOGY						
Wetland Hydrology Indicators:		Seco	ndary Indicator	s (minimum of two required)		
Primary Indicators (minimum of one is required; che	eck all that apply)		Surface Soil Cra	acks (B6)		
Surface Water (A1)	<u> </u>	Sparsely Vegeta	ated Concave Surface (B8)			
High Water Table (A2)	_ Hydrogen Sulfide Odo	r (C1) [Orainage Patter	ns (B10)		
Saturation (A3)	Oxidized Rhizospheres	s on Living Roots (C3) N	Moss Trim Line	s (B16)		
Water Marks (B1)	_ Presence of Reduced	Iron (C4) [Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction	in Tilled Soils (C6) (Crayfish Burrow	rs (C8)		
Drift Deposits (B3)	_ Thin Muck Surface (C7		Saturation Visib	le on Aerial Imagery (C9)		
	_ Other (Explain in Remain			ssed Plants (D1)		
Iron Deposits (B5)			Geomorphic Po			
Inundation Visible on Aerial Imagery (B7)			Shallow Aquitar			
Water-Stained Leaves (B9)			/licrotopograph			
Aquatic Fauna (B13)			AC-Neutral Te	st (D5)		
Field Observations:	Donth (in shoot)					
Surface Water Present? Yes No	Depth (inches): Depth (inches):					
Saturation Present? Yes No	Depth (inches):	Wetland Hydrol	ogy Present?	Yes No		
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, prev	ious inspections), if available:				
Remarks:						
Corresponds/overlaps partially with NWI F	PEM wetland					
Consopense of Chape partially many						

VEGETATION (Four Strata) – Use scientific names of plants

/EGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: W-NN06
201		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:2 (A)
2				
3				Total Number of Dominant Species Across All Strata: 2 (B)
4			·	Openies Across All Ottata.
5		-		Percent of Dominant Species That Are OBL_FACW_or_FAC: 100 (A/B)
6				That Are OBL, FACW, or FAC: (A/B)
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')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4 5.				(, (, ,
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9	0			3 - Prevalence Index is ≤3.0 ¹
50% of total cover:0		= Total Cov	_	4 - Morphological Adaptations ¹ (Provide supporting
<u></u>	20% 01	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5') 1. Carex Iurida	40	~	EACW.	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Juncus effusus	30		FACW	
3. Vernonia noveborensis	5		FACW_	¹ Indicators of hydric soil and wetland hydrology must
·		-	FACW_	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				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
77.		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>37.5</u>	<u>)</u> 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
1		= Total Cov	_	Present? Yes V No
50% of total cover:0		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 confirn	n the absen	ce of indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	<u>Remarks</u>
0-4	10 YR 3/2	96	5 YR 5/8	4	<u>C</u>	M	SiL	
4-10	10 YR 3/1	90	5 YR 4/6	10	С	M	SiL	
10-18	10 YR 3/1	93	5 YR 5/8	7	С	M	SiL	
							-	
				-				
						. ——		
				-				
1Type: C=C	oncentration, D=Depl	etion RM-	-Reduced Matrix MS	S-Masko	d Sand Gr	aine	² l ocation:	PL=Pore Lining, M=Matrix.
Hydric Soil		etion, ixivi-	-reduced Matrix, Mc	J-IVIASKE	u Sanu Oi	airis.		licators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ace (S8) (N	/ILRA 147,	148) _	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mar		- 0'			(MLRA 136, 147)
	ick (A10) (LRR N) d Below Dark Surface	(//11)	Redox Dark S Depleted Dar					Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ark Surface (A12)	: (A11)	Redox Depre					Other (Explain in Remarks)
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,		
	A 147, 148)	•	MLRA 13		` / `	•		
-	Gleyed Matrix (S4)		Umbric Surfa					Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	Matrix (S6)		Red Parent N	/laterial (F	⁻ 21) (MLR	A 127, 147	7)	unless disturbed or problematic.
	Layer (if observed):							
Type:							l .	
	ches):						Hydric S	oil Present? Yes 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.

Project/Site: MVP				City/0	County: Mont	gomery		_ Sampling Date: 08	3/25/2015	
Applicant/Owner: MVP					-		State: VA	Sampling Point:	NWI-NN1-Up	
Investigator(s): D. Mccullou	ugh, D H	adersbeck	, K. Larser							
Landform (hillslope, terrace, e									(%): 1	
Subregion (LRR or MLRA): L										
Soil Map Unit Name:										
Are climatic / hydrologic condi										
· · · · · · · · · · · · · · · · · · ·				-						
Are Vegetation, Soil _	, or H	lydrology	significa	ıntly distu	rbed? A	re "Norma	Circumstances"	present? Yes	No	
Are Vegetation, Soil								rers in Remarks.)		
SUMMARY OF FINDIN	GS – At	tach site r	nap show	ing sar	npling poir	t location	ons, transect	s, important fea	tures, etc.	
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?		Yes Yes Yes	No /		Is the Samp		Yes	No		
Remarks:										
Cowardin Code: HGM: WT: Upland point located or	ı hillside									
Wetland Hydrology Indicat	ors.						Secondary India	cators (minimum of tw	vo required)	
Primary Indicators (minimum		equired: che	rk all that an	alv)			Surface So		<u>ro requireay</u>	
Surface Water (A1)	Of Othe IS I	equired, che	True Aquat		(R14)		· 	egetated Concave Su	ırface (B8)	
High Water Table (A2)		-	Hydrogen S				Drainage P		mace (Bo)	
Saturation (A3)					res on Living R	oots (C3)	Moss Trim			
Water Marks (B1)			Presence of		_	(,		n Water Table (C2)		
Sediment Deposits (B2)		<u> </u>	='		on in Tilled Soi	ls (C6)	Crayfish Burrows (C8)			
Drift Deposits (B3)			Thin Muck	Surface (C7)		Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		_	Other (Exp	lain in Re	marks)		Stunted or	Stressed Plants (D1)		
Iron Deposits (B5)							Geomorphi	c Position (D2)		
Inundation Visible on Ae	_	ry (B7)					Shallow Aq			
Water-Stained Leaves (В9)							raphic Relief (D4)		
Aquatic Fauna (B13)					T		FAC-Neutra	al Test (D5)		
Field Observations:		🗸	5							
Surface Water Present?		No								
Water Table Present?		No								
Saturation Present? (includes capillary fringe)	Yes	No	_ Depth (inc	nes):		Wetland I	Hydrology Prese	ent? Yes	No	
Describe Recorded Data (str	eam gauge	e, monitoring	well, aerial p	hotos, pre	evious inspecti	ons), if ava	ilable:			
Remarks:										

Sampling I	Point:	NWI-I	NN1-	Up
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30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Descent of Descriptors Consider
5	-	-		Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
50% of total cover:0		= Total Cov		OBL species x 1 =
4.51	20% 01	total cover		FACW species x 2 =
Japinig/Ornab Ottatum (1 lot size				FAC species x 3 =
1				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		-		3 - Prevalence Index is ≤3.0 ¹
•		= Total Cov	_	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% of	total cover	. 0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')	45			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Trifolium repens	45		F <u>ACU</u>	: : : : : : : : : : : : : : : : :
2. Digitaria ischaemum			<u>UPL</u>	¹ Indicators of hydric soil and wetland hydrology must
3. Solanum carolinensis	5		F <u>ACU</u>	be present, unless disturbed or problematic.
4. Polygonum ssp.	2		F <u>ACU</u>	Definitions of Four Vegetation Strata:
5. Taraxacum officinale	5		F <u>ACU</u>	Trans. Was dead and a surfaction visus 2 is (7.0 cm) as
6. Festucas arundinacea	20		F <u>ACU</u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7. Plantago major	10		F <u>ACU</u>	height.
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
	107	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>53.5</u>	5_ 20% of	total cover	21.4	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
	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.)			

SOIL Sampling Point: NWI-NN1-Up

Profile Desc	ription: (Describe t	to the depth	needed to docun	nent the i	ndicator	or confirm	the absence	of indicators.)	
Depth	Matrix		Redo	x Features	31	. 2		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>		marks
0-18	10yr3/1	100					Silty loam		
					-				
									_
								-	
·	<u> </u>								
¹ Type: C=Co	oncentration, D=Depl	etion, RM=Re	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location: P	L=Pore Lining, M=	Matrix.
Hydric Soil									atic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (N	ILRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfac	ce (S8) (N	ILRA 147,	148) (Coast Prairie Redox	(A16)
Black Hi			Thin Dark Su			47, 148)		(MLRA 147, 148)	
	n Sulfide (A4)		Loamy Gleye		F2)		F	Piedmont Floodplair	T
	d Layers (A5)		Depleted Mat					(MLRA 136, 147)	
	ick (A10) (LRR N)	(044)	Redox Dark S					ery Shallow Dark	
	d Below Dark Surface ark Surface (A12)	e (A11)	Depleted Dar Redox Depre				_ '	Other (Explain in Re	emarks)
	fucky Mineral (S1) (L	RR N	Iron-Mangan			RR N			
	A 147, 148)	,	MLRA 13) (i iz) (i				
	Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Inc	licators of hydrophy	tic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology m	_
Stripped	Matrix (S6)		Red Parent N	/laterial (F	21) (MLR	A 127, 147	') un	less disturbed or p	roblematic.
Restrictive I	Layer (if observed):								
Type:			_						
Depth (inc	ches):		_				Hydric Soi	Present? Yes	No <u> </u>
Remarks:									

Project/Site: MVP	City/C	county: Montgomery	Sampling Date: 04/08/2015				
Applicant/Owner: MVP		-	Sampling Point: W-F9-PFO				
Investigator(s): E. Stromhaier, D. M	IcCullough, A. Flake Section						
Landform (hillslope, terrace, etc.): Terra		· · · · · · · · · · · · · · · · · · ·	Slope (%): 0				
Subregion (LRR or MLRA): LRRN		Long: -80.28588					
Soil Map Unit Name: Berks and Wei							
Are climatic / hydrologic conditions on th	ne site typical for this time of year? Y	res No (If no, explain in	Remarks.)				
Are Vegetation, Soil, or I	Hydrology significantly distur	bed? Are "Normal Circumstances	s" present? Yes V No				
Are Vegetation, Soil, or I							
-		npling point locations, transec					
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area					
Wetland Hydrology Present?	Yes V No	within a Wetland? Yes	No				
Remarks:							
Cowardin Code: PFO; HGM: riv	erine flow-through; WT: RPW	/WD					
The wetland was revisited on 1	1/1/2019. Presence of wetland	d hydrology, hydrophytic vegeta	tion, and hydric soils was				
confirmed using the USACE EM	MP Regional Supplement delir	neation methodology. A portion o	of wetland was obstructed by				
timber matting within LOD.		3 , 1	,				
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Ind	icators (minimum of two required)				
Primary Indicators (minimum of one is	required: check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)		/egetated Concave Surface (B8)					
High Water Table (A2)	True Aquatic Plants (I Hydrogen Sulfide Odo		Patterns (B10)				
Saturation (A3)	✓ Oxidized Rhizosphere	-	Lines (B16)				
Water Marks (B1)		Dry-Season Water Table (C2)					
Sediment Deposits (B2)	Recent Iron Reductio		Crayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C	C7) Saturation	Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Ren	marks) Stunted or	Stressed Plants (D1)				
Iron Deposits (B5)		<u>✓</u> Geomorph	nic Position (D2)				
Inundation Visible on Aerial Image	ery (B7)	Shallow A	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)			Microtopographic Relief (D4)				
Aquatic Fauna (B13)		FAC-Neut	ral Test (D5)				
Field Observations:							
	No Depth (inches):	0					
	Deptil (iliches)	<u>-</u>	. 4				
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland Hydrology Pres	ent? Yes Vo				
Describe Recorded Data (stream gaug	je, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:	and in an area of braided small	ll atroom abannala. Plat area inal	udes braided shannels with				
		ll stream channels. Plot area incl	dues braided charmers with				
shallow flowing about 25% of ar	ea of the plot.						

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

Sapling/Shrub Stratum (Plot size: 15')

Tree Stratum (Plot size: _

1. Lindera benzoin

Herb Stratum (Plot size: 5'

1. Quercus bicolor

___)

____30 ___**/**__FAC

50% of total cover: 25 20% of total cover: 10

50% of total cover: 15 20% of total cover: 6

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

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

ames of	plants.		Sampling Poir	nt: <u>W-F9-PF</u>	0
Absolute			Dominance Test worksheet:		
50	Species? ✓	FACW	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:		
50	= Total Cov		Total % Cover of:	Multiply by:	
	total cover:	4.0	OBL species x 1	=	_
2070 01	total oover.		FACW species x 2	=	
30	~	FAC	FAC species x 3	=	
		· <u></u>	FACU species x 4	=	<u> </u>
			UPL species x 5	=	<u> </u>
			Column Totals:(A)		(B)
					_ ` ′
		-	Prevalence Index = B/A = _		_
			Hydrophytic Vegetation Indicate		
			1 - Rapid Test for Hydrophytic	C Vegetation	
			2 - Dominance Test is >50%		
30	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹	4	
	total cover:	_	4 - Morphological Adaptations		-
			data in Remarks or on a se	•	
			Problematic Hydrophytic Veg	etation' (Expla	ain)
			¹ Indicators of hydric soil and wetla be present, unless disturbed or pr		must
			Definitions of Four Vegetation S	Strata:	
			Tree – Woody plants, excluding vi more in diameter at breast height height.		
			Sapling/Shrub – Woody plants, e than 3 in. DBH and greater than o m) tall.		
0	= Total Cov	_	Herb – All herbaceous (non-wood of size, and woody plants less tha		ardless
20% of	total cover:	0	Woody vine – All woody vines green height.	eater than 3.2	8 ft in
0	= Total Cov		Hydrophytic Vegetation Present? Yes	No	

Remarks:	(Include pho	to numbers	s here or	on a	separate	sheet.)
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Woody Vine <u>Stratum</u> (Plot size: ______)

Sampling Point: W-F9-PFO

SOIL

0-15" 10YR 3/2 80 5YR 4/6 20 C M/PL SiLo SiLo Signature of the state	Depth	Matrix	%	Redo:	x Features	Tuno	Loc ²	Touturo		Domorko	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: Indicators for Problematic Hydric Soils*:	inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹		<u>Texture</u>	_	Remarks	
Histosol (A1)	0-15	101113/2		31H 4/6			IVI/FL	SILU	<u> </u>		
Histosol (A1)											
Histosol (A1)											
Histosol (A1)			· 								
Histosol (A1)			. ——								
Histosol (A1)											
Histosol (A1)											
Histosol (A1)											
Histosol (A1)		-									
Histosol (A1)							<u> </u>				
Histosol (A1)											
Histosol (A1)											
Histosol (A1)		noontration D Don	lotion DM	Dadwaad Matrix MS	Mookod	Cond C		2l continu	DI Doro Lin	ina M Matrix	
Histosol (A1)			letion, Rivi=	Reduced Matrix, MS	s=iviasked	Sand Gr	ains.	Location:	PL=Pore Lin	roblomatic U	rdric Soile ³ :
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Betrictive Layer (if observed): Type: 15 Depth (inches): Rocks Polyvalue Below Surface (S9) (MLRA 147, 148) (MLRA 147, 148) (MLRA 147, 148) Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Nomeral (S1) (LRR N, MLRA 136, 122) Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No	•			Davis Confess	(07)						
Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Stripped Matrix (S6) Estrictive Layer (if observed): Type: 15 Depth (inches): Rocks Thin Dark Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Selow (Matrix (S4) Depleted Matrix (F2) Depleted Matrix (F3) Wellow Dark Surface (F19) Wellow Dark Surface (TF12) Depleted Dark Surface (F7) Depleted Dark Surface (F12) (LRR N, Matrix (F2)) Wellow Dark Surface (TF12) Depleted Dark Surface (F12) (LRR N, Matrix (F2)) Wellow Dark Surface (F12) Wellow Dark Surface (F						·- (CO) (I	AL DA 447			, ,	•
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) MLRA 136, 147) Peledmont Floodplain Soils (F19) MLRA 136, 147) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Estrictive Layer (if observed): Type: 15 Depth (inches): Rocks Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Netron-Manganese Masses (F12) (LRR N, MLRA 136, 122) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes ✓ No								148)			
Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Estrictive Layer (if observed): Type: 15 Depth (inches): Rocks Depleted Matrix (F3) McRA 136, 147) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Tyery Shallow Dark Surface (TF12) Lestrace (F7) Other (Explain in Remarks) MLRA 136, 147) Very Shallow Dark Surface (TF12) Letrace (F7) Other (Explain in Remarks) Memarks MLRA 136, 147) Very Shallow Dark Surface (TF12) Letrace (F7) Mthra N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (F13) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface (TF12) Multan N, MLRA 136, 122) Shallow Dark Surface					. ,	•	147, 140)				(E10)
2 cm Muck (A10) (LRR N)						-2)		_			(F19)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Stripped Matrix (S6) Stripped Matrix (S6) Estrictive Layer (if observed): Type: 15 Depth (inches): Rocks Depleted Dark Surface (F7) Depth (inches): Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, Iron-Manganese Masses (F12) (LRR N					. ,	6)					(TF12)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Estrictive Layer (if observed): Type: 15 Depth (inches): Rocks Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Which is the set of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No			e (A11)		•	•					
Sandy Mucky Mineral (S1) (LRR N,			. (, , , ,						O (= / (= / /)		,
MLRA 147, 148) _ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ Unless disturbed or problematic. _ Type: 15 _ Depth (inches): Rocks _ Hydric Soil Present? Yes _ No			RR N,				LRR N.				
_ Sandy Gleyed Matrix (S4)			•			,	,				
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. estrictive Layer (if observed): Type: 15 Depth (inches): Rocks					-	MLRA 13	36, 122)	³ lr	dicators of h	ydrophytic veg	getation and
estrictive Layer (if observed): Type: 15 Depth (inches): Rocks Hydric Soil Present? Yes ✓ No											
Type: 15 Depth (inches): Rocks Hydric Soil Present? Yes	Stripped	Matrix (S6)		Red Parent N	1aterial (F2	21) (MLR	A 127, 147	') u	nless disturb	ped or problem	atic.
Depth (inches): Rocks Hydric Soil Present? Yes V No	Restrictive L	ayer (if observed):									
	Type: 15			<u></u>							
		hes): Rocks						Hydric So	il Present?	Yes 🗸	No
								,			
	cinario.										

Wetland Photograph Page

Wetland ID W-F9-PFO



Photograph Direction NNW

Date: 04/08/2015

Comments: 2015 wetland delineation.



Photograph Direction SW

Date: 11/01/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP	City/Co	ounty: Montgomery	S	ampling Date: 04/08/2015
Applicant/Owner: MVP		-		Sampling Point: W-F9-UP1
Investigator(s): E. Stromhaier, D. McCullo				
Landform (hillslope, terrace, etc.): Hillside		·	Linear	Slope (%): 9
Subregion (LRR or MLRA): LRRN				Datum: NAD 83
Soil Map Unit Name: Berks and Weikert so				
Are climatic / hydrologic conditions on the site typ	pical for this time of year? You	es No (If r	no, explain in Ren	narks.)
Are Vegetation, Soil, or Hydrolog	y significantly disturb	ped? Are "Normal Ci	rcumstances" pre	sent? Yes No
Are Vegetation, Soil, or Hydrolog			lain any answers	
SUMMARY OF FINDINGS – Attach s	•		•	
Hydrophytic Vegetation Present? Yes _	No			
	No✓	Is the Sampled Area	Yes	No. V
	No	within a Wetland?	res	NO
UPLAND				
HYDROLOGY				
Wetland Hydrology Indicators:				rs (minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply) True Aquatic Plants (I		_ Surface Soil Cr	
Surface Water (A1)		rated Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfide Odd		_ Drainage Patte	
Saturation (A3)	Oxidized RhizospherePresence of Reduced	=	Moss Trim LineDry-Season Wa	
Water Marks (B1) Sediment Deposits (B2)	Recent Iron Reduction	· · ·	_ Crayfish Burrov	
Drift Deposits (B3)	Thin Muck Surface (C			ole on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Rem			ssed Plants (D1)
Iron Deposits (B5)	_ ` ` '	, <u> </u>	_ Geomorphic Po	
Inundation Visible on Aerial Imagery (B7)		<u> </u>	_ Shallow Aquita	rd (D3)
Water-Stained Leaves (B9)		_	_ Microtopograph	nic Relief (D4)
Aquatic Fauna (B13)		_	_ FAC-Neutral Te	est (D5)
Field Observations:				
Surface Water Present? Yes No	Depth (inches):			
	Depth (inches):			
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland Hyd	rology Present?	Yes No
Describe Recorded Data (stream gauge, monitor	oring well, aerial photos, prev	vious inspections), if availat	ole:	
Remarks: Sample plot is about 6 feet higher than	the wetland			
Sample plot is about 6 feet higher than	the wettand			

VEGETAT

0.01	Absolute	Dominant	Indicator	Dominance Test worksheet:	
ree Stratum (Plot size: 30')		Species?		Number of Dominant Species	
Juniperus virginiana	40		FACU	That Are OBL, FACW, or FAC:	(A)
				Total Number of Dominant	
				Species Across All Strata: 2	(B)
				Percent of Dominant Species	
				That Are OBL, FACW, or FAC:	(A/B)
					_ ` `
		<u> </u>		Prevalence Index worksheet:	
	40	= Total Co	ver .	Total % Cover of: Multiply by:	
50% of total cover: 2	20% of	f total cover	:8	OBL species x 1 =	
pling/Shrub Stratum (Plot size: 15')				FACW species x 2 =	
				FAC species x 3 =	
				FACU species x 4 =	
				UPL species x 5 =	
				Column Totals: (A)	(B)
				Dravalance Index D/A	
				Prevalence Index = B/A =	_
				Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Vegetation	
				2 - Dominance Test is >50%	
	0	= Total Co	/er	3 - Prevalence Index is ≤3.0¹	
50% of total cover:				4 - Morphological Adaptations ¹ (Provide su	
erb Stratum (Plot size: 5')				data in Remarks or on a separate sheet	,
Verbascum thapsus	50	~	FACU	Problematic Hydrophytic Vegetation ¹ (Explanation)	ain)
Polystichum acrostichoides	10		FACU		
			-	¹ Indicators of hydric soil and wetland hydrology	must
				be present, unless disturbed or problematic.	
		-		Definitions of Four Vegetation Strata:	
				Tree – Woody plants, excluding vines, 3 in. (7.6	cm) o
				more in diameter at breast height (DBH), regard	dless of
				height.	
				Sapling/Shrub - Woody plants, excluding vine	s, less
		·		than 3 in. DBH and greater than or equal to 3.2	8 ft (1
				m) tall.	
•				Herb - All herbaceous (non-woody) plants, rega	ardless
		= Total Co		of size, and woody plants less than 3.28 ft tall.	
50% of total cover: 3	20% of	f total cover	:12	Woody vine – All woody vines greater than 3.2	8 ft in
oody Vine Stratum (Plot size: 15')				height.	
	_				
				Hydrophytic	
		- <u></u>		Hydrophytic Vegetation	
		= Total Co	ver		
	0		_	Vegetation	
·	0 20% o	= Total Co	_	Vegetation	

Sampling Point: W-F9-UP1

SOIL

Depth	Matrix	<u></u> %	Redox F	eatures	_Loc ²	Tavt		Damad	•
nches)	Color (moist)		Color (moist)	% Type ¹ RM	M	Texture SSiL	-	Remarks	<u>s</u>
0-15"	10YR 4/6	100			IVI	SSIL	-		
		. —— –							
		- <u></u> -							
			_		· 	·			
							'		
							-		
		oletion, RM=R	educed Matrix, MS=N	Masked Sand Gr	ains.	² Location: P	L=Pore Linii	ng, M=Matri	х.
dric Soil Iı	ndicators:					Indica	ators for Pr	oblematic I	Hydric Soil
Histosol ((A1)		Dark Surface (S	57)		2	cm Muck (A	10) (MLRA	147)
	ipedon (A2)		Polyvalue Belov			148) C	oast Prairie	Redox (A16	6)
Black His			Thin Dark Surfa	, , ,	147, 148)		(MLRA 14		
	n Sulfide (A4)		Loamy Gleyed N	, ,		P		odplain Soil	ls (F19)
=	Layers (A5)		Depleted Matrix	, ,			(MLRA 13		(TE40)
	ck (A10) (LRR N) Below Dark Surfac	·ο (Λ11)	Redox Dark Sur Depleted Dark S	. ,				Dark Surfain in Remark	
	rk Surface (A12)	C (ATT)	Redox Depressi			0	illei (Explai	ii iii ixeman	N3)
	ucky Mineral (S1) (I	LRR N.	Iron-Manganese		LRR N.				
	147, 148)	,	MLRA 136)	,					
	leyed Matrix (S4)		Umbric Surface	(F13) (MLRA 1 3	86, 122)	³ Ind	icators of hy	drophytic v	egetation a
	edox (S5)		Piedmont Flood					logy must be	-
Ctrinned	Matrix (S6)		Red Parent Mat	erial (F21) (MLR	A 127, 147	7) un	less disturbe	ed or proble	matic.
_ Siripped									
	ayer (if observed):	:							
		:	_						
estrictive L	ayer (if observed)	:	_			Hydric Soil	Present?	Yes	No
estrictive L Type: Depth (inc	ayer (if observed)	:	<u> </u>			Hydric Soil	Present?	Yes	No
estrictive L Type: Depth (inc	ayer (if observed)	:	_ _			Hydric Soil	Present?	Yes	No
estrictive L Type: Depth (inc	ayer (if observed)	:	_ 			Hydric Soil	Present?	Yes	No'
estrictive L Type: Depth (inc	ayer (if observed)	:	<u>-</u>			Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)	:	-			Hydric Soil	Present?	Yes	No'
estrictive L Type: Depth (inc	ayer (if observed)		 			Hydric Soil	Present?	Yes	No
estrictive L Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)		_			Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
estrictive L Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
strictive L Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
estrictive L Type: Depth (inc	ayer (if observed)		_			Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
estrictive L Type:	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No
Type: Depth (inc	ayer (if observed)					Hydric Soil	Present?	Yes	No

Project/Site: MVP	City/County: Montgomery		Sampling Date: 11/01/19	
Applicant/Owner: MVP			Sampling Point: W-C12-PEM	
Investigator(s): R. Sparhawk, W. Jackson	Section, Township, Range; N			
Landform (hillslope, terrace, etc.): Valley bottom			Slope (%): 2	
Subregion (LRR or MLRA): LRRN Lat:	37.257205 Long: -80	.281473	Datum: NAD 83	
	Long.			
Are climatic / hydrologic conditions on the site typical for				
Are Vegetation, Soil, or Hydrology		I Circumstances" p	resent? Yes No	
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed,	explain any answer	s in Remarks.)	
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling point location	ons, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area			
Hydric Soil Present? Yes		Vac V	No	
Wetland Hydrology Present? Yes	No	res	NO	
Remarks: Cowardin Code: PEM	HGM: Riverine Water Type:	RP\W\WD		
			elineation Confirmation	
Additional areas of wetland abutting wetland surveys. W-C11 and W-C12 wetlands were pwhich time thearea now delineated as W-C1	previously confirmed by USACE No	folk District dur	ing 2015 field reviews, at	
in this area in 2019 is likely due to tree cleari	2-PEM did not meet all 3 wetland cr ing and other habitat alterations in th	iteria. The obse ne vicinity.	ervation of wetland criteria	
HYDROLOGY				
Wetland Hydrology Indicators:			tors (minimum of two required)	
Primary Indicators (minimum of one is required; check		Surface Soil (` ′	
	Γrue Aquatic Plants (B14)		etated Concave Surface (B8)	
l - *	Hydrogen Sulfide Odor (C1)	Drainage Pat		
<u> </u>	Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16)		
	Presence of Reduced Iron (C4)		Vater Table (C2)	
	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burn	` '	
1 — · · · /	Fhin Muck Surface (C7)		sible on Aerial Imagery (C9)	
	Other (Explain in Remarks)		ressed Plants (D1)	
Iron Deposits (B5)		Geomorphic I		
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		Shallow Aquit	` '	
Aquatic Fauna (B13)		FAC-Neutral	phic Relief (D4) Test (D5)	
Field Observations:		- TAO Neutrai	1631 (150)	
Surface Water Present? Yes No	Depth (inches): 5			
Water Table Present? Yes V No				
Saturation Present? Yes V No	_	Hydrology Presen	t? Yes ✔ No	
(includes capillary fringe)			100 <u> </u>	
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photos, previous inspections), if ava	ailable:		
Remarks:				
T. C.				

Sampling Poi	nt: W-C12-PEM
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30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:8(A)
2				Total Number of Demisers
3				Total Number of Dominant Species Across All Strata: 8 (B)
4				、 /
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6		-		Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
50% of total cover: 0	20% of	total cover	. 0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15')	10		E A C\A/	
1. Platanus occidentalis	10		F <u>ACW</u>	FACULARISES X 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6		-		
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.		-		✓ 2 - Dominance Test is >50%
<u> </u>	10	= Total Cov	· · · · · · · · · · · · · · · · · · ·	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 5		total cover	_	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	2070 01	10101 00101	·	data in Remarks or on a separate sheet)
1. Eupatorium perfoliatum	10	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Scirpus atrovirens	10	~	OBL	
3. Dicanthelium acuminatum	15		FAC	¹ Indicators of hydric soil and wetland hydrology must
	5			be present, unless disturbed or problematic.
4. Scirpus plyphyllus	15		OBL	Definitions of Four Vegetation Strata:
5. Dicanthelium clandestinum			FAC FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Ludwigia alternifolia	3			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
_{9.} Carex Iurida	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 1 2 20 61
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height.
1				noight.
2				
3				
4		-		
-				Hydrophytic
5	0	= Total Cov		Vegetation Present? Yes <u>✓</u> No
50% of total cover: 0		total cover	_	
Remarks: (Include photo numbers here or on a separate s		total cover		<u> </u>
nemarks. (include prioto numbers nere or on a separate s	11001.)			

epth	Matrix	0/		x Features	1 1 - 2	Touters	Demonstra
nches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> Type	e ¹ Loc ²	Texture	Remarks
0-2	10YR 4/2	100_				L	
2-20	10YR 4/2	90	10YR 5/6	<u>10</u> D	M	L	
oe: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked Sand	Grains.	² Location: PL=P	ore Lining, M=Matrix.
	Indicators:					Indicator	s for Problematic Hydric Soils ³
Histosol	(A1)		Dark Surface	(S7)		2 cm	Muck (A10) (MLRA 147)
	oipedon (A2)			low Surface (S8		148) Coas	t Prairie Redox (A16)
Black Hi	, ,			rface (S9) (MLR	A 147, 148)		LRA 147, 148)
	n Sulfide (A4)		Loamy Gleye				nont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat				LRA 136, 147)
	ick (A10) (LRR N)	- (0.4.4)	Redox Dark S				Shallow Dark Surface (TF12)
	d Below Dark Surface ark Surface (A12)) (A11)	Depleted Dar Redox Depre	k Surface (F7)		Otnei	r (Explain in Remarks)
	ark Surface (A12) lucky Mineral (S1) (L	DD N		ese Masses (F1)) /I DD N		
	147, 148)	.KK N,	MLRA 130		z) (LKK N,		
	Gleyed Matrix (S4)			ce (F13) (MLR<i>A</i>	136, 122)	³ Indicate	ors of hydrophytic vegetation and
	ledox (S5)			odplain Soils (F			d hydrology must be present,
	Matrix (S6)			1aterial (F21) (M			disturbed or problematic.
	_ayer (if observed):			() (<u> </u>	Í	'
Type: N/							
Depth (inc						Hydric Soil Pre	sent? Yes 🗸 No
marks:						1.,	
iiaiks.							

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:

Project/Site: MVP	City/C	ounty: Montogomery	y	Sampling Date: 11/01/19
Applicant/Owner: MVP			State: VA	Sampling Point: W-C12-PEM-UP
Investigator(s): R. Sparhawk, W. Jackson	Section	n Township Range N		
Landform (hillslope, terrace, etc.): Valley Botton				Slope (%): 2
Subregion (LRR or MLRA): LRRN L				
Soil Map Unit Name: McGary and Purdy soils	_at			
		~		
Are climatic / hydrologic conditions on the site typical	•			
Are Vegetation, Soil, or Hydrology _	significantly distur	ped? Are "Norma	l Circumstances" p	present? Yes No
Are Vegetation, Soil, or Hydrology _	naturally problema	tic? (If needed,	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sam	pling point location	ons, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No_ V			
Hydric Soil Present? Yes	/ No	Is the Sampled Area within a Wetland?	Vas	No
Wetland Hydrology Present? Yes	No	within a wettand:	163	
Remarks: Cowardin Code: UPLAND	HGM:	Water Type:		
5		21		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; ch	neck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	True Aquatic Plants (314)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odd		Drainage Pa	
Saturation (A3)			_	
Water Marks (B1)	Presence of Reduced	Iron (C4)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)
Drift Deposits (B3)	Thin Muck Surface (C	7)	Saturation V	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)			Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (B7)			Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)			Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)
Field Observations:	.1			
Surface Water Present? Yes No	Depth (inches):			
	Depth (inches):			
Saturation Present? Yes No No	Depth (inches):	Wetland I	Hydrology Preser	nt? Yes No
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, pre	l vious inspections), if ava	ailable:	
Damada				
Remarks:				

Sampling Point: W-C12-PEM-UP

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30')		Species?		Number of Dominant Species
1. Liriodendron tulipifera	10	✓	FACU	That Are OBL, FACW, or FAC: 3 (A)
2 Platanus occidentalis	5	<u> </u>	FACW	(/,
				Total Number of Dominant Species Across All Strata: 6 (B)
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50% (A/B)
6				Providence Index weeks heat.
7				Prevalence Index worksheet:
	15	= Total Cov	/er	Total % Cover of: Multiply by:
50% of total cover: 7.5	20% of	total cover	: 3	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')	<u></u>			FACW species x 2 =
1. Rosa multiflora	5		FACU	FAC species x 3 =
2. Juniperus virginiana	20		FACU	FACU species x 4 =
	5			-
3. Rubus allegheniensis			F <u>ACU</u>	'
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8		-		2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
45		= Total Cov	_	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 15	20% of	total cover	:6	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')				• • • • • • • • • • • • • • • • • • • •
1. Dicanthelium clandestinum	10		FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Eupatorium perfoliatum	10	V	FACW	
3. Dicanthelium acuminatum	5		FAC	¹ Indicators of hydric soil and wetland hydrology must
4 Andropogon virginicus	5	-	FACU	be present, unless disturbed or problematic.
··	5	-		Definitions of Four Vegetation Strata:
5. Solidago canadensis			FACU_	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				
9				Sapling/Shrub – Woody plants, excluding vines, less
10.		-		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10		-		,
11	25			Herb – All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>17.5</u>	20% of	total cover	:	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')		_		height.
1. Lonicera japonica	30		FACU	
2. Smilax rotundifolia	5		FAC	
3.				
4				
4		-	· ——	Hydrophytic
5	35			Vegetation Present? Yes No ✓
47.6		= Total Cov	_	riesent: res No
50% of total cover: <u>17.5</u>	20% of	total cover	:/	
Remarks: (Include photo numbers here or on a separate sl	heet.)			

Depth	Matrix		Redo	x Features					
(inches)	Color (moist)	%	Color (moist)	<u>% Ty</u>	/pe ¹ Loc ²	Texture		Remarks	
0-4	10YR 2/2	100				L			
4-20	10YR 4/2	95	10YR 5/6	5 C	M	L			
	•					·			
		· ——				-	_		
		· ——	<u> </u>				_		
	-						_		
	-	· ——					_		
	-								
							_		
Type: C=Cc	oncentration, D=Dep	letion RM=	Reduced Matrix MS	S=Masked Sar	nd Grains	² Location:	PI =Pore I ini	ng, M=Matrix.	
ydric Soil I		iodon, rawi–	rtoddodd Matrix, Mc	z-iviasitea eai	ia Oraino.			oblematic Hy	dric Soils ³ :
Histosol			Dark Surface	(S7)				م 410) (MLRA 1	
	pipedon (A2)				58) (MLRA 147		•	Redox (A16)	,
Black His					_RA 147, 148)	, -, <u>—</u>	(MLRA 14		
	n Sulfide (A4)		Loamy Gleye	, , ,	,			oodplain Soils ((F19)
_ Stratified	Layers (A5)		Depleted Mat	trix (F3)			(MLRA 13	6, 147)	
	ck (A10) (LRR N)		Redox Dark S	, ,			•	/ Dark Surface	. ,
	Below Dark Surface	e (A11)		k Surface (F7)		Other (Expla	in in Remarks)	
	ark Surface (A12)		Redox Depre						
	lucky Mineral (S1) (L	RR N,	Iron-Mangan		-12) (LRR N,				
	147, 148) sleyed Matrix (S4)		MLRA 130	•	0 A 126 122\	31,5	diantara of h	ydrophytic veg	atation and
	edox (S5)				(F19) (MLRA 1			logy must be p	
	Matrix (S6)				(MLRA 127, 14			ed or problema	
Stripped					(ou o. p.ob.o	
						1			
Restrictive L	_ayer (if observed):								
Type:	ayer (if observed):						il Present?	Yes V	No
Type: Depth (inc							il Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (if observed):		_				il Present?	Yes 🗸	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes <u>V</u>	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes <u>V</u>	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
estrictive L Type: Depth (inc	ayer (if observed):						il Present?	Yes V	No
Type: Depth (inc	ayer (if observed):		_				il Present?	Yes 🗸	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes 🔽	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes <u>V</u>	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes V	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes V	No
estrictive L Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
estrictive L Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
estrictive L Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes 🔽	No
Restrictive L Type: Depth (inc	ayer (if observed):						il Present?	Yes_V	No
Restrictive L	ayer (if observed):						il Present?	Yes 🗸	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
Restrictive L Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No
Restrictive L Type: Depth (inc	ayer (if observed):						il Present?	Yes 🗸	No

Project/Site: MVP		City/C	ounty: Montgomery		Sampling Date: 04/09/2015
Applicant/Owner: MVP					Sampling Point: W-C12
Investigator(s): L.Harloe, K	Lamontagne, L. S	Summers Section			
Landform (hillslope, terrace, et					Slone (%)· 2
Subregion (LRR or MLRA): L	RRN L:	at: 37.257125			Datum: NAD 83
Soil Map Unit Name: McGar	v and Purdy soils	at	Long.		
Are climatic / hydrologic condit					
					resent? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point location	ons, transects	, important features, etc.
Hydrophytic Vegetation Prese Hydric Soil Present?	Yes	No No	Is the Sampled Area within a Wetland?	Yes	No
Wetland Hydrology Present? Remarks:	Yes	No			
	GM:Riverine flow	through; WT:RPWV	VD; Part of wetland	complex include	ding W-C10, W-C11, and
W-C12 (2015 field surve		3 ,	,	•	, ,
The wetland was revisite	ed on 11/1/2019.	The presence of we	tland hydrology, hy	drophytic vege	tation, and hydric soils
was unable to be confirr	ned because the	wetland was obstru	cted by timber matti	ing.	•
HYDROLOGY					
Wetland Hydrology Indicate	ors:			Secondary Indica	tors (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 (l	B14)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)		_ Hydrogen Sulfide Odd		Drainage Pat	
Saturation (A3)		_ Oxidized Rhizosphere			
Water Marks (B1)		_ Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)		_ Recent Iron Reductio		Crayfish Burr	
Drift Deposits (B3)		_ Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	_ Other (Explain in Ren	iaiks)	Geomorphic	ressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Ae	rial Imagery (R7)			Shallow Aqui	
Water-Stained Leaves (E					phic Relief (D4)
Aquatic Fauna (B13)	,,,			FAC-Neutral	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?		Depth (inches):	2		
Saturation Present?	Yes No	Depth (inches):	2 Wetland H	Hydrology Presen	t? Yes <u>/</u> No
(includes capillary fringe) Describe Recorded Data (stre	eam gauge, monitorinç	y well, aerial photos, pre	l vious inspections), if ava	ailable:	
Remarks:	ant ta marradina D	OW show don't don't	un tunna . I lanuu unin		
	•		n trees. Heavy rain	i overnight coul	d contribute to hydrology.
Spring peepers heard d	uring 2015 field St	irvey.			

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-C12

Tree Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:	
Tice ettatum (Flot size)		Species?		Number of Dominant Species	
1. Quercus bicolor	40		<u>FACW</u>	That Are OBL, FACW, or FAC:5 (A)	
2				Total Number of Demisser	
3				Total Number of Dominant Species Across All Strata: 5 (B)	
				opecies Across Air Strata.	
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC:100% (A/	B)
6					
7				Prevalence Index worksheet:	
	40	= Total Cov	/er	Total % Cover of: Multiply by:	
50% of total cover:		total cover	_	OBL species x 1 =	
4 = 1	20 /0 01	total cover		FACW species x 2 =	
Odphing/Ornab Otratam (1 lot 3i2c)	30		540	FAC species x 3 =	
1. Acer rubrum			FAC		
2. Lindera benzoin	10		FAC	FACU species x 4 =	
3				UPL species x 5 =	
4				Column Totals: (A) (E	3)
5				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	\dashv
7				1 - Rapid Test for Hydrophytic Vegetation	
8					
9				✓ 2 - Dominance Test is >50%	
<u> </u>	40	Total Car		3 - Prevalence Index is ≤3.0 ¹	
50% - (1-1-1		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporti	ng
50% of total cover: 20	20% of	total cover	:8	data in Remarks or on a separate sheet)	
Herb Stratum (Plot size: 5)				Problematic Hydrophytic Vegetation ¹ (Explain)	
1				Troblematic Trydrophytic Vegetation (Explain)	
2					
3.				¹ Indicators of hydric soil and wetland hydrology must	
				be present, unless disturbed or problematic.	
4		-		Definitions of Four Vegetation Strata:	
5				Tree Meady plants evaluding vines 2 in (7.6 cm)	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of	
7				height.	, l
8					
				Sapling/Shrub – Woody plants, excluding vines, less	3
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, regardles	ss
	0	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.	
50% of total cover: 0		total cover			
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in	
1. Lonicera japonica	15	~		height.	
2 Smilix rotundifolia	5		FAC_		
2. Strillix foturidilolla			<u>FAC</u>		
3					
4.				Hadaankada	
5.				Hydrophytic Vegetation	
<u>.</u>	20	Tatal Car		Present? Yes V No	
50% - (1-1-1		= Total Cov			
50% of total cover: 10		total cover	:4		
Remarks: (Include photo numbers here or on a separate s	heet.)				
					- 1

Sampling Point: W-C12

0-6"	Color (maint)	%		x Features	/pe ¹ Loc ²	Toytura	Domorko
	Color (moist)		Color (moist)			<u>Texture</u>	Remarks
6 20"	10YR5/2	90	10YR6/8	10 (SiL	
6-20"	7.5YR7/2	90	7.5YR6/8	<u>10</u> C	<u> </u>	SiL	
		etion, RM=	Reduced Matrix, MS	S=Masked Sa	nd Grains.		=Pore Lining, M=Matrix.
dric Soil In							tors for Problematic Hydric Soils ³ :
_ Histosol (Dark Surface		20) (14) 24 447		cm Muck (A10) (MLRA 147)
	pedon (A2)				S8) (MLRA 147,	148) Co	oast Prairie Redox (A16)
Black His	, ,			. , .	_RA 147, 148)	ъ.	(MLRA 147, 148)
	Sulfide (A4)		Loamy Gleye	, ,		Pi	edmont Floodplain Soils (F19)
-	Layers (A5)		Depleted Mar			.,	(MLRA 136, 147)
	ck (A10) (LRR N)	(444)	Redox Dark		`		ery Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)		k Surface (F7)	0	ther (Explain in Remarks)
	k Surface (A12)	DD 11	Redox Depre		-10\ (I DD N		
	ucky Mineral (S1) (L	RR N,	Iron-Mangan		-12) (LRR N,		
	147, 148)		MLRA 13		3.4.400400\	31	and an afficiency by the constation and
	eyed Matrix (S4)			ce (F13) (MLI			cators of hydrophytic vegetation and
_ Sandy Re					(F19) (MLRA 1 4		tland hydrology must be present,
	Matrix (S6)		Red Parent N	/laterial (F21)	(MLRA 127, 14	r) uni	ess disturbed or problematic.
	ayer (if observed):						
Type: NA							
Depth (inch	nes):					Hydric Soil	Present? Yes V No
emarks:							

Wetland Photograph Page

Wetland ID W-C12



Photograph Direction South

Date: 04/09/2015

Comments: 2015 wetland delineation.



Photograph Direction SE

Date: 11/01/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP	oject/Site: MVP City/County: Montgomery						
Applicant/Owner: MVP			•	State: VA Sampling Point: W-C12			
Investigator(s): L.Harloe, K.La	ımontagne, L. Sı	ummers Sect	ion Township Range N				
Landform (hillslope, terrace, etc.):					Slope (%); 2		
Subregion (LRR or MLRA): LRR					Datum: NAD 83		
Soil Map Unit Name: McGary a			=				
		to a thirty than a form and	V. V. Na	INVVI CIASSIII	Cation: Trend		
Are climatic / hydrologic conditions		-					
Are Vegetation, Soil		-			present? Yes No		
Are Vegetation, Soil	, or Hydrology	naturally problem	natic? (If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS	5 – Attach site r	nap showing saı	mpling point location	ons, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	? Yes	No. V					
Hydric Soil Present?	Yes		Is the Sampled Area	.,	🗸		
Wetland Hydrology Present?	Yes V		within a Wetland?	Yes	No		
Remarks: Upland							
HYDROLOGY							
Wetland Hydrology Indicators	:			Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of	one is required; chea	ck all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	_	True Aquatic Plants	(B14)	Sparsely Ve	getated Concave Surface (B8)		
High Water Table (A2)	<u> </u>	Hydrogen Sulfide O		Drainage Patterns (B10)			
Saturation (A3)	_		res on Living Roots (C3)	Moss Trim L			
Water Marks (B1)		Presence of Reduce	, ,		n Water Table (C2)		
Sediment Deposits (B2)	_		on in Tilled Soils (C6)	Crayfish Bu			
Drift Deposits (B3)		Thin Muck Surface (Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Iron Deposits (B5)		Other (Explain in Re	emarks)		Stressed Plants (D1)		
Inundation Visible on Aerial	Imagery (R7)			Shallow Aqu	Position (D2)		
Water-Stained Leaves (B9)	imagery (Dr)				aphic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutra			
Field Observations:					. ,		
Surface Water Present?	∕es No <u></u>	_ Depth (inches):					
Water Table Present?	res No <u>✔</u>	_ Depth (inches):					
	Yes No No	Depth (inches):		Hydrology Prese	nt? Yes <u>/</u> No		
(includes capillary fringe) Describe Recorded Data (stream			avious inspections) if ave	viloble			
Describe Necorded Data (stream	r gauge, monitoring	well, aeriai priotos, pi	evious irispections), ii ava	aliable.			
Remarks:							
Heavy rain overnight could	contribute to hy	drology. Spring p	eepers heard.				

VEGETATION (Four Strata) – Use scientific names of plants.

, ,	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species
1. Pinus virginiana	30		<u>UPL</u>	That Are OBL, FACW, or FAC:2 (A)
2. Quercus bicolor	15	~	FACW	T. 111 1 15
3				Total Number of Dominant Species Across All Strata: 6 (B)
4				、,
5				Percent of Dominant Species That Are OBL FACW or FAC: 33 (A/B)
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
r	45	= Total Cov	or	Total % Cover of: Multiply by:
50% of total cover: 22.5				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')	2070 0.	10101 00101		FACW species x 2 =
1. Viburnum lentago	20	~	FAC	FAC species x 3 =
2. Acer saccharum	10		FACU	FACU species x 4 =
3. Fagus grandifolia	10			UPL species x 5 =
			F <u>ACU</u>	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				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 20	20% of	total cover:	8	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')				
1				Problematic Hydrophytic Vegetation ¹ (Explain)
2	-			1
3				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Deminions of Four Vegetation Strata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
8				noight.
				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10	-	-		, '
11	0	T		Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 0		= Total Cov total cover:		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 15')	20 /6 01	iolai covei.		Woody vine - All woody vines greater than 3.28 ft in
1. Lonicera japonica	20	~	FACU	height.
			FACO	
2		-		
3				
4		· 		Hydrophytic
5				Vegetation
40		= Total Cov		Present? Yes No
50% of total cover:10		total cover:	4	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Disturbed site, adjacent to ROW.				

Sampling Point: W-C12,C11-UP

SOIL

Profile Desc	ription: (Describe t	o the dept	h needed to docun	ent the in	ndicator o	or confirm	the absence	of indicat	ors.)		
Depth	Matrix		Redox	c Features	3						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remar	ks	
0-8"	7.5 YR6/6	100					Silty loam	-			
8-20"	7.5 YR7/8	100					Silty loam				
											_
								-			
								-			
¹ Type: C=Ce	oncentration, D=Depl	etion, RM=I	Reduced Matrix, MS	=Masked	Sand Gra	ins.	² Location: P	L=Pore Lin	ing, M=Mat	rix.	
Hydric Soil		•							roblematic		ils³:
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLR	A 147)	
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfac	ce (S8) (M	LRA 147,	148) C	oast Prairi	e Redox (A	16)	
	stic (A3)		Thin Dark Su			47, 148)		(MLRA 1			
	en Sulfide (A4)		Loamy Gleye		F2)		P		oodplain So	oils (F19)	
	d Layers (A5)		Depleted Mat		-\			(MLRA 1		(==)	
	uck (A10) (LRR N)	(////	Redox Dark S						v Dark Surf		
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Dar Redox Depre					ullei (Expia	ain in Rema	iks)	
	Mucky Mineral (S1) (L	RR N.	Iron-Mangane			RR N.					
	A 147, 148)	,	MLRA 130		, , (-	,					
	Gleyed Matrix (S4)		Umbric Surfa	-	MLRA 13	6, 122)	³ Ind	icators of h	ydrophytic	vegetation a	and
Sandy R	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	MLRA 14	8) we	tland hydro	ology must l	be present,	
Stripped	l Matrix (S6)		Red Parent M	laterial (F2	21) (MLR	A 127, 147	') un	less disturb	ed or probl	ematic.	
Restrictive I	Layer (if observed):										
Type:											
Depth (in	ches):						Hydric Soil	Present?	Yes	No _	<u> </u>
Remarks:							· L				

Project/Site: MVP	City/County: Montgomery Sampling Date: 04/09/20					
Applicant/Owner: MVP	State: VA Sampling Point: W-C11					
	Summers Section, Township, Range: N/A					
=	Local relief (concave, convex, none):					
	_at: 37.257071 Long: -80.28					
Soil Map Unit Name: McGary and Purdy soils						
	al for this time of year? Yes No (If r					
	significantly disturbed? Are "Normal Ci	_				
	naturally problematic? (If needed, exp					
	map showing sampling point locations					
Hudwah wie Verstellen Breezel	No lo the Semular Area	-				
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	/ No lis the Sampled Area					
Wetland Hydrology Present?	No within a Wetland?	Yes No				
Remarks:						
Cowardin Code:PSS; HGM: Riverine flov	v through; WT:RPWWD					
The wetland was revisited on 11/21/2019	Presence of wetland hydrology, hydroph	ytic vegetation, and hydric soils was				
confirmed using the USACE EMP Region	nal Supplement delineation methodology.					
HYDROLOGY						
Wetland Hydrology Indicators:	Se	econdary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; ch	neck all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	✓ Hydrogen Sulfide Odor (C1)	_ Drainage Patterns (B10)				
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16)				
Water Marks (B1)	Presence of Reduced Iron (C4)	_ Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	_ Crayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C7)	_ Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Remarks)	_ Stunted or Stressed Plants (D1)				
✓ Iron Deposits (B5)		_ Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)	<u> </u>	_ Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	<u> </u>	_ Microtopographic Relief (D4)				
Aquatic Fauna (B13)	_	_ FAC-Neutral Test (D5)				
Field Observations:						
	Depth (inches):					
Water Table Present? Yes No	✓ Depth (inches): 2					
Saturation Present? Yes No	Depth (inches):2 Wetland Hyd	Irology Present? Yes <u></u> No				
(includes capillary fringe)	ng well, aerial photos, previous inspections), if availab	plo:				
Describe Recorded Data (stream gauge, mornion	ig well, aerial priotos, previous irispections), il avallat	ne.				
Remarks:						

Sampling	Point:	W-C1	1
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30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
2.				, , ,
3				Total Number of Dominant Species Across All Strata: 5 (B)
4				(,,
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)
6				
7				Prevalence Index worksheet:
_		= Total Cov	_	
50% of total cover: 0	20% of	total cover	. 0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')	4-	_		FACW species x 2 =
1. Rosa multiflora	15		FACU_	FAC species x 3 =
2. Lindera benzoin	30		F <u>AC</u>	FACU species x 4 =
3				UPL species x 5 =
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				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 22.5	20% of	total cover	9	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5'	_			Problematic Hydrophytic Vegetation¹ (Explain)
1. Cyperus strigosus	5		FACW_	Froblematic Hydrophytic vegetation (Explain)
2. Arthraxon hispidus	15		F <u>AC</u>	Indicators of hydric soil and watland hydrology must
3. Juncus effusus	10		FACW_	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6		-		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Continue (Character Meantains and a second additional
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
	30	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:15	20% of	total cover	6	Was devices Allowed by the greatest than 2 20 ft in
Woody Vine Stratum (Plot size:15')				Woody vine – All woody vines greater than 3.28 ft in height.
1. Lonicera japonica	20		<u>FAC</u>	
2		-		
3	-	-		
4	-	-		Hydrophytic
5				Hydrophytic Vegetation
	20	= Total Cov	er	Present? Yes V No No
50% of total cover:10	20% of	total cover	4	
Remarks: (Include photo numbers here or on a separate s	heet.)			

SOIL Sampling Point: W-C11

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the in	ndicator	or confirm	the abs	ence of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Textu</u>	
0-20"	10YR4/1	90	10YR6/8	10	С	M	SSi	
						·		
			_					
			_					
						·		
			_					
¹ Type: C=Co	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gr	ains.		n: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:							ndicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)				2 cm Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Be	. ,	ce (S8) (N	/ILRA 147,		Coast Prairie Redox (A16)
Black His			Thin Dark Su				, -	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			. ,	_	Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Ma		,		_	(MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface (F	6)		_	Very Shallow Dark Surface (TF12)
Depleted	Below Dark Surface	(A11)	Depleted Da	rk Surface	(F7)		_	Other (Explain in Remarks)
	rk Surface (A12)		Redox Depre	essions (F8	3)			
	lucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	es (F12) (LRR N,		
	147, 148)		MLRA 13	•				
	leyed Matrix (S4)		Umbric Surfa					³ Indicators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flo					wetland hydrology must be present,
	Matrix (S6)		Red Parent N	Material (F2	21) (MLR	A 127, 147	7)	unless disturbed or problematic.
	ayer (if observed):							
Type: NA	1		_					
Depth (inc	ches):		<u> </u>				Hydric	Soil Present? Yes No
Remarks:								

Wetland Photograph Page

Wetland ID W-C11



Photograph Direction NE

Date: 04/09/2015

Comments: 2015 wetland delineation.



Photograph Direction South

Date: 11/21/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP	oject/Site: MVP City/County: Montgomery						
Applicant/Owner: MVP			•	State: VA Sampling Point: W-C12			
Investigator(s): L.Harloe, K.La	ımontagne, L. Sı	ummers Sect	ion Township Range N				
Landform (hillslope, terrace, etc.):					Slope (%); 2		
Subregion (LRR or MLRA): LRR					Datum: NAD 83		
Soil Map Unit Name: McGary a			=				
		to a thirty than a form and	V. V. Na	INVVI CIASSIII	Cation: Trend		
Are climatic / hydrologic conditions		-					
Are Vegetation, Soil		-			present? Yes No		
Are Vegetation, Soil	, or Hydrology	naturally problem	natic? (If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS	5 – Attach site r	nap showing saı	mpling point location	ons, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	? Yes	No. V					
Hydric Soil Present?	Yes		Is the Sampled Area	.,	🗸		
Wetland Hydrology Present?	Yes V		within a Wetland?	Yes	No		
Remarks: Upland							
HYDROLOGY							
Wetland Hydrology Indicators	:			Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of	one is required; chea	ck 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 O		Drainage Patterns (B10)			
Saturation (A3)	_		res on Living Roots (C3)	Moss Trim L			
Water Marks (B1)		Presence of Reduce	, ,		n Water Table (C2)		
Sediment Deposits (B2)	_		on in Tilled Soils (C6)	Crayfish Bu			
Drift Deposits (B3)		Thin Muck Surface (Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Iron Deposits (B5)		Other (Explain in Re	emarks)		Stressed Plants (D1)		
Inundation Visible on Aerial	Imagery (R7)			Shallow Aqu	Position (D2)		
Water-Stained Leaves (B9)	imagery (Dr)				aphic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutra			
Field Observations:					. ,		
Surface Water Present?	∕es No <u></u>	_ Depth (inches):					
Water Table Present?	res No <u>✔</u>	_ Depth (inches):					
	Yes No No	Depth (inches):		Hydrology Prese	nt? Yes <u>/</u> No		
(includes capillary fringe) Describe Recorded Data (stream			avious inspections) if ave	viloble			
Describe Necorded Data (stream	r gauge, monitoring	well, aeriai priotos, pi	evious irispections), ii ava	aliable.			
Remarks:							
Heavy rain overnight could	contribute to hy	drology. Spring p	eepers heard.				

VEGETATION (Four Strata) – Use scientific names of plants.

, ,	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species
1. Pinus virginiana	30		<u>UPL</u>	That Are OBL, FACW, or FAC:2 (A)
2. Quercus bicolor	15	~	FACW	T. 111 1 15
3				Total Number of Dominant Species Across All Strata: 6 (B)
4				、,
5				Percent of Dominant Species That Are OBL FACW or FAC: 33 (A/B)
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
r	45	= Total Cov	or	Total % Cover of: Multiply by:
50% of total cover: 22.5				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')	2070 0.	10101 00101		FACW species x 2 =
1. Viburnum lentago	20	~	FAC	FAC species x 3 =
2. Acer saccharum	10		FACU	FACU species x 4 =
3. Fagus grandifolia	10			UPL species x 5 =
			F <u>ACU</u>	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				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 20	20% of	total cover:	8	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')				
1				Problematic Hydrophytic Vegetation ¹ (Explain)
2	-			1
3				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Deminions of Four Vegetation Strata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
8				noight.
				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10	-	-		, '
11	0	T		Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 0		= Total Cov total cover:		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 15')	20 /6 01	iolai covei.		Woody vine - All woody vines greater than 3.28 ft in
1. Lonicera japonica	20	~	FACU	height.
			FACO	
2		-		
3				
4		· 		Hydrophytic
5				Vegetation
40		= Total Cov		Present? Yes No
50% of total cover:10		total cover:	4	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Disturbed site, adjacent to ROW.				

Sampling Point: W-C12,C11-UP

SOIL

Profile Desc	ription: (Describe t	o the dept	h needed to docun	nent the in	ndicator o	or confirm	the absence	of indicat	ors.)		
Depth	Matrix		Redox	c Features	3						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remar	ks	
0-8"	7.5 YR6/6	100					Silty loam	-			
8-20"	7.5 YR7/8	100					Silty loam				
											_
								-			
								-			
¹ Type: C=Ce	oncentration, D=Depl	etion, RM=I	Reduced Matrix, MS	=Masked	Sand Gra	ins.	² Location: P	L=Pore Lin	ing, M=Mat	rix.	
Hydric Soil		•							roblematic		ils³:
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLR	A 147)	
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfac	ce (S8) (M	LRA 147,	148) C	oast Prairi	e Redox (A	16)	
	stic (A3)		Thin Dark Su			47, 148)		(MLRA 1			
	en Sulfide (A4)		Loamy Gleye		F2)		P		oodplain So	oils (F19)	
	d Layers (A5)		Depleted Mat		-\			(MLRA 1		(==)	
	uck (A10) (LRR N)	(////	Redox Dark S						v Dark Surf		
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Dar Redox Depre					ullei (Expia	ain in Rema	iks)	
	Mucky Mineral (S1) (L	RR N.	Iron-Mangane			RR N.					
	A 147, 148)	,	MLRA 130		, , (-	,					
	Gleyed Matrix (S4)		Umbric Surfa	-	MLRA 13	6, 122)	³ Ind	icators of h	ydrophytic	vegetation a	and
Sandy R	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	MLRA 14	8) we	tland hydro	ology must l	be present,	
Stripped	l Matrix (S6)		Red Parent M	laterial (F2	21) (MLR	A 127, 147	') un	less disturb	ed or probl	ematic.	
Restrictive I	Layer (if observed):										
Type:											
Depth (in	ches):						Hydric Soil	Present?	Yes	No _	<u> </u>
Remarks:							· L				

Project/Site: MVP		City/C	ounty: Montgomery		Sampling Date: 04/08/2015		
Applicant/Owner: MVP			,	State: VA	Sampling Point: W-C6		
Investigator(s): L.Harloe, K.	Lamontagne, L. Sur	nmers _{Sectio}	on, Township, Range: N/		_ ,		
Landform (hillslope, terrace, etc					Slope (%): 2		
Subregion (LRR or MLRA): LF			Long: -80.		Datum: NAD 83		
Soil Map Unit Name: Berks-C							
Are climatic / hydrologic condition					_		
Are Vegetation, Soil		_ ,		Circumstances" p	present? Yes No		
Are Vegetation, Soil	, or Hydrology	_ naturally problema	itic? (If needed, e	explain any answe	rs in Remarks.)		
SUMMARY OF FINDING	3S – Attach site ma	ap showing sam	pling point location	ns, transects	, important features, etc.		
Hydrophytic Vegetation Prese	ent? Yes	No					
Hydric Soil Present?	Yes 🗸	No No	Is the Sampled Area within a Wetland?	Yes 🗸	No		
Wetland Hydrology Present?	Yes 🔽	No	within a wetiand?	res	NO		
Remarks:		I					
Cowardin Code: PEM; H	·						
The wetland was revisite	ed on 11/1/2019. The	e presence of we	tland hydrology, hyd	drophytic vege	tation, and hydric soils		
was unable to be confirm	ned because the we	tland was obstru	cted by timber matti	ng.			
HYDROLOGY							
Wetland Hydrology Indicato	ors:				tors (minimum of two required)		
Primary Indicators (minimum	•			Surface Soil			
Surface Water (A1)		rue Aquatic Plants (I			getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Par			
Saturation (A3)			es on Living Roots (C3)	Moss Trim Lines (B16)			
Water Marks (B1)		Presence of Reduced		Dry-Season Water Table (C2)			
Sediment Deposits (B2) Drift Deposits (B3)		Recent Iron Reduction Thin Muck Surface (C		Crayfish Burrows (C8)			
Algal Mat or Crust (B4)		Other (Explain in Ren		Saturation Visible on Aerial Imagery (C9)Stunted or Stressed Plants (D1)			
Iron Deposits (B5)	<u> </u>	Strict (Explain in Roll	iainoj	Geomorphic Position (D2)			
Inundation Visible on Aer	ial Imagery (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B				Microtopographic Relief (D4)			
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)		
Field Observations:							
Surface Water Present?	Yes No	Depth (inches): C	0.5				
Water Table Present?	Yes No	Depth (inches):	8				
Saturation Present?	Yes No		8 Wetland H	lydrology Presen	nt? Yes <u> </u>		
(includes capillary fringe) Describe Recorded Data (stre	an gauge monitoring w	all agrical photos proj	vious inspections) if ava	ilabla:			
Describe Necolded Data (Sile	am gauge, monitoring we	eli, aeriai priotos, pre	vious irispections), ii ava	liable.			
Remarks:	-						
Area gets bush hogged a	annually by landown	er, per discussio	n with landowner.				

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-C6

20'	Absolute	Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species	
1				That Are OBL, FACW, or FAC: 2	(A)
2					
				Total Number of Dominant	(D)
3		-		Species Across All Strata: 2	(B)
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 100%	(A/B)
6					(,,,_)
				Prevalence Index worksheet:	
7	_			Total % Cover of: Multiply by:	
		= Total Cov		OBL species x 1 =	
50% of total cover: 0	20% of	total cover			
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					
4				Column Totals: (A)	(B)
5			_	Decodes a la deco D/A	
				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
8				✓ 2 - Dominance Test is >50%	
9					
	_	= Total Cov	or	3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: 0				4 - Morphological Adaptations ¹ (Provide s	upporting
5'	20 /6 01	iolai covei		data in Remarks or on a separate shee	et)
Heib Stratum (Flot Size)	4.0			✓ Problematic Hydrophytic Vegetation¹ (Exp	nlain)
1. Carex stricta	10		OBL	1 Toblemate Tryatophytic Vegetation (Exp	nam)
2. Scirpus atrovirens	10	~	OBL		
3				¹ Indicators of hydric soil and wetland hydrolog	y must
				be present, unless disturbed or problematic.	
4				Definitions of Four Vegetation Strata:	
5				_ ,,, , , , , , , , , , , , , , , , , ,	٥ ،
6				Tree – Woody plants, excluding vines, 3 in. (7 more in diameter at breast height (DBH), rega	.6 cm) or
7				height.	ruless of
8				Sapling/Shrub - Woody plants, excluding vin	es, less
9				than 3 in. DBH and greater than or equal to 3.	28 ft (1
10	· <u></u>			m) tall.	
11.				Harb All barbaccas (non woods) plants re	aardlaaa
	20 -	= Total Cov	·or	Herb – All herbaceous (non-woody) plants, re of size, and woody plants less than 3.28 ft tall	
50% of total cover:10				or size, and woody plants loss than size it tall	
	20 /0 01	total cover	·	Woody vine – All woody vines greater than 3	28 ft in
Woody Vine Stratum (Plot size: 15')				height.	
1					
2			. <u></u>		
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	sheet.)			1	
Unknown grasses with no flowering heads not u		domina	nce test	Other enecies present but not in samp	e nlot
				Other species present but not in samp	e piot
include Juncus effusus (FACW) and Toxicoden	aron verni	ix (OBL).			

Sampling Point: W-C6

Profile Desc	ription: (Describe t	o the dep	th needed to docun	nent the i	indicator	or confirm	the absence of	of indicators.)			
Depth	Matrix		Redox	x Feature	S						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	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	<u>M</u>	SiLo	C M			
1 _{Type} C C		otion DM	Dodugod Motrix, MS				2l costion: DI	Doro Lining M Matrix			
Hydric Soil I	oncentration, D=Depl	etion, KM=	-keaucea Matrix, MS	=iviasked	a Sand Gr	ains.		=Pore Lining, M=Matrix. cors for Problematic Hydric Soils ³ :			
Histosol Histic Ep Black His Hydroge Stratified 2 cm Mu	(A1) pipedon (A2)	e (A11)	Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S ✓ Depleted Dar	low Surfa rface (S9 d Matrix (rix (F3) Surface (F	(F2)		2 co 148) Co Pie Ve	cm Muck (A10) (MLRA 147) least Prairie Redox (A16) (MLRA 147, 148) ledmont Floodplain Soils (F19) (MLRA 136, 147) ry Shallow Dark Surface (TF12) ther (Explain in Remarks)			
Thick Da	ark Surface (A12)		Redox Depre	ssions (F	8)		Ou	ilei (Expiairi iri Kemarks)			
	lucky Mineral (S1) (L	RR N,	<u>✓</u> Iron-Mangane		es (F12) (LRR N,					
	147, 148)		MLRA 136)								
	edox (S5)		 Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be presented by the presented surface of the presented by the presen								
	Matrix (S6)		Red Parent M	1aterial (F	21) (MLR	A 127, 147) unle	ess disturbed or problematic.			
Restrictive L	_ayer (if observed):										
Type:											
	ches):						Hydric Soil F	Present? Yes No			
Remarks:											

SOIL

Wetland Photograph Page

Wetland ID W-C6



Photograph Direction NE

Date: 04/08/2015

Comments: 2015 wetland delineation.



Photograph Direction ENE

Date: 11/01/19

Project/Site: MVP City/County: Mont					ontgomery Sampling Date: 04/08/			
Applicant/Owner: MVP					State: VA Sampling Point: W-C6-U			
Investigator(s): L.Harloe, K.Lamontagne, L. Summers Section, Township,				on Township Pango: N/		Camping Font.		
Landform (hillslope, terrace, etc.): Toe Slope Local relief (concave, convex, none): None						Slane (0/), 5		
			Local rei	ier (concave, convex, non	276246	Slope (%): 0		
Subregion (LRR or MLRA): _L		Datum: NAD 83						
Soil Map Unit Name: Berks-	Clymer co	mplex,	7 to 15 percent slop	es	NWI classific	cation: None		
Are climatic / hydrologic condi	tions on the	site typica	al for this time of year? Y	′es No (If no, explain in F	Remarks.)		
Are Vegetation, Soil	, or Hy	drology _	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No		
Are Vegetation, Soil _	, or Hy	drology	naturally problema		xplain any answe			
						s, important features, etc.		
Hydrophytic Vegetation Pres	ent?	Vas	No					
Hydric Soil Present?	ione.		No	Is the Sampled Area	V = =	/		
Wetland Hydrology Present	?	Yes	No V	within a Wetland?	Yes	No		
Remarks:								
HYDROLOGY								
Wetland Hydrology Indica	ors:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum	of one is re	quired; ch	neck all that apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)		_	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)		_	Hydrogen Sulfide Od	or (C1)	Drainage Patterns (B10)			
Saturation (A3)		-	Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim L	ines (B16)		
Water Marks (B1)		_	Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		-	Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)		
Drift Deposits (B3)		=	Thin Muck Surface (0			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		-	Other (Explain in Rer	narks)	Stunted or S	tressed Plants (D1)		
Iron Deposits (B5)						Position (D2)		
Inundation Visible on A		(B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9)					aphic Relief (D4)		
Aquatic Fauna (B13)					FAC-Neutra	Test (D5)		
Field Observations:								
Surface Water Present?			Depth (inches):					
Water Table Present?			Depth (inches):					
Saturation Present?	Yes	_ No	Depth (inches):	Wetland H	ydrology Presei	nt? Yes No		
(includes capillary fringe) Describe Recorded Data (st	ream gauge,	monitorin	ng well, aerial photos, pre	vious inspections), if avai	ilable:			
,	0 0 7		7 1 71	, ,,				
Remarks:								
Area gets bush hogged	annually	by land	owner, per discussion	n with landowner				

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

__)

50% of total cover: ___0

50% of total cover: ___0

_ = Total Cover

_ 20% of total cover:__ 0

0 = Total Cover

20% of total cover:

45 = Total Cover

0 = Total Cover

5

50% of total cover: 22.5 20% of total cover: 9

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

25

✓ FACU

✓ _ FACU

FACU

UPL

30'

Sapling/Shrub Stratum (Plot size: 15')

Tree Stratum (Plot size: _

Herb Stratum (Plot size: _

2. Trifolium pratense

4. Dactylis glomerata

3. Daucus carota

1. Andropogon virginicus

Sampling Point: W-C6-UP1 **Dominance Test worksheet:** Absolute Dominant Indicator % Cover Species? Status **Number of Dominant Species** 0 ___ (A) That Are OBL, FACW, or FAC: **Total Number of Dominant** 2 (B) Species Across All Strata: Percent of Dominant Species 0% (A/B) That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species ____ x 1 = ____ FACW species _____ x 2 = ____ FAC species _____ x 3 = ____ FACU species _____ x 4 = ____ UPL species _____ x 5 = ____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0¹ ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 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 Yes ____ No ___ Present?

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

10._____

Area gets bush hogged annually by landowner

Woody Vine Stratum (Plot size: 15'

SOIL Sampling Point: W-C6-UP1

Profile Description: (Describe to	the depth	needed to docun	nent the i	ndicator	or confirn	the absence	of indicators.)			
Depth Matrix		Redox	x Feature:							
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks			
0-9" 10 YR 4/4	100			RM	M	SiL	Gravel intermixed			
		_				·				
		.				-				
¹ Type: C=Concentration, D=Deple	tion RM-F	Reduced Matrix MS	S-Masked	I Sand Gr	ains	² Location: P	L=Pore Lining, M=Matrix.			
Hydric Soil Indicators:	tion, raivi–i	Codoca Matrix, Mc	J-IVIASKCC	T Carla Ci	anis.		ators for Problematic Hydric Soils ³ :			
Histosol (A1)		Dark Surface	(\$7)				cm Muck (A10) (MLRA 147)			
Histic Epipedon (A2)		Polyvalue Be		ce (S8) (I	MLRA 147.		Coast Prairie Redox (A16)			
Black Histic (A3)		Thin Dark Su				=	(MLRA 147, 148)			
Hydrogen Sulfide (A4)		Loamy Gleye			, -,	Р	riedmont Floodplain Soils (F19)			
Stratified Layers (A5)		Depleted Mat		,			(MLRA 136, 147)			
2 cm Muck (A10) (LRR N)		Redox Dark S	Surface (F	6)		V	ery Shallow Dark Surface (TF12)			
Depleted Below Dark Surface	(A11)	Depleted Dar				c	Other (Explain in Remarks)			
Thick Dark Surface (A12)		Redox Depre								
Sandy Mucky Mineral (S1) (LF	RR N,	Iron-Mangane		es (F12) ((LRR N,					
MLRA 147, 148)		MLRA 136)								
Sandy Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122) Bindrant Floodelain Soila (F40) (MLRA 136)								
Sandy Redox (S5)Stripped Matrix (S6)		Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic.								
Restrictive Layer (if observed):		Neu Faleili IV	iateriai (i	ZI) (IVILI	A 121, 14	T un	less disturbed or problematic.			
Type: Shale										
		<u> </u>				11-1-1-1-0-1	Duna 2010 - Van - Na - V			
Depth (inches): 9		_				Hydric Soil	Present? Yes No			
Remarks:										

Project/Site: MVP			Citv/C	ountv: Montgomery		Sampling Date: 04/08/2015	
Applicant/Owner: MVP						Sampling Point: W-C5	
Investigator(s): L.Harloe, K	Lamontagr	ne. L. Sur	nmers soction	on Township Pango: N	<u> </u>		
• • • • • • • • • • • • • • • • • • • •						01 (0() 5	
Landform (hillslope, terrace, e	IC.): TOCSIOP	<u> </u>	Local reli			Slope (%): 5	
Subregion (LRR or MLRA):	.RRN	Lat:	37.2555			_{Datum:} NAD 83	
Soil Map Unit Name: Berks-	Weikert con	nplex, 15	to 25 percent slo	pes	NWI classifica	_{ation:} None	
Are climatic / hydrologic condi	tions on the sit	e typical for	this time of year? Y	es No ((If no, explain in Re	emarks.)	
Are Vegetation . Soil	. or Hvdr	oloav	significantly distur	bed? Are "Normal	Circumstances" p	resent? Yes No	
Are Vegetation, Soil _					explain any answer		
_	•					, important features, etc.	
		· ·					
Hydrophytic Vegetation Pres		es V	No	Is the Sampled Area			
Hydric Soil Present?		es /	No No	within a Wetland?	Yes	No	
Wetland Hydrology Present? Remarks:	<u></u>	es <u> </u>	NO				
Cowardin Code:PEM							
HGM:slope							
WT:NRPWW							
VVI.IVIXI VVVV							
HYDROLOGY							
Wetland Hydrology Indicat	ors:				Secondary Indicat	tors (minimum of two required)	
Primary Indicators (minimum	of one is requ	ired; check	all that apply)		Surface Soil (Cracks (B6)	
✓ Surface Water (A1)			True Aquatic Plants (B14)	Sparsely Veg	etated Concave Surface (B8)	
High Water Table (A2)		1	Hydrogen Sulfide Odd	or (C1)	Drainage Pat	terns (B10)	
Saturation (A3)		(Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim Li	nes (B16)	
Water Marks (B1)		1	Presence of Reduced	I Iron (C4)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)		ا	Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Burrows (C8)		
Drift Deposits (B3)			Thin Muck Surface (C	27)	Saturation Vis	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		(Other (Explain in Ren	narks)	Stunted or St	ressed Plants (D1)	
Iron Deposits (B5)					Geomorphic I		
Inundation Visible on Ae		37)			Shallow Aquit		
Water-Stained Leaves (B9)				Microtopogra		
Aquatic Fauna (B13)					FAC-Neutral	Test (D5)	
Field Observations:) E			
Surface Water Present?			_ op (ooo)	0.5			
Water Table Present?			Depth (inches):	0		_	
Saturation Present? (includes capillary fringe)	Yes	No	Depth (inches):	Wetland H	lydrology Presen	t? Yes <u> </u>	
Describe Recorded Data (str	ream gauge, m	onitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:		
Remarks:			h	al in alabania Amaa ara		d a marralle character de coma a	
per discussion with land						d annually by landowner,	
ROW.	lowner. wet	iana ione	iws what looks lik	te depression of dra	ınage pattern a	and extends beyond	
TIOVV.							

Samp	lina	Point:	W-C	5
Janio	IIIIIU	ı Ollit.		_

0.01	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 Dominant
3				Species Across All Strata: 3 (B)
4				
5		-		Percent of Dominant Species That Are OBL FACW or FAC: 67
6				That Are OBL, FACW, or FAC: 67 (A/B)
				Prevalence Index worksheet:
7	0	Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0		= Total Cov		OBL species x 1 =
	20% 01	total cover.		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15') 1 Toxicodendron vernix	10	~	OBL	FAC species x 3 =
··	5		OBL	
2. Rosa multiflora			F <u>ACU</u>	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
<u>. </u>	15	= Total Cov		3 - Prevalence Index is ≤3.0¹
50% of total cover:	20% of	total cover	3	4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size: 5')	2070 01	total oover.		data in Remarks or on a separate sheet)
1. Arthraxon hispidus	15	~	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Microstegium vimineum	5			
	5		FAC	¹ Indicators of hydric soil and wetland hydrology must
3. Juncus effusus			F <u>ACW</u>	be present, unless disturbed or problematic.
4. Carex lurida	5		<u>OBL</u>	Definitions of Four Vegetation Strata:
5				Too Weeks to the second of a s
6	-			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
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				
· · · · · · · · · · · · · · · · · · ·	30	Tatal Car		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 15		Total Coversitotal covers	_	of size, and woody plants less than 3.20 it tall.
451	20 /6 01	total cover.		Woody vine – All woody vines greater than 3.28 ft in
voody viile Stratum (Flot size)				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cov	er	Present? Yes V No No
50% of total cover:0		total cover:	_	
Remarks: (Include photo numbers here or on a separate s	heet.)			· I
(,			

W-C5

Depth	cription: (Describe Matrix	to the dep		x Feature		or commi	i tile absence	or mulcators.)
(inches)				% realure.	Type ¹	Loc ²	Texture	Remarks
0-6"	10YR4/2							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	-
0-20	101113/1		7.51110/0				Loam	
	-	· ——			-			
								-
								_
¹ Type: C=Ce	oncentration, D=Dep	letion, RM=	=Reduced Matrix, MS	S=Masked	d Sand Gi	rains.	² Location: PL	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:							ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (I	MLRA 147,	148) Co	oast Prairie Redox (A16)
Black Hi			Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		Pi	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma	, ,				(MLRA 136, 147)
	ick (A10) (LRR N)	- (044)	Redox Dark	,	,			ery Shallow Dark Surface (TF12)
	d Below Dark Surfac ark Surface (A12)	e (A11)	Depleted Date Redox Depreted				0	ther (Explain in Remarks)
	fik Sunace (A12) lucky Mineral (S1) (L	RR N	✓ Iron-Mangan			(I RR N		
	147, 148)	-IXIX I V ,	MLRA 13		63 (1 12)	(LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa	-	(MLRA 1	36. 122)	³ Indi	icators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6)		Red Parent M					ess disturbed or problematic.
Restrictive I	Layer (if observed):							
Type: N	4							
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								



Photograph Direction SE

Comments:		

Project/Site: MVP				City/	County: Montgome	ery	_ Sampling Date: 04/08/2015	
Applicant/Owner: MVP							Sampling Point: W-C5UP	
Investigator(s): L.Harloe, K.Lamontagne, L. Summers Section, Township, R					<u> </u>			
Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, conve							Slope (%): 5	
						Datum: NAD 83		
Soil Map Unit Name: Berks-								
Are climatic / hydrologic condi								
· · · · · · · · · · · · · · · · · · ·				-				
							"present? Yes No	
Are Vegetation, Soil _	-					ed, explain any ansv		
SUMMARY OF FINDIN	IGS – Atta	ch site r	nap sh	owing sai	mpling point loca	ations, transect	ts, important features, etc.	
Hydrophytic Vegetation Pres	sent?	Yes	No	✓				
Hydric Soil Present?		Yes			Is the Sampled Ar within a Wetland?		No	
Wetland Hydrology Present		Yes		✓	within a wetland:	163		
Remarks:	-							
HYDROLOGY								
Wetland Hydrology Indica	tors:					Secondary Indi	cators (minimum of two required)	
Primary Indicators (minimum		uired: che	ck all that	apply)		Surface So		
Surface Water (A1)	10101101010104			quatic Plants	(B14)	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)		
High Water Table (A2)				en Sulfide O				
Saturation (A3)					eres on Living Roots (C			
Water Marks (B1)				ce of Reduce		Dry-Season Water Table (C2)		
Sediment Deposits (B2))		Recent	Iron Reducti	on in Tilled Soils (C6)	Crayfish Bu	urrows (C8)	
Drift Deposits (B3)			Thin Mu	uck Surface ((C7)	Saturation	Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)			Other (I	Explain in Re	emarks)		Stressed Plants (D1)	
Iron Deposits (B5)							ic Position (D2)	
Inundation Visible on A		B7)				Shallow Ac		
Water-Stained Leaves (B9)						graphic Relief (D4)	
Aquatic Fauna (B13) Field Observations:						FAC-Neutr	ai rest (D5)	
Surface Water Present?	Yes	No	Depth	(inches):				
Water Table Present?				(inches):				
Saturation Present?				(inches):		nd Hydrology Pres	ent? Yes No_ 🗸	
(includes capillary fringe)								
Describe Recorded Data (st	ream gauge, r	nonitoring	weii, aeri	ai priotos, pr	evious inspections), if	avallable:		
Remarks:								

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W-C5UP	
•apg : •	
st worksheet:	
in and Consider	

1	= Total Cover	er 0 FACU	Number of Dominant Species 1 (A) Total Number of Dominant 2 (B) Percent of Dominant Species 50% (A/B) Prevalence Index worksheet: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 =
3	= Total Cover	er 0 FACU	Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) Prevalence Index worksheet:
3	= Total Cover	er 0 FACU	Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) Prevalence Index worksheet:
5	_ = Total Cov of total cover	er 0 FACU	That Are OBL, FACW, or FAC: 50% (A/B) Prevalence Index worksheet:
6	_ = Total Cov of total cover	er 0 FACU	That Are OBL, FACW, or FAC: 50% (A/B) Prevalence Index worksheet:
7	= Total Cov f total cover	er 0 FACU	Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 =
0 20% of total cover: 0 20% of total	of total cover	0 FACU	Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 =
50% of total cover:0 20% of Sapling/Shrub Stratum (Plot size:15') 1. Rosa multiflora	of total cover	0 FACU	OBL species x 1 = FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15') 20 1. Rosa multiflora 20 2		F <u>ACU</u>	FACW species x 2 =
1. Rosa multiflora 20 2			
2			1 AC species x 3 =
3.			FACU species x 4 =
4.			UPL species x 5 =
5	_		
6			Column Totals: (A) (B)
	- ·		Prevalence Index = B/A =
7	_		Hydrophytic Vegetation Indicators:
7	_		1 - Rapid Test for Hydrophytic Vegetation
8			2 - Dominance Test is >50%
9	_		3 - Prevalence Index is ≤3.0 ¹
	= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:10 20% of	of total cover	4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')	•		Problematic Hydrophytic Vegetation¹ (Explain)
1. Arthraxon hispidus 10		F <u>AC</u>	1 Toblematic Hydrophytic Vegetation (Explain)
2			¹ Indicators of hydric soil and wetland hydrology must
3			be present, unless disturbed or problematic.
4			Definitions of Four Vegetation Strata:
5	_		
6	_		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7			height.
8			Continue/Charaba Manda alanta analadia antina alan
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 Cov	er	of size, and woody plants less than 3.28 ft tall.
	of total cover	2	Monday ding. All was divising a greater their 2.00 ft in
Woody Vine Stratum (Plot size:)			Woody vine – All woody vines greater than 3.28 ft in height.
1			
2			
3			
4			the described to
5.			Hydrophytic Vegetation
	= Total Cov	er	Present? Yes No
50% of total cover: 0 20% of	of total cover	_	

SOIL Sampling Point: W-C5UP

Profile Desc	ription: (Describe	to the dept	h needed to docun	ent the in	ndicator	or confirm	n the abse	ence of indicators.)
Depth	Matrix		Redox	(Features	3			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Textur</u>	re Remarks
0-10"	10YR 4/2	100						
10-20"	10 YR 5/4	100						
	-							
		· 						 ;
							-	
	-		_				-	
	-	· 					2	
	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.		n: PL=Pore Lining, M=Matrix.
Hydric Soil I							li .	ndicators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	. ,	/ 	/ -	_	2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) _	Coast Prairie Redox (A16)
Black His			Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		-2)		_	Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat		٥)			(MLRA 136, 147)
	ck (A10) (LRR N)	~ (^44)	Redox Dark S				-	Very Shallow Dark Surface (TF12)
	Below Dark Surface	e (ATT)	Depleted Dar Redox Depre				_	Other (Explain in Remarks)
	ark Surface (A12) lucky Mineral (S1) (L	DD N	Iron-Mangane			DDN		
	147, 148)	.KK N,	MLRA 13		5 (F12) (LKK N,		
	leyed Matrix (S4)		Umbric Surfa	•	MI D A 13	6 122\		³ Indicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo				18)	wetland hydrology must be present,
	Matrix (S6)		Red Parent M					unless disturbed or problematic.
	_ayer (if observed):		Red ratefit iv	iateriai (i z	ZI) (IVILIX	A 121, 141	', 	uniess disturbed of problematic.
	ayer (ii observeu).							
Type:							l	0.11.00.11
	ches):						Hydric	Soil Present? Yes No
Remarks:								

Project/Site: MVP		City/C	ounty: Montgomery		Sampling Date: 08/28/2015
Applicant/Owner: MVP			,		Sampling Point: W-NN8
Investigator(s): D. Mccullou	igh, K. Larsen, R. Tı	urner _{Sectio}	on, Township, Range: N/A		
Landform (hillslope, terrace, et					Slope (%): 10
Subregion (LRR or MLRA): L			Long: <u>-</u> 80.		Datum: NAD83
Soil Map Unit Name: Weave				NWI classifica	
Are climatic / hydrologic condit		ur this time of year? V			
· -		-			
Are Vegetation, Soil					esent? Yes No
Are Vegetation, Soil SUMMARY OF FINDIN				oplain any answers	in Remarks.) important features, etc.
			<u> </u>	<u> </u>	
Hydrophytic Vegetation Pres		_ No	Is the Sampled Area		
Hydric Soil Present? Wetland Hydrology Present?	Yes	No No	within a Wetland?	Yes	No
Remarks:					
Cowardin Code: PFO; F	IGM: Riverine; WT:	RPWWD			
Information listed on this for survey in 2019 to red	s form represents the confirm the presence	e data collected in e of wetland hydro	n 2015. Due to high v blogy, hydrophytic ve	waters, the we getation, and I	tland was not accessible nydric soils.
HYDROLOGY					
Wetland Hydrology Indicate			<u>.</u>	Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum	of one is required; check	call that apply)		Surface Soil C	cracks (B6)
Surface Water (A1)		True Aquatic Plants (· ·		etated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Patt	
Saturation (A3)		•	es on Living Roots (C3)	Moss Trim Lin	` '
Water Marks (B1)		Presence of Reduced	· · ·		/ater Table (C2)
Sediment Deposits (B2)	 -	Recent Iron Reductio	` ,	Crayfish Burro	` '
Drift Deposits (B3) Algal Mat or Crust (B4)		Thin Muck Surface (C Other (Explain in Ren			ible on Aerial Imagery (C9) essed Plants (D1)
Iron Deposits (B5)	_	Other (Explain in Ken	ilaiks)	Geomorphic F	` '
Inundation Visible on Ae	rial Imagery (B7)		-	Shallow Aquita	, ,
Water-Stained Leaves (E			-		phic Relief (D4)
Aquatic Fauna (B13)	,		-	FAC-Neutral 1	` '
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No	Depth (inches):			
Saturation Present?	Yes No	Depth (inches):	Wetland Hy	drology Present	? Yes <u>/</u> No
(includes capillary fringe) Describe Recorded Data (str	eam gauge, monitoring w	vell, aerial photos, pre	 vious inspections), if avail	able:	
·					
Remarks:			National in an agradia		
			-		er channel between main
stem of river and a river	braid during 2015 fi	ieia survey. See s	soils page for problen	natic condition	s description.

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

20% of total cover:____

Tree Stratum (Plot size:

3. Betula nigra

4. Juglans nigra

1. Asimina triloba

Herb Stratum (Plot size: _ 1. Micristegium viminium

3. Verbesina alterniflora

4. Leersia oryzoides

1. Vitis aestivalis

2. Dichanthelium clandestinum

Woody Vine Stratum (Plot size: 15'

2. Toxicodendron radicans

3. Salix nigra

1. Platanus occidentalis

2. Robinia psudoacacea

Sapling/Shrub Stratum (Plot size: 15'

2. Lindera benzoin

4. Betula nigra

	Absolute	Dominant	Indicator	Dominance Test workshee	t:	
)		Species?		Number of Dominant Specie		
	75	~	FACW	That Are OBL, FACW, or FA		(A)
	10		FACU	Total Number of Descinent		_
	10		FACW	Total Number of Dominant Species Across All Strata:	7	(B)
	5		<u>FACU</u>			_ ` ′
				Percent of Dominant Species That Are OBL, FACW, or FA		_ (A/B
				Prevalence Index workshe	et:	
	100	= Total Cov	er	Total % Cover of:	Multiply by:	
0% of total cover: 50				OBL species	x 1 =	
15'				FACW species	x 2 =	
,	7		FACU	FAC species	x 3 =	
	35	~	FAC	FACU species	x 4 =	
	10		OBL	UPL species	x 5 =	
	15	✓	FACW	Column Totals:	_ (A)	(B)
				Prevalence Index = B/	'A =	
				Hydrophytic Vegetation Inc	dicators:	
				1 - Rapid Test for Hydro	phytic Vegetation	
				✓ 2 - Dominance Test is >	50%	
				3 - Prevalence Index is s	≤3.0 ¹	
20.6		= Total Cov		4 - Morphological Adapt	ations1 (Provide s	upporting
0% of total cover: <u>33.5</u>	20% of	total cover:	13.4	data in Remarks or o	n a separate shee	et)
)	40	~	EAC	Problematic Hydrophytic	Vegetation ¹ (Exp	lain)
	15		FAC			
	10		FAC	¹ Indicators of hydric soil and	wetland hydrolog	y must
	5		F <u>AC</u>	be present, unless disturbed	or problematic.	
			<u>OBL</u>	Definitions of Four Vegetat	tion Strata:	
				Tree – Woody plants, exclude more in diameter at breast he		
				height.	eigiii (DBH), Tegai	iuless oi
				Sapling/Shrub – Woody pla	ints, excludina vin	es, less
				than 3 in. DBH and greater th		
				m) tall.		
				Herb - All herbaceous (non-		
		= Total Cov		of size, and woody plants les	ss than 3.28 ft tall.	
0% of total cover: <u>35</u> 15' \	20% of	total cover:	14	Woody vine – All woody vin	es greater than 3.	28 ft in
,)	15	~	FACU	height.		
	25	~				
			<u>FAC</u>			
				Hydrophytic		
				Vegetation	<i>.</i>	
		= Total Cov		Present? Yes	No	_
50% of total cover: 20	0001	total cover:	8			

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

50% of total cover: ___20

SOIL Sampling Point: W-NN8

Profile Desc	cription: (Describe t	o the dept	h needed to docur	ment the i	ndicator	or confirm	the abs	sence of indicators.)
Depth	Matrix			x Feature:	-			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Text	
0-2	10YR 4/3	100					S	S Sandy/gravel
							-	
	-							
							-	
	-							
							-	
¹ Type: C=C	oncentration, D=Depl	etion. RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Locati	ion: PL=Pore Lining, M=Matrix.
Hydric Soil		ouon, ruii–	reduced Matrix, IN	O-Maskee	ound Ore			Indicators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) /M	II RΔ 147	148)	Coast Prairie Redox (A16)
	istic (A3)		Tolyvalde Be				0,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	. ,	•	47, 140)		Piedmont Floodplain Soils (F19)
	, ,				Γ 2)			
	d Layers (A5)		Depleted Ma	, ,	·c/			(MLRA 136, 147)
	uck (A10) (LRR N)	. (Redox Dark	`	,			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Da		, ,			✓ Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (I	_RR N,		
	A 147, 148)		MLRA 13	-				2
	Gleyed Matrix (S4)		Umbric Surfa					³ Indicators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	d Matrix (S6)		Red Parent I	Material (F	21) (MLR	A 127, 147	7)	unless disturbed or problematic.
	Layer (if observed):							
Type: Co	obble/gravel							
Depth (in	ches). 2						Hydri	ic Soil Present? Yes No
Remarks:	onco)						- i yui i	10 0011 1030111. 103 100
								ey exist within a vegetated sand/grav

Wetland Photograph Page

Wetland ID W-NN8



Photograph Direction West

Date: 08/28/2015

Comments: 2015 wetland delineation.



Photograph Direction South

Date: 11/01/19

Project/Site: MVP		City/County: Mor	ntgomery	Sampling Date: 08/28/2015		
Applicant/Owner: MVP				Sampling Point: W-NN8-UP		
Investigator(s): D. Mccullough, K. Lars	sen, R. Turner					
Landform (hillslope, terrace, etc.): Terrace			-	Slope (%): 1		
Subregion (LRR or MLRA): LRRN				Datum: NAD83		
Soil Map Unit Name: Ross soils	Lat		NWI cla			
Are climatic / hydrologic conditions on the si	to tomical familia times					
	* *	-				
Are Vegetation, Soil, or Hydr						
Are Vegetation, Soil, or Hydr			(If needed, explain any ar			
SUMMARY OF FINDINGS – Attac	h site map show	wing sampling poi	int locations, transe	ects, important features, etc.		
Hydrophytic Vegetation Present?	Yes No 	/				
	res No	Is the Sam	•	No✓		
	Yes No	<u>/</u>	elialid: Tes_			
Remarks:						
Upland	- C-1.1					
Upland point located on adjacent h	ay field.					
HYDROLOGY						
Wetland Hydrology Indicators:			Socondany	ndicators (minimum of two required)		
Primary Indicators (minimum of one is requ	uirod: chock all that a	nnlu)	·	<u> </u>		
-			Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)			
Surface Water (A1)		atic Plants (B14) Sulfide Odor (C1)				
High Water Table (A2) Saturation (A3)		Rhizospheres on Living	-	rim Lines (B16)		
Water Marks (B1)		of Reduced Iron (C4)		ason Water Table (C2)		
Sediment Deposits (B2)		on Reduction in Tilled So		Burrows (C8)		
Drift Deposits (B3)		k Surface (C7)		on Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		plain in Remarks)		or Stressed Plants (D1)		
Iron Deposits (B5)	0.1101 (EX	piant in reomand)		rphic Position (D2)		
Inundation Visible on Aerial Imagery (I	37)			Aquitard (D3)		
Water-Stained Leaves (B9)	,			pographic Relief (D4)		
Aquatic Fauna (B13)				eutral Test (D5)		
Field Observations:						
	No Depth (in					
Water Table Present? Yes	No Depth (in	iches):				
	No Depth (in	iches):	Wetland Hydrology Present? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge, m	nonitoring well, aerial	photos, previous inspec	tions), if available:			
Describe Necorded Bata (Stream gauge, m	Torintorning Well, derital	priotos, proviodo mopoc	Alono, il avallable.			
Remarks:						

VEG

201	Absolute			Dominance Test work	ksheet:	
ree Stratum (Plot size: 30')	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant S	Species	
				That Are OBL, FACW,	or FAC: 0	(A)
				Total Number of Domi	nant	
				Species Across All Stra	ata:1_	(B)
				Percent of Dominant S	inacias	
				That Are OBL, FACW,	' ^	(A/B
				Prevalence Index wo		
		= Total Cove	_		Multiply	-
50% of total cover: _	0 20% of	total cover:_	0	OBL species		
apling/Shrub Stratum (Plot size: 15'	_)			FACW species		
				FAC species		
				FACU species		
				UPL species	x 5 =	
				Column Totals:	(A)	(B
				Droveles es la de-	. D/A	
					x = B/A =	
				Hydrophytic Vegetati		
				<u> </u>	Hydrophytic Vegetat	ion
				2 - Dominance Te		
		= Total Cove		3 - Prevalence Ind		
50% of total cover:			_	4 - Morphological	Adaptations ¹ (Provid	e supportir
erb Stratum (Plot size: 5')				data in Remark	ks or on a separate s	heet)
Festuca arundinacea	70	✓ i	FACU	Problematic Hydro	ophytic Vegetation ¹ (I	Explain)
Gallium mallugo	10	<u> </u>	ACU			
Trifolium repens	10	· · ·	ACU ACU	¹ Indicators of hydric so		
Solanum carolinensis	<u> </u>	· · ·		be present, unless dist	·	.
		·	-ACU	Definitions of Four V	egetation Strata:	
				Tree – Woody plants,	excluding vines, 3 in	. (7.6 cm) c
				more in diameter at bro		
				height.		
				Sapling/Shrub – Woo	dy plants, excluding	vines, less
				than 3 in. DBH and gre		
)				m) tall.		
l				Herb – All herbaceous	(non-woody) plants	regardless
		= Total Cove		of size, and woody pla	nts less than 3.28 ft	tall.
50% of total cover: _	47.5 20% of	total cover:_	19	Woody vine – All woo	dv vines greater that	n 3.28 ft in
oody Vine Stratum (Plot size: 15')				height.	dy virioù groator arai	1 0.20 11 111
		· ——		Hydrophytic		
				Hydrophytic Vegetation		
	0	= Total Cove			es No_ v	<u></u>
50% of total cover:		total cover:_	_			
emarks: (Include photo numbers here or on a sepa						
omano. Imolado prioto humbers fiere or on a sepa	311 66 1.)					

Sampling Point: W-NN8-UP

SOIL

Depth (inches)	Matrix Color (moist)	<u></u> %	Redox Features Color (moist)		D	marka
•			Color (moist) % Type ¹ Lo	CL	_ Kei	marks
0-8	10YR 4/3	100				
					_	
					_	
						
					_	
		letion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location:	PL=Pore Lining, M=	Matrix.
dric Soil I	ndicators:			Indi	icators for Problem	atic Hydric Soils ³ :
_ Histosol			Dark Surface (S7)		2 cm Muck (A10) (N	
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	—	Coast Prairie Redox	
Black Hi			Thin Dark Surface (S9) (MLRA 147, 1	148)	(MLRA 147, 148)	
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain	
	Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)	
	ick (A10) (LRR N) d Below Dark Surfac	Δ (Δ11)	Redox Dark Surface (F6)Depleted Dark Surface (F7)		Very Shallow Dark S Other (Explain in Re	
	ark Surface (A12)	e (ATT)	Redox Depressions (F8)		Other (Explain in Ite	anarks)
	lucky Mineral (S1) (L	_RR N.	Iron-Manganese Masses (F12) (LRR	N.		
	147, 148)	,	MLRA 136)	,		
	leyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 12	22) 3lı	ndicators of hydrophy	ytic vegetation and
_ Sandy R	edox (S5)		Piedmont Floodplain Soils (F19) (MLF	RA 148)	wetland hydrology m	ust be present,
	Matrix (S6)		Red Parent Material (F21) (MLRA 12	7, 147)	unless disturbed or p	roblematic.
	_ayer (if observed):					
	ard pack		<u> </u>			
Depth (inc	ches): <u>8</u>		<u> </u>	Hydric So	oil Present? Yes	No 🗸
emarks:				l .		