Project/Site: MVP		Citv/C	_{ountv:} Roanoke		Sampling Date: 04/08/2016
Applicant/Owner: MVP				State: VA	Sampling Point: W-AB5
Investigator(s): J. Hart, A.	Larson, T. Woods	Section			<u></u>
Landform (hillslope, terrace, e			-		Slone (9/.): 0
Subregion (LRR or MLRA): L					
			-		
Soil Map Unit Name: 16B - I					
Are climatic / hydrologic condi	tions on the site typical	for this time of year? Y	es No (I	If no, explain in R	emarks.)
Are Vegetation, Soil _	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	resent? Yes No
Are Vegetation, Soil				xplain any answei	
SUMMARY OF FINDIN	IGS – Attach site	map showing sam	pling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Pres	sent? Yes	No			
Hydric Soil Present?	Yes V	No	Is the Sampled Area		N-
Wetland Hydrology Present?		No No	within a Wetland?	Yes	No
Remarks: Cowardin C		HGM: Depressio	nal Water Type: F	RPWWN	
Wetland is in low-lying					not directly abut stream
to west but close proxin			or exteriaca perioas	or time. Book	Thot all colly abat off carri
'	, 66				
HYDROLOGY					
Wetland Hydrology Indicat	tore:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum		ack all that apply)	:	Surface Soil	
Surface Water (A1)		_ True Aquatic Plants (l	R14)		getated Concave Surface (B8)
High Water Table (A2)		_ Hydrogen Sulfide Odd		Sparsely veg Drainage Pat	
Saturation (A3)		_ Oxidized Rhizosphere		Drainage Fat Moss Trim Li	
Water Marks (B1)		Presence of Reduced	=		Water Table (C2)
Sediment Deposits (B2)	·	Recent Iron Reduction	, ,	Crayfish Burr	
Drift Deposits (B3)		_ Thin Muck Surface (C		-	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		_ Other (Explain in Ren			ressed Plants (D1)
Iron Deposits (B5)	_	_	,	Geomorphic	
Inundation Visible on Ae	erial Imagery (B7)			Shallow Aqui	` '
✓ Water-Stained Leaves (phic Relief (D4)
Aquatic Fauna (B13)	•			FAC-Neutral	Test (D5)
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes _ 🗸 No	Depth (inches):	17		
Saturation Present?	Yes No No		10 Wetland H	ydrology Presen	t? Yes 🗸 No
(includes capillary fringe)	·				
Describe Recorded Data (str	ream gauge, monitoring	y weii, aeriai photos, pre	vious inspections), if avail	iable:	
Remarks:					
Heavy clay soils may pr	revent water table	from being visible.			
		_			

/EGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Po	int:W-AB5
201	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:) 1. Acer rubrum	% Cover 45	Species? ✓	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	4 (A)
2					
3			· ·	Total Number of Dominant Species Across All Strata:	4 (B)
4.				•	(-/
5	-			Percent of Dominant Species	100 (A/B)
0				That Are OBL, FACW, or FAC:	100 (A/B)
6 7				Prevalence Index worksheet:	
	45	= Total Cov		Total % Cover of:	Multiply by:
50% of total cover: 22.5				OBL species x	1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x	2 =
1. Acer rubrum	15	~	FAC	FAC species x	3 =
2. Cornus amomum	15		FACW	FACU species x	4 =
		·	1.71.011	UPL species x	
4				Column Totals: (A	
4				,	, , ,
5				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indica	itors:
7			-	1 - Rapid Test for Hydrophy	tic Vegetation
8				✓ 2 - Dominance Test is >50%	, 0
9	30			3 - Prevalence Index is ≤3.0	1
50% -{\cdot \cdot \	2007 - 1	= Total Cov	er 6	4 - Morphological Adaptation	ns ¹ (Provide supporting
50% of total cover: 15	20% 01	total cover:		data in Remarks or on a	
Colidado gigantos	15	~	E40)4/	Problematic Hydrophytic Ve	getation ¹ (Explain)
			F <u>ACW</u>		
2				¹ Indicators of hydric soil and wet	land hydrology must
3		·		be present, unless disturbed or p	oroblematic.
4		·		Definitions of Four Vegetation	Strata:
5		· <u></u>		Tree – Woody plants, excluding	vines 3 in (7.6 cm) or
6				more in diameter at breast heigh	
7		· 		height.	
8		· 		Sapling/Shrub – Woody plants,	excluding vines, less
9	-			than 3 in. DBH and greater than	
10				m) tall.	
11				Herb – All herbaceous (non-woo	ody) plants, regardless
		= Total Cov	_	of size, and woody plants less th	
50% of total cover: 7.5	20% of	total cover:	3	Woody vine – All woody vines of	reater 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.)				
Remaining cover in herb stratum is bare ground	and leaf	litter			
-					

Sampling Point: W-AB5

Profile Desc	ription: (Describe t	o the depth	n needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	c Features	3			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>
0-3.5	10YR 5/2	85	10YR 6/6	15	С	M	SCL	
3.5-13	10YR 6/1	65	10YR 6/6	35_	С	<u>M</u>	<u>SiLo</u>	Hydrogen sulfide odor
13-20	2.5Y 6/1	50	10YR 6/8	50	С	М	SCL	
					-			
					-			
						· ——		
¹ Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	=Masked	Sand Gr	ains.		_=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indica	tors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	. ,				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel		. , .		. —	past Prairie Redox (A16)
Black Hi	stic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye			147, 148)		(MLRA 147, 148) edmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		ΓZ)			(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S		6)			ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar				Ot	ther (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (LRR N,		
	A 147, 148) Gleyed Matrix (S4)		MLRA 136 Umbric Surfa		MIRA 13	86 122)	³ India	cators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					and hydrology must be present,
	Matrix (S6)		Red Parent M					ess disturbed or problematic.
Restrictive I	Layer (if observed):							
Туре:								
Depth (inc	ches):						Hydric Soil I	Present? Yes No
Remarks:							•	



Photograph Direction WNW

Comments:			

Project/Site: MVP	City/County: Ro	oanoke	Sampling Date: 04/08/2016
Applicant/Owner: MVP		State: VA	Sampling Point: W-AB5-UP
Investigator(s): J. Hart, A. Larson, T. Wood	ds Section, Townsl		
Landform (hillslope, terrace, etc.): Terrace		-	Slope (%): 0
Subregion (LRR or MLRA): LRR N			
Soil Map Unit Name: 16B - Edneyville fine sa			
Are climatic / hydrologic conditions on the site typ			
Are Vegetation, Soil, or Hydrology		Are "Normal Circumstances	" present? Yes No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	wers in Remarks.)
SUMMARY OF FINDINGS – Attach si	te map showing sampling p	oint locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Yes _	No Is the Sc		
	No V	Impled Area	No
Wetland Hydrology Present? Yes _	No Within a	Wetland? Yes	NO
Remarks: Cowardin Code: UPLAND		/ater Type:	
Upland plot occurs on slightly higher te		* *	Paired plot with both W-
AB5	nace above wettand dominate	d by upland vegetation.	Faired plot with both W-
ABS			
HYDROLOGY			
Wetland Hydrology Indicators:		· · · · · · · · · · · · · · · · · · ·	icators (minimum of two required)
Primary Indicators (minimum of one is required;		Surface So	` '
Surface Water (A1)	True Aquatic Plants (B14)		/egetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	_	Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Livin		Lines (B16)
Water Marks (B1)	Presence of Reduced Iron (C4)	·	on Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled		urrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Other (Explain in Remarks)		Stressed Plants (D1) nic Position (D2)
Inundation Visible on Aerial Imagery (B7)			quitard (D3)
Water-Stained Leaves (B9)			graphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neuti	• • •
Field Observations:			
	Depth (inches):		
Water Table Present? Yes No _	Depth (inches):		
	Depth (inches):	Wetland Hydrology Pres	ent? Yes No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monito	ring weil, aeriai photos, previous insp	ections), if available:	
Remarks:			
No hydrology			

= T T	otal Coval cover:	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 0
= T 6 of tot	otal Cover:	FACU	Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B Prevalence Index worksheet:
= T T 6 of tot	otal Cover:	FACU	Percent of Dominant Species 0 (A/B Prevalence Index worksheet:
= T 6 of tot	otal Cover:	5 FACU	Prevalence Index worksheet:
= T T	otal Cover:	5 FACU	Total % Cover of: Multiply by: OBL species x 1 =
	al cover:	5 FACU	OBL species
	✓	FACU	FACW species x 2 =
	otal Cov	er	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
	otal Cov	er	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
	otal Cov	 er	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
	otal Cov	 er	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
	otal Cov	 er	Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
	otal Cov	 er	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
 = T	otal Cov	 er	 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
= T	otal Cov		2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
= T	otal Cov		3 - Prevalence Index is ≤3.0 ¹
·			
·			
6 of tot	al cover:		4 - Morphological Adaptations ¹ (Provide supportin
		- 4	data in Remarks or on a separate sheet)
			Problematic Hydrophytic Vegetation ¹ (Explain)
	<i>'</i>	F <u>ACU</u>	1 Toblematio 1 Tydrophlytic Vegetation (Explain)
			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), regardless o
			height.
			On the Month of the state of th
			Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
	_		Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
6 of tot	al cover:		Woody vine – All woody vines greater than 3.28 ft in
			height.
		-	
			Hydrophytic
			Vegetation
		_	Present? Yes No
6 of tot	al cover:	0	
	= T 6 of tot	= Total Cover:	= Total Cover 6 of total cover:1

Sampling Point: W-AB5-UP

	ription: (Describe	to the dept				or confirn	n the absence	e of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	K Features	Type ¹	Loc ²	Texture		Remark	(S
0-5	10YR 4/3	100	Color (molety	70	1,700		SCL		Ttoman	
5-10.5	7.5YR 4/2	98	10YR 6/2	2	D	M	SCL	-		
10.5-20	10YR 6/3	60	10YR 5/8	40	C	_ <u>IVI</u>	SCL	-		
10.5-20	10100/3		1010 3/0	40_	<u> </u>	IVI				
								-		
					-					
					-					
										
	oncentration, D=Depl	letion, RM=	Reduced Matrix, MS	S=Masked	Sand G	rains.		PL=Pore Lini		
Hydric Soil I	ndicators:						Indio	cators for P	roblematic	Hydric Soils ³ :
Histosol			Dark Surface	. ,				2 cm Muck (
	ipedon (A2)		Polyvalue Be				, 148)	Coast Prairie	•	6)
Black His	stic (A3) n Sulfide (A4)		Thin Dark Su Loamy Gleye	. ,	•	147, 148)		(MLRA 14 Piedmont Flo		ile (F10)
	l Layers (A5)		Loanly Gleye	•	r <i>2)</i>			MLRA 13)		115 (F19)
	ck (A10) (LRR N)		Redox Dark S		6)		,	Very Shallov		ace (TF12)
	Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)		_	Other (Expla	in in Remar	ks)
	rk Surface (A12)		Redox Depre							
	lucky Mineral (S1) (L	.RR N,	Iron-Mangane		es (F12)	(LRR N,				
	147, 148)		MLRA 136	•	MI DA 4	26 422\	3100	diantara of h	v dranhv tia v	remetation and
	leyed Matrix (S4) edox (S5)		Umbric Surfa Piedmont Flo					etland hydro		egetation and
	Matrix (S6)		Red Parent M					nless disturb		
	ayer (if observed):				, (,	1			
Type:										
Depth (inc	ches):						Hydric So	il Present?	Yes	No 🗸
Remarks:										

Project/Site: MVP	City/County: Roanoke		Sampling Date: 04/08/2016	
Applicant/Owner: MVP				
Investigator(s): J. Hart, A. Larson, T. Woods	Section Township Range N		_ Sampling Point: W-AB3-PEM-2	
Landform (hillslope, terrace, etc.): Floodplain			Slope (%): 0	
Subregion (LRR or MLRA): LRR N Lat: 37	7.155415 Long: <u>-80</u>	.129456	Datum: NAD 83	
Soil Map Unit Name: 16B - Edneyville fine sandy loa				
Are climatic / hydrologic conditions on the site typical for the	·		•	
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed,	explain any answer	s in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing sampling point location	ons, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes!	No Is the Sampled Area			
Hydric Soil Present? Yes 1	is the campied Area	V V	N-	
1	No within a Wetland?	res	No	
Remarks: Cowardin Code: PEM HC	GM: Slope Water Type:	RPWWD		
Wetland is in low-lying area where groundwate	,		staids of the corridor	
welland is in low-lying area where groundwate	er is daylighting. Directly abuts sire	ani wilich is ou	itside of the corridor.	
HYDROLOGY				
Wetland Hydrology Indicators:			ors (minimum of two required)	
Primary Indicators (minimum of one is required; check all		Surface Soil (` '	
	e Aquatic Plants (B14)			
	drogen Sulfide Odor (C1)			
	idized Rhizospheres on Living Roots (C3)			
	esence of Reduced Iron (C4)	Dry-Season V		
	cent Iron Reduction in Tilled Soils (C6)	Crayfish Burn		
	n Muck Surface (C7) ner (Explain in Remarks)		sible on Aerial Imagery (C9) ressed Plants (D1)	
Iron Deposits (B5)	iei (Explain in Kemarks)	Geomorphic I		
Inundation Visible on Aerial Imagery (B7)		Shallow Aquit		
Water-Stained Leaves (B9)			phic Relief (D4)	
Aquatic Fauna (B13)		FAC-Neutral		
Field Observations:				
Surface Water Present? Yes No De				
Water Table Present? Yes No De	epth (inches):0			
Saturation Present? Yes No De	epth (inches): 0 Wetland I	Hydrology Presen	t? Yes <u> </u>	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if ava	ailable:		
	acidi priores, providuo inopositoro, il ari			
Remarks:				

Sampling Point: W-AB3-PEM-2

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: 2 (A)
2		-		Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				` ,
5				Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
6				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
7	0	Tatal Car		Total % Cover of: Multiply by:
50% of total cover: 0		= Total Cov		OBL species x 1 =
451	20 /6 01	total cover		FACW species x 2 =
				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%
v	0	= Total Cov	/or	3 - Prevalence Index is ≤3.0¹
50% of total cover: 0		total cover	_	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	2070 01	total cover		data in Remarks or on a separate sheet)
1. Poa trivialis	35	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Symplocarpus foetidus	20		OBL	
	10			¹ Indicators of hydric soil and wetland hydrology must
3. Impatiens capensis			FACW	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				
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				
11	65			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: <u>32.5</u>		= Total Cov		of size, and woody plants less than 3.28 ft tall.
4.51	<u>20%</u> 01	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		total cover	_	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Remaining cover in herb stratum is bare ground		litter		
riomaning cover in nois chatain le saie greana	and loan			

Sampling Point: W-AB3-PEM-2

Profile Desc	ription: (Describe t	o the deptl	n needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Features	S T 1	12	T	Description
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> 	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-5.5	10YR 4/2	95	10YR 5/6	5	<u>C</u>	<u>M</u>	SCL	
5.5-18	10YR 5/1	60	10YR 5/8	40	С	M	Si	Hydrogen sulfide odor
					,			
							-	
1- 0.0							2	
Hydric Soil	oncentration, D=Deple	etion, RIVI=I	Reduced Matrix, Mi	S=Masked	Sand Gr	ains.		_=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
_			Dork Surface	(07)				•
Histosol	oipedon (A2)		Dark Surface Polyvalue Be		ce (S8) (I	/II RΔ 147		cm Muck (A10) (MLRA 147) oast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				0	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			· · · · ,	Pi	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		,			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark	,	,			ery Shallow Dark Surface (TF12)
-	d Below Dark Surface	(A11)	Depleted Dar				0	ther (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			'. DD M		
	Mucky Mineral (S1) (L l A 147, 148)	KK N,	Iron-Mangan MLRA 13		es (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa		MIRA 13	86, 122)	³ Indi	cators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					tland hydrology must be present,
-	Matrix (S6)		Red Parent N					ess disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								



Photograph Direction South

Comments:		

Project/Site: MVP	City/County: Roa	anoke	Sampling Date: 04/08/2016			
Applicant/Owner: MVP		State: VA	Sampling Point: W-AB3-UP			
Investigator(s): J. Hart, A. Larson, T. Woods	Section, Townshi		<u> </u>			
Landform (hillslope, terrace, etc.): Terrace		_	Slope (%): 0			
Subregion (LRR or MLRA): LRR N La						
Soil Map Unit Name: 16B - Edneyville fine sand						
Are climatic / hydrologic conditions on the site typical						
Are Vegetation, Soil, or Hydrology	·	Are "Normal Circumstances"	· · · · · · · · · · · · · · · · · · ·			
Are Vegetation, Soil, or Hydrology		(If needed, explain any answ				
SUMMARY OF FINDINGS – Attach site						
			, ,			
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes ✓	No	npled Area				
Wetland Hydrology Present? Yes	No within a W	letland? Yes	No			
Remarks: Cowardin Code:		ater Type:				
Upland plot occurs on slightly higher terral positive indicator for hydric soils it lacks w PEM and W-AB3-PSS.						
HYDROLOGY						
Wetland Hydrology Indicators:		<u></u>	cators (minimum of two required)			
Primary Indicators (minimum of one is required; che		Surface Soi				
	- , , , , , , , , , , , , , , , , , , ,					
	Presence of Reduced Iron (C4)		Water Table (C2)			
	Recent Iron Reduction in Tilled S					
Drift Deposits (B3) Algal Mat or Crust (B4)	_ Thin Muck Surface (C7) _ Other (Explain in Remarks)		Visible on Aerial Imagery (C9)			
Algai Mat of Crust (B4) Iron Deposits (B5)	_ Other (Explain in Remarks)		Stressed Plants (D1) c Position (D2)			
Inundation Visible on Aerial Imagery (B7)		Shallow Aqu	, ,			
Water-Stained Leaves (B9)			raphic Relief (D4)			
Aquatic Fauna (B13)		FAC-Neutra				
Field Observations:		<u> </u>				
	Depth (inches):					
Water Table Present? Yes No	Depth (inches):					
	Depth (inches):	Wetland Hydrology Prese	ent? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring						
Describe Necorded Data (stream gauge, mormoning	y well, aeriai priotos, previous ilispet	mons, ii available.				
Remarks:						
No hydrology						

/EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling	g Point: W-AB3-UP
201	Absolute	Dominant	Indicator	Dominance Test workshe	et:
<u>Tree Stratum</u> (Plot size:) 1. Pinus strobus	% Cover 70	Species? ✓	Status FACU	Number of Dominant Speci That Are OBL, FACW, or F	
2					
3				Total Number of Dominant Species Across All Strata:	3 (B)
4				openios / torodo / tir otrata.	(5)
5		· ——		Percent of Dominant Speci	
-				That Are OBL, FACW, or F	AC: (A/B)
6	•	· ——		Prevalence Index worksh	eet:
7	70	= Total Cov		Total % Cover of:	Multiply by:
50% of total cover:35		total cover:		OBL species	x 1 =
Sapling/Shrub Stratum (Plot size: 15')	20 /0 01	total cover.		FACW species	x 2 =
1. Pinus strobus	20	~	FACU	FAC species	
a Flaggrus umbellata	15	·	UPL	FACU species	
			UPL	UPL species	
3		· ——			(A) (B)
4				Coldinii Totals.	_ (A) (D)
5				Prevalence Index = E	3/A =
6		· ——		Hydrophytic Vegetation II	
7	-			1 - Rapid Test for Hydr	
8				2 - Dominance Test is	
9				3 - Prevalence Index is	
	35	= Total Cov	er _		otations ¹ (Provide supporting
50% of total cover: <u>17.5</u>	20% of	f total cover:	7	· · · · ·	on a separate sheet)
Herb Stratum (Plot size: 5')				Problematic Hydrophyt	•
1				Problematic Hydrophyt	ic vegetation (Explain)
2				11	december of headmale accessors
3	-			¹ Indicators of hydric soil an be present, unless disturbe	
4				Definitions of Four Veget	•
5.				Deminions of Four Veget	ation offata.
6					uding vines, 3 in. (7.6 cm) or
7				height.	height (DBH), regardless of
8				noight.	
9				Sapling/Shrub – Woody pl	
40				than 3 in. DBH and greater m) tall.	than or equal to 3.26 it (1
11.	•	· ——		,	
	0	= Total Cov		Herb – All herbaceous (nor of size, and woody plants le	n-woody) plants, regardless
50% of total cover: 0	$\overline{}$	f total cover:	_	or size, and woody plants it	755 than 6.25 it tall.
Woody Vine Stratum (Plot size: 15')	20,00.	total oovol.		Woody vine – All woody vi	nes greater than 3.28 ft in
				height.	
3		· 			
4				Hydrophytic	
5	0			Vegetation Present? Yes	No 🗸
50% of total cover: 0		= Total Cov	_	1000111.	
		total cover:			
Remarks: (Include photo numbers here or on a separate s					
Entire cover in herb stratum is duff (pine needle:	S)				

Depth (inches)	Matrix Color (moist)	%	Redo: Color (moist)	k Features	Type ¹	Loc ²	Texture		Remar	l.o	
0-1.5	10YR 3/3	100	Color (moist)	<u></u> %	туре	LOC	SCL		Kemai	KS	
1.5-14	7.5YR 6/1	60	10YR 6/8	40_	<u>C</u>	<u>M</u>	SCL				
14-20	10YR 6/8	65	7.5YR 6/1	35_	D	M	SCL				
							-				
Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: I	PL=Pore Lini	ng, M=Mat	rix.	
ydric Soil I	ndicators:						Indio	ators for P	oblematio	Hydric	Soils ³ :
_ Histosol			Dark Surface	. ,				2 cm Muck (
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie	,	16)	
_ Black His	stic (A3) n Sulfide (A4)		Thin Dark Su Loamy Gleye			47, 148)		MLRA 14 Piedmont Flo		:lo /E10	`
	I Layers (A5)		Depleted Mat		-2)			MLRA 13)		פווכ (דופ)
	ck (A10) (LRR N)		Redox Dark S		6)			Very Shallov		ace (TF	12)
	Below Dark Surface	e (A11)	Depleted Dar					Other (Expla	in in Rema	rks)	
	ark Surface (A12)		Redox Depre								
	lucky Mineral (S1) (L	.RR N,	Iron-Mangan		es (F12) (LRR N,					
	147, 148) sleyed Matrix (S4)		MLRA 130	•	MI DA 13	6 122\	³ In	dicators of h	vdrophytic	voqetati	on and
	edox (S5)		Piedmont Flo					etland hydro		-	
	Matrix (S6)		Red Parent N					nless disturb			,
astrictiva I	// I N										
Coulcuve L	ayer (if observed):										
Type:	-ayer (if observed):										
			_				Hydric So	I Present?	Yes_	<u></u> N	 _
Type: Depth (inc			_				Hydric So	I Present?	Yes_	<u>N</u>	o
Type: Depth (inc			_				Hydric So	I Present?	Yes	<u> N</u>	<u> </u>
Type:							Hydric So	Il Present?	Yes	<u> </u>	<u> </u>
Type:							Hydric So	Il Present?	Yes	<u> N</u>	o
Type: Depth (inc							Hydric So	Il Present?	Yes	<u>N</u>	o
Type: Depth (inc							Hydric So	il Present?	Yes	<u> </u>	o
Type: Depth (inc							Hydric So	il Present?	Yes	<u>N</u>	o
Type: Depth (inc							Hydric So	Il Present?	Yes	<u> N</u>	o
Type: Depth (inc							Hydric So	il Present?	Yes	<u> </u>	o
Type: Depth (inc							Hydric So	il Present?	Yes	<u> </u>	o
Type:							Hydric So	Il Present?	Yes	<u> </u>	<u> </u>
Type: Depth (inc							Hydric So	Il Present?	Yes	N	o
Type: Depth (inc							Hydric So	il Present?	Yes	<u> </u>	·
Type: Depth (inc							Hydric So	il Present?	Yes	<u> </u>	o
Type: Depth (inc							Hydric So	Il Present?	Yes	<u> </u>	<u> </u>
Туре:							Hydric So	il Present?	Yes	<u> </u>	<u> </u>
Type: Depth (inc							Hydric So	il Present?	Yes	<u> </u>	·
Type: Depth (inc							Hydric So	il Present?	Yes	<u> </u>	<u> </u>
Type:							Hydric So	il Present?	Yes	<u> </u>	<u> </u>
Type:							Hydric So	il Present?	Yes	<u> </u>	<u> </u>
Type:							Hydric So	il Present?	Yes	<u> </u>	D
Type: Depth (inc							Hydric So	il Present?	Yes	<u> </u>	<u> </u>

Project/Site: MVP	City/County: Roanoke	Sampling Date: 08/25/2016			
Applicant/Owner: MVP	State: VA Sampling Point: W-EF46				
• •	dson, K Pulver Section, Township, Range: N	· -			
• ,	n Local relief (concave, convex, no				
Subregion (LRR or MLRA): LRR N		0.128932 Datum: NAD 83			
	0 to 4 percent slopes				
	typical for this time of year? Yes No				
• •					
	ogy significantly disturbed? Are "Norma	al Circumstances" present? Yes No			
Are Vegetation, Soil, or Hydrol	ogy naturally problematic? (If needed,	explain any answers in Remarks.)			
SUMMARY OF FINDINGS – Attach	site map showing sampling point locati	ons, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area				
Hydric Soil Present? Yes	is the Sampled Area	Yes 🗸 No			
Wetland Hydrology Present? Yes		resNo			
Remarks: Cowardin Code: PSS	HGM: Riverine Water Type	RPWWD			
	,,,,,				
LIVEROLOGY					
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
	ad chack all that apply)				
Primary Indicators (minimum of one is require		Surface Soil Cracks (B6)			
Surface Water (A1) High Water Table (A2)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Sparsely Vegetated Concave Surface (B8)			
Saturation (A3)	 mydrogen Sullide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) 	 Drainage Patterns (B10) Moss Trim Lines (B16)			
Water Marks (B1)	Presence of Reduced Iron (C4)	Moss Triff Lines (B16) 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)	Outer (Explain in remaine)	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:					
Surface Water Present? Yes N	o Depth (inches):1				
Water Table Present? Yes N	o Depth (inches):4				
Saturation Present? Yes N	_	Hydrology Present? Yes <u>✓</u> No			
(includes capillary fringe) Describe Recorded Data (stream gauge more	nitoring well, aerial photos, previous inspections), if av	ailahle.			
Describe Necorded Data (stream gauge, mor	moning well, actial priotos, previous inspections), il av	anabic.			
Remarks:					

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0.01	Absolute	Dominant	Indicator	Dominance Test worksheet:		
ree Stratum (Plot size: 30')		Species?		Number of Dominant Species		
Nyssa sylvatica	12		FAC	That Are OBL, FACW, or FAC:	6 ((A)
Acer rubrum	10		FAC	Total Number of Dominant		
	_			Species Across All Strata:	6	(B)
				5		
				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B
				That 710 0B2, 171011, 61 1710.		(,,,,,
				Prevalence Index worksheet:		
	22	= Total Cov	ver	Total % Cover of:	Multiply by:	
50% of total cover:1		f total cover		OBL species x	1 =	
apling/Shrub Stratum (Plot size: 15')				FACW species x	2 =	
Alnus serrulata	30	✓	OBL	FAC species x	3 =	
llex verticillata	25		FACW	FACU species x	4 =	
	-	-	1 <u>ACW</u>	UPL species x	5 =	
4				Column Totals: (A)	(B)
•		-	·	() .	,	(-)
				Prevalence Index = B/A =		
•		·	·	Hydrophytic Vegetation Indica	tors:	
				1 - Rapid Test for Hydrophyt	tic Vegetation	
				✓ 2 - Dominance Test is >50%		
				3 - Prevalence Index is ≤3.0		
		= Total Cov		4 - Morphological Adaptation		ortin
50% of total cover: 27	. <u>5 </u>	f total cover	:11	data in Remarks or on a		011111
lerb Stratum (Plot size: 5')					•	١.
Impatiens capensis	25		F <u>ACW</u>	Problematic Hydrophytic Ve	getation (Explain))
Leersia oryzoides	25	✓	OBL	1		
Scirpus atrovirens	10		OBL	¹ Indicators of hydric soil and weth be present, unless disturbed or p		ust
. Sagittaria cuneata	5		OBL	Definitions of Four Vegetation		
				Definitions of Four Vegetation	Juata.	
				Tree – Woody plants, excluding	,	,
				more in diameter at breast heigh height.	t (DBH), regardles	SS O
				neight.		
·				Sapling/Shrub – Woody plants,		
				than 3 in. DBH and greater than m) tall.	or equal to 3.28 ft	t (1
0		-	· ——	iii) taii.		
1			· ——	Herb – All herbaceous (non-woo		lless
() 20		= Total Cov		of size, and woody plants less th	an 3.28 ft tall.	
50% of total cover: <u>32</u>	. <u>5</u> 20% of	total cover	13	Woody vine – All woody vines g	reater than 3.28 ft	t in
Voody Vine Stratum (Plot size:15')				height.		
•						
	-					
<u> </u>		<u> </u>				
				Hydrophytic		
<u> </u>				Vegetation		
	0	= Total Cov	er er	Present? Yes	No	
50% of total cover:0	20% of	f total cover	. 0			
Remarks: (Include photo numbers here or on a separate	sheet.)			<u> </u>		
(minute printer manuscript of the copulation	/					

Sampling Point: W-EF46

Profile Desc	ription: (Describe t	o the depth	needed to docun	nent the in	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	x Features	<u> </u>	. 2	_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-3	7.5yr 3/1	100					SICL	
3-24	2.5y 4/1	80	7.5yr 5/8	20_	С	M/PL	SIC	
			_					
	-							
			_		-			
	-							
	-							
1Type: C-C	oncentration, D=Deple	etion RM-F	Peduced Matrix MS		Sand Gr	aine	² I ocation: P	L=Pore Lining, M=Matrix.
Hydric Soil		suon, rivi=r	reduced Matrix, Mc	=iviaskeu	Sand Gr	aii 15.		ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(S7)				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) (N	ILRA 147,		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su				-, <u>—</u>	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			•	P	Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		Depleted Mat	rix (F3)				(MLRA 136, 147)
	ıck (A10) (LRR N)		Redox Dark S					ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar		. ,		<u> </u>	Other (Explain in Remarks)
	ark Surface (A12) Mucky Mineral (S1) (L	DD N	Redox Depre Iron-Mangane			I DD N		
	147, 148)	KK N,	MLRA 136		5 (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6. 122)	³ Ind	licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M					less disturbed or problematic.
Restrictive I	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								



Photograph Direction South

Comments:			

Project/Site: MVP	City/County: Ro	anoke	_ Sampling Date: 08/25/2016
Applicant/Owner: MVP		State: VA	Sampling Point: W-EF46-UF
Investigator(s): D Hadersbeck, S Therkildso			
Landform (hillslope, terrace, etc.): Swell			Slope (%): 1-3
Subregion (LRR or MLRA): LRR N			
Soil Map Unit Name: 1A-Alderflats silt loam, 0 to		NWI classif	
Are climatic / hydrologic conditions on the site typic			
Are Vegetation, Soil, or Hydrology _	•		present? Yes No
Are Vegetation, Soil, or Hydrology _		(If needed, explain any answ	
SUMMARY OF FINDINGS – Attach site			
			5, important reatures, etc.
Hydrophytic Vegetation Present? Yes	- Is the Sar	npled Area	
I	No within a V	Vetland? Yes	No
Demontos	No	_	
Cowardin Code: UPLAND	HGM: W	ater Type:	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	cators (minimum of two required)
Primary Indicators (minimum of one is required; c	heck all that apply)	Surface Soi	il Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)		egetated Concave Surface (B8)
	Hydrogen Sulfide Odor (C1)		atterns (B10)
	Oxidized Rhizospheres on Living		
· · ·	Presence of Reduced Iron (C4)		n Water Table (C2)
	Recent Iron Reduction in Tilled S		
Drift Deposits (B3)	Thin Muck Surface (C7)		Visible on Aerial Imagery (C9)
	Other (Explain in Remarks)		Stressed Plants (D1)
Iron Deposits (B5)			c Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aq	
Water-Stained Leaves (B9) Aquatic Fauna (B13)		Microtopogi FAC-Neutra	raphic Relief (D4)
Field Observations:		rac-neutra	ai rest (D3)
	Depth (inches):		
	Depth (inches):		
	Depth (inches):	Wetland Hydrology Prese	ent? Yes No 🗸
(includes capillary fringe) Describe Recorded Data (stream gauge, monitori		rtions) if available:	
Describe Necorded Data (stream gauge, monitori	ng well, derial priotos, previous mape	money, ii available.	
Remarks:			

Sampling	Point: W-EF46-UP
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Troo Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:
Tiee Stratum (Flot size)		Species?		Number of Dominant Species
1. Pinus strobus	<u>75</u>		<u>FACU</u>	That Are OBL, FACW, or FAC:3 (A)
2. Acer rubrum	70		FAC	Total Number of Deminent
3. Quercus alba	20		<u>FACU</u>	Total Number of Dominant Species Across All Strata: 4 (B)
4.				(2)
				Percent of Dominant Species That Are ORL FACW or FAC: 75 (A/R)
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	405			Total % Cover of: Multiply by:
		= Total Cov		
50% of total cover: <u>82.5</u>	20% of	total cover:	33	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)
· ·				
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	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:0				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
Parathalynteric novehoracensis	5	~	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Carex intumescens				
			FACW_	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
7				more in diameter at breast height (DBH), regardless of height.
				noight.
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
	10:	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 5	20% of	total cover:	2	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')				height.
1				- 3
2.		·		
3.				
4				Hydrophytic
5				Vegetation Present? Yes ✓ No
0		= Total Cov	_	Present? Tes No
50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix	-	needed to document the indicator or Redox Features			•	
(inches)	Color (moist)	<u>%</u>	Color (moist) % Type ¹		ture	Remarks	
0-12	7.5yr 4/4	100		S	<u> L</u>		
							
							
		. <u> </u>					
							
		· ——— —					
		. <u></u>					
		· — — —					
Type: C=Co	ncentration, D=Dep	letion, RM=Re	educed Matrix, MS=Masked Sand Grains	s. ² Loca	tion: PL=Pore Lini	ng, M=Matrix	
lydric Soil I					Indicators for P		
Histosol	(A1)		Dark Surface (S7)		2 cm Muck (A10) (MLRA	147)
	ipedon (A2)		Polyvalue Below Surface (S8) (MLF	A 147, 148)	Coast Prairie		
Black Hi			Thin Dark Surface (S9) (MLRA 147		(MLRA 14		
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)	•		oodplain Soils	(F19)
	Layers (A5)		Depleted Matrix (F3)		(MLRA 13		
2 cm Mu	ck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallov	Dark Surfac	e (TF12)
Depleted	Below Dark Surface	e (A11)	Depleted Dark Surface (F7)		Other (Expla	in in Remarks	s)
	rk Surface (A12)		Redox Depressions (F8)				
Sandy M	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LR	R N,			
MLRA	147, 148)		MLRA 136)				
	leyed Matrix (S4)		Umbric Surface (F13) (MLRA 136,		³ Indicators of h		
	edox (S5)		Piedmont Floodplain Soils (F19) (M		wetland hydro		
	Matrix (S6)		Red Parent Material (F21) (MLRA 1	27, 147)	unless disturb	ed or problen	natic.
Restrictive L	ayer (if observed):						
Туре:			<u> </u>				
Depth (inc	ches):		_	Hydr	ic Soil Present?	Yes	_ No <u> </u>
Remarks:							

Project/Site: MVP	MVP City/County: Roanoke				Sampling Date: 05/15/2017		
Applicant/Owner: MVP	out/county.			State: VA	Sampling Point: W-KL48-PSS-1		
Investigator(s): E. Foster, J. Cook, K.	Gracie	Section	on Township Range N				
Landform (hillslope, terrace, etc.): Slope					Slone (%): 5		
Subregion (LRR or MLRA): LRR N					Datum: NAD 83		
Soil Map Unit Name: 16C - Edneyville fin							
Are climatic / hydrologic conditions on the s	• •	•		•	,		
Are Vegetation, Soil, or Hyd	drology	significantly distur	bed? Are "Norma	l Circumstances" p	present? Yes No		
Are Vegetation, Soil, or Hyd	drology	naturally problemate	atic? (If needed,	explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS – Atta	ch site n	nap showing san	npling point location	ons, transects	, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No					
	Yes	No	Is the Sampled Area				
Wetland Hydrology Present?	Yes 🗸	No	within a Wetland?	Yes	No		
Remarks: Cowardin Code: PSS		HGM: Riverine	Water Type:	DDWWD			
HADBOI OCA							
HYDROLOGY Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is required)	uired: chec	k all that apply)					
✓ Surface Water (A1)		True Aquatic Plants ((D14)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od					
Saturation (A3)			es on Living Roots (C3)	Drainage Patterns (B10) Moss Trim Lines (B16)			
Water Marks (B1)		Presence of Reduced	= : :	Dry-Season			
Sediment Deposits (B2)		Recent Iron Reduction	` '	Crayfish Bur			
Drift Deposits (B3)		Thin Muck Surface (0	C7)	Saturation V	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)	Stunted or S	tressed Plants (D1)		
Iron Deposits (B5)				Geomorphic			
Inundation Visible on Aerial Imagery	(B7)			Shallow Aqu			
Water-Stained Leaves (B9)				Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5)			
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations: Surface Water Present? Yes	No	Depth (inches):	1				
Water Table Present? Yes	_ No _ No		12				
		_ Bopan (monoc)		Hydrology Preser	v2 Van V Na		
(includes capillary fringe)	_ NO	Depth (inches):	wetiand	nyarology Preser	nt? Yes V No		
Describe Recorded Data (stream gauge,	monitoring	well, aerial photos, pre	evious inspections), if ava	ailable:			
Remarks:							

Sampling Point: W-KL48-PSS-1

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species
1. Prunus serotina	25	✓	FACU	That Are OBL, FACW, or FAC: 5 (A)
2				(//
				Total Number of Dominant Species Across All Strata: 7 (B)
3		-		Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 71 (A/B)
6				Describence in description of
7				Prevalence Index worksheet:
	25	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: _ 12.5	20% of	total cover:	5	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'	<u></u>			FACW species x 2 =
1. Cornus amomum	30	/	FACW	FAC species x 3 =
2. Eleagnus angustifolia	10	<u> </u>		FACU species x 4 =
		· 	F <u>ACU</u>	
3				
4				Column Totals: (A) (B)
5			. <u> </u>	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
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)
Herb Stratum (Plot size: 5')				,
1. Impatiens capensis	15		F <u>ACW</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Leersia oryzoides	20	✓	OBL	
3. Persicaria maculosa	12		FACW	¹ Indicators of hydric soil and wetland hydrology must
4 Persicaria sagittata	10		OBL	be present, unless disturbed or problematic.
"				Definitions of Four Vegetation Strata:
5. Glyceria striata	15		OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Phalaris arundinacea	10		FACW_	more in diameter at breast height (DBH), regardless of
7. Symplocarpus foetidus	15		OBL	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.
10				, '
11	07		· 	Herb – All herbaceous (non-woody) plants, regardless
10.5		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>48.5</u>	20% of	total cover	19.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')				height.
1				
2				
3.				
Λ				
4			· ——	Hydrophytic
5				Vegetation Present? Yes ✓ No
0		= Total Cov		resent: res_v No
50% of total cover: 0	20% of	total cover		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: W-KL48-PSS-1

Profile Desc	cription: (Describe t	to the dept	h needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix Color (moist)	%	Redo Color (moist)	x Features	s Type ¹	Loc ²	Texture	Remarks
(inches) 0-2	10YR 4/2	100	Color (IIIOISI)	%	<u>i ype</u>	LUC	<u>rexture</u>	Saturated
2-10	10YR 4/1	80	7.5YR 4/4	20	С	M/PL	SL	
10-18	10YR 4/1	70	7.5YR 4/4	30	C	M/PL	SCL	Saturated
10-10	101114/1		7.51114/4		<u> </u>	IVI/I L		Gaturated
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		=Pore Lining, M=Matrix.
Hydric Soil			Daule Conford	(07)				tors for Problematic Hydric Soils ³ :
Histosol Histic Er	oipedon (A2)		Dark Surface Polyvalue Be		ce (S8) (N	ILRA 147.		cm Muck (A10) (MLRA 147) past Prairie Redox (A16)
Black Hi			Thin Dark Su					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)			edmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		.0)			(MLRA 136, 147)
	ick (A10) (LRR N) d Below Dark Surface	(Δ11)	Redox Dark : Depleted Dark :					ery Shallow Dark Surface (TF12) ther (Explain in Remarks)
	ark Surface (A12)	, (, (, , ,	Redox Depre					inor (Explain in Normanio)
	lucky Mineral (S1) (L	.RR N,	Iron-Mangan		es (F12) (LRR N,		
	A 147, 148)		MLRA 13	-		o 400\	3, ,,	
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo					cators of hydrophytic vegetation and land land hydrology must be present,
-	Matrix (S6)		Red Parent N					ess disturbed or problematic.
Restrictive I	Layer (if observed):			<u> </u>				-
Type:								•
	ches):						Hydric Soil	Present? Yes No
Remarks:								

Wetland Photograph Page

Wetland ID W-KL48-PS; Date 05/15/2017



Photograph Direction WNW

Comments:		

Project/Site: MVP	City/County: Roanoke		Sampling Date: 05/15/2017		
Applicant/Owner: MVP		State: VA	Sampling Point: W-KL48-PEM		
Investigator(s): E. Foster, J. Cook, K. Gracie	Section, Township, Range; N				
Landform (hillslope, terrace, etc.): Slope			Slope (%): 5		
Subregion (LRR or MLRA): LRR N Lat: 37.1521			Datum: NAD 83		
Soil Map Unit Name: 16c - Edneyville fine sandy loam, 7 to 15					
Are climatic / hydrologic conditions on the site typical for this time of	·		·		
Are Vegetation, Soil, or Hydrology signification		I Circumstances" pr	resent? Yes No		
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed,	explain any answers	s in Remarks.)		
SUMMARY OF FINDINGS – Attach site map show	ing sampling point location	ons, transects,	important features, etc.		
Hydrophytic Vegetation Present? Yes No					
Hydric Soil Present? Yes V No	is the bumpled Area	V V	No		
Wetland Hydrology Present? Yes No	within a Wetland?	res			
Remarks: Cowardin Code: PEM HGM: Ri	verine Water Type:	RPWWD			
Floodplain wetland associated with Mill Creek.	voime mater type.	111 *******			
1 loodplain wettand associated with will oreck.					
HYDROLOGY					
Wetland Hydrology Indicators:			ors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that app		Surface Soil C	, ,		
Surface Water (A1) True Aquat		Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)			
_ , ,	Sulfide Odor (C1)				
<u> </u>	f Reduced Iron (C4)	Dry-Season V			
	n Reduction in Tilled Soils (C6) Surface (C7)	Crayfish Burro	sible on Aerial Imagery (C9)		
	ain in Remarks)		ressed Plants (D1)		
Iron Deposits (B5)	all il Remarks)	Geomorphic F			
Inundation Visible on Aerial Imagery (B7)		Shallow Aquit			
Water-Stained Leaves (B9)		Microtopographic Relief (D4)			
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)		
Field Observations:					
Surface Water Present? Yes No Depth (inc	hes):				
Water Table Present? Yes No Depth (inc	,				
Saturation Present? Yes No Depth (inc	hes):0 Wetland I	Hydrology Present	? Yes <u>/</u> No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if ava	ailable:			
	71 1 //				
Remarks:					

Sampling	Point:	W-	KL	.48-	P	Εľ	V
Samonia	гопп.						•

30'	Absolute	Dominant		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 Descious
3				Total Number of Dominant Species Across All Strata: 2 (B)
4				Species / toross / till otratia.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6				Prevalence Index worksheet:
7				
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	:0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
		-		UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
9	^			3 - Prevalence Index is ≤3.0 ¹
500% of total access 0		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% of	total cover	:	data in Remarks or on a separate sheet)
(Flot Size)	00			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Symplocarpus foetidus	20		OBL	1 Toblematic Frydrophytic Vegetation (Explain)
2. Glyceria striata	20		OBL	1
3. Impatiens capensis	12		FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Persicaria sagittata	12		OBL	
5. Persicaria maculosa	12		FACW	Definitions of Four Vegetation Strata:
<u> </u>		-	171011	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.				
	76	Total Car		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 38		= Total Cover		of size, and woody plants less than 3.20 it tall.
451	20% 01	lotal cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')				height.
1				
2				
3				
4				
5.				Hydrophytic
J	0	T-1-1-0		Vegetation Present? Yes ✓ No
500% - 51 - 51 - 51 - 51 - 51 - 51 - 51 - 5		= Total Cov	_	· · · · · · · · · · · · · · · · · · ·
50% of total cover:0		total cover	:	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: W-KL48-PEM

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 Features	3			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-4	10YR 4/2	95	7.5YR 3/4	5	С	M/PL	L	Saturated
4-10	7.5YR 5/1	80	5YR 4/6	20	С	M/PL	CL	Oxidized rhizosperes at 8"
10-18	10GY 5/1	90	7.5 YR 5/4	10	С	M/PL	SICL	
						· <u></u>		
					-			
		-						
						·		
¹ Type: C=Co	oncentration, D=Depl	etion. RM=	Reduced Matrix. MS	=Masked	Sand Gr	ains.	² Location: PL	L=Pore Lining, M=Matrix.
Hydric Soil			, , , , , , , , , , , , , , , , , , , ,					ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) (N	MLRA 147,		oast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	147, 148)		(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye		F2)		Pi	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	(A11)	Depleted Dar				0	ther (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			LDDN		
-	Mucky Mineral (S1) (L \ 147, 148)	KK N,	Iron-Mangane		es (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MIRA 13	16 122)	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:			<u></u>					
Depth (inc	ches):						Hydric Soil	Present? Yes No
Remarks:								

Wetland Photograph Page

Wetland ID W-KL48-PEl Date 05/15/2017



Photograph Direction NNE

Comments:		

Project/Site: MVP	City/County: F	oanoke	Sampling Date: 05/15/2017					
Applicant/Owner: MVP	State: VA	Sampling Point: W-KL48-PSS-2						
Investigator(s): E. Foster, J. Cook, K. Gracie Section, Township, Range: N/A								
Landform (hillslope, terrace, etc.): Slope			ave Sione (%): 5					
Subregion (LRR or MLRA): LRR N La	37 151120	-80 130937	Datum: NAD 83					
Soil Map Unit Name: 16C - Edneyville fine sandy								
Are climatic / hydrologic conditions on the site typical	·							
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstar	nces" present? Yes No					
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any a	answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site	map showing sampling բ	oint locations, trans	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No Is the S							
Hydric Soil Present?	No lis the S	ampled Area	.					
Wetland Hydrology Present?	No within a	Wetland? Yes	No					
Remarks: Cowardin Code: PSS	l .	Vater Type: RPWWD						
		* *						
Abuts Mill Creek, outside of study area.	Transitions to PEW outside	e or study area						
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; che	eck all that apply)	Surfac	e Soil Cracks (B6)					
✓ Surface Water (A1)	_ True Aquatic Plants (B14)	Sparse	ely Vegetated Concave Surface (B8)					
✓ High Water Table (A2)	_ Hydrogen Sulfide Odor (C1)	Draina	ge Patterns (B10)					
Saturation (A3)	 Oxidized Rhizospheres on Livi 		Γrim Lines (B16)					
Water Marks (B1)	Presence of Reduced Iron (C4		eason Water Table (C2)					
Sediment Deposits (B2)	Recent Iron Reduction in Tilled		sh Burrows (C8)					
Drift Deposits (B3)	_ Thin Muck Surface (C7)		Saturation Visible on Aerial Imagery (C9)					
	_ Other (Explain in Remarks)		d or Stressed Plants (D1)					
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)			orphic Position (D2)					
Water-Stained Leaves (B9)		Shallow Aquitard (D3) Microtopographic Relief (D4)						
Aquatic Fauna (B13)		FAC-Neutral Test (D5)						
Field Observations:								
	Depth (inches):1							
	Depth (inches):							
_	Depth (inches): 0	Wetland Hydrology F	Present? Yes No					
(includes capillary fringe)		, ,						
Describe Recorded Data (stream gauge, monitoring	weii, aeriai pnotos, previous ins	pections), if available:						
Remarks:								

Sampling Point: W-KL48-PSS-2

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:4 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				
5		-		Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
6				That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
7	0	Tatal Car		Total % Cover of: Multiply by:
50% of total cover: 0		Total Cover total cover	_	OBL species x 1 =
	20% 01	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15') 1. Alnus serrulata	20	~	OBL	FAC species x 3 =
	15		OBL	FACU species x 4 =
2. Cornus amomum			FACW_	
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>	35	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:17.5				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	2070 01	total cover		data in Remarks or on a separate sheet)
1. Symplocarpus foetidus	30	~	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Impatiens capensis	25			
	15		FACW_	¹ Indicators of hydric soil and wetland hydrology must
3. Ranunculus sp.			ND	be present, unless disturbed or problematic.
4. Carex scoparia	15		F <u>ACW</u>	Definitions of Four Vegetation Strata:
5. Glyceria striata	20		FACW_	Too. Meadagle to realistic action (7.0 cm)
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	-	-		
	105	= Total Cov		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>52.5</u>				of size, and woody plants less than 3.20 it tall.
4.51	20 /6 01	total cover		Woody vine - All woody vines greater than 3.28 ft in
, (Flot size.				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.)			
	,			

Profile Desc	ription: (Describe to	o the depth	needed to docum	ent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	Features	<u> </u>	. 2	_	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-10	10YR 5/1	95	7.5YR 5/6	5	С	M/PL	CL	
10-18	10G 7/1	100					SC	
			.					
			_					
	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	=Masked	Sand Gra	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indica	ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface					cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Bel		. , .		148) C	Coast Prairie Redox (A16)
Black Hi	, ,		Thin Dark Sur	, ,	•	47, 148)	_	(MLRA 147, 148)
	n Sulfide (A4) d Layers (A5)		Loamy Gleyer Depleted Mat		-2)		<u> </u>	Piedmont Floodplain Soils (F19) (MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S		6)		V	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark	•	,			Other (Explain in Remarks)
	ark Surface (A12)	, ,	Redox Depre					, ,
	lucky Mineral (S1) (L l	RR N,	Iron-Mangane		es (F12) (LRR N,		
	A 147, 148)		MLRA 136				2	
-	Gleyed Matrix (S4)		Umbric Surfac					licators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6) Layer (if observed):		Red Parent M	iateriai (F	21) (WLR	A 127, 147) un	less disturbed or problematic.
	Layer (ii observed).							
Type:	-1 \						115 - 15 - 0 - 11	D
	ches):		<u> </u>				Hydric Soil	Present? Yes No
Remarks:								

Wetland Photograph Page

Wetland ID W-KL48-PS: Date 05/15/2017



Photograph Direction NE

Comments:		
Commichio.		

Project/Site: MVP		City/C	_{ounty:} Roanoke		Sampling Date: 05/15/2017	
Applicant/Owner: MVP		Sampling Point: W-KL48-UP				
Investigator(s): E. Foster, J. Cook, K. Gracie Section, Township, Range: N/A						
Landform (hillslope, terrace, etc.): Slo					Slope (%): 5	
Subregion (LRR or MLRA): LRR N						
Soil Map Unit Name: 16C - Edneyville						
Are climatic / hydrologic conditions on the		-				
Are Vegetation, Soil, or	Hydrology	significantly disturb	ped? Are "Normal	Circumstances" p	oresent? Yes No	
Are Vegetation, Soil, or	Hydrology	naturally problema	itic? (If needed, e	xplain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – A	ttach site m	ap showing sam	pling point locatio	ns, transects	s, important features, etc.	
Hydrophytic Vegetation Present?	Yes	No. 🗸				
Hydric Soil Present?	Yes		Is the Sampled Area	V = =	N	
Wetland Hydrology Present?		No.	within a Wetland?	Yes	No	
Remarks: Cowardin Code: UF			Water Type:			
Cowardin Code. OF	LAND	i iGivi.	vvaler Type.			
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 (I	B14)	Sparsely Ve	getated Concave Surface (B8)	
High Water Table (A2)		Hydrogen Sulfide Odd	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	Iron (C4)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	(C6) Crayfish Burrows (C8)		
Drift Deposits (B3)		Thin Muck Surface (C		Saturation Visible 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)					aphic Relief (D4)	
Aquatic Fauna (B13)				FAC-Neutral	Tilest (D5)	
Field Observations: Surface Water Present? Yes	No. V	Donth (inches)				
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 gaug	ge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:		
Demodes						
Remarks:						

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

Sampling Point: W-KL48-UP

20'	Absolute	Dominan	t Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size:)	% Cover	Species'	? Status	Number of Dominant Species		
1				That Are OBL, FACW, or FAC:	0	(A)
2				T		
3				Total Number of Dominant Species Across All Strata:	3	(B)
				Species Acioss Ali Strata.		(D)
4				Percent of Dominant Species	0	
5				That Are OBL, FACW, or FAC:	0	(A/B)
6				Prevalence Index worksheet:		
7					And Control	
	0	= Total Co	ver	Total % Cover of: N		
50% of total cover:0	20% of	total cove	r: <u> </u>	OBL species x 1 =		
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =	:	_
1				FAC species x 3 =	:	_
				FACU species x 4 =	:	
2				UPL species x 5 =		
3		-				
4				Column Totals: (A)	-	_ (D)
5				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicators		<u> </u>
7						
8				1 - Rapid Test for Hydrophytic \	vegetation	
				2 - Dominance Test is >50%		
9	^	T-1-1-0-		3 - Prevalence Index is ≤3.0 ¹		
50% of total cover: 0		= Total Co		4 - Morphological Adaptations ¹	(Provide supp	oorting
E!	20% of	total cove	r:	data in Remarks or on a sep	parate sheet)	
TIEID STIATUIII (FIOT SIZE)	0.5			Problematic Hydrophytic Vegeta	•	n)
1. Poa pratensis	35		F <u>ACU</u>	resistance riyarepriyas vegea	attori (Explaii	,
2. Dicanthelium clandestinum	8		FAC	1 a disease of bundais and supplementary	al la al a a l a a	
3. Anthoxanthum odorata	25		FACU_	¹ Indicators of hydric soil and wetland be present, unless disturbed or prob		nust
4. Dactylis glomerata	25	✓	FACU	Definitions of Four Vegetation Str		
5				Definitions of Four Vegetation Str	rata:	
				Tree - Woody plants, excluding vine	es, 3 in. (7.6 d	cm) or
6				more in diameter at breast height (D	DBH), regardle	ess of
7				height.		
8		-		Sapling/Shrub – Woody plants, exc	cluding vines.	less
9				than 3 in. DBH and greater than or e		
10				m) tall.		
11.				Herb – All herbaceous (non-woody)	A plante rogar	dlocc
	93	= Total Co	ver	of size, and woody plants less than		uless
50% of total cover: <u>46.5</u>						
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines grea	ater than 3.28	ft in
				height.		
1						
2						
3						
4				Hydrophytic		
5				Vegetation	_	
	0	= Total Co	ver	Present? Yes N	No <u>/</u>	
50% of total cover:0	20% of	total cove	r: <u> </u>			
Remarks: (Include photo numbers here or on a separate s	heet.)					
The market (motate priorie market) and on an a coparate of	,					

		to the depth	needed to document the indicator or con	firm the abse	ence of indicato	rs.)	
Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist) % Type ¹ Loc	² Textur	re	Remarks	
0-1	10YR 4/2	100	<u> </u>	CL		rtomanto	
1-15	10YR 4/4	100		CL			
15-18	10YR 6/6	100		CL			
13-10	101110/0	100					
							
	-						
		·					
1Typo: C-C	properties D-Den	lotion PM-P	educed Matrix, MS=Masked Sand Grains.	² L ocation	n: PL=Pore Lini	na M-Matrix	
Hydric Soil		elion, Kivi=Ke	educed Matrix, Mo=Masked Sarid Grains.		ndicators for Pr		
Histosol			Dark Surface (S7)		2 cm Muck (A		
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	147, 148)	Coast Prairie	, .	•
Black Hi	, ,		Thin Dark Surface (S9) (MLRA 147, 14		(MLRA 14	7, 148)	
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)	_	Piedmont Flo		s (F19)
	Layers (A5)		Depleted Matrix (F3)		(MLRA 13		· (TE40)
	ick (A10) (LRR N) d Below Dark Surface	a (Δ11)	Redox Dark Surface (F6)Depleted Dark Surface (F7)	_	Very Shallow Other (Explain		
	ark Surface (A12)	, (, (, , ,)	Redox Depressions (F8)	_	01101 (Explai	TI III TOMAN	5)
	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LRR N	l,			
	A 147, 148)		MLRA 136)		_		
	sleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122		³ Indicators of hy		
	edox (S5)		Piedmont Floodplain Soils (F19) (MLRA		wetland hydro		
	Matrix (S6) _ayer (if observed):		Red Parent Material (F21) (MLRA 127,	, 147)	unless disturbe	ea or problen	natic.
Type:	Layer (ii observed).						
	ches):		_	Hydric	Soil Present?	Yes	No _ 🗸
Remarks:	J. 100).		_	Tiyano	- Con i resent.		
rtomanto.							

Project/Site: MVP		City/C	county: Roanoke		Sampling Date: 05/16/2017		
Applicant/Owner: MVP							
Investigator(s): E. Foster, J.							
Landform (hillslope, terrace, etc					Slope (%): 0-5		
Subregion (LRR or MLRA): <u>LF</u>			Long: -80	.131499	Datum: NAD 83		
Soil Map Unit Name: 16C - Ed							
Are climatic / hydrologic condition							
· · · · · ·		•					
Are Vegetation, Soil							
Are Vegetation, Soil				explain any answe			
SUMMARY OF FINDING	SS – Attach site	map showing san	npling point location	ns, transects	, important features, etc.		
Hydrophytic Vegetation Prese	nt? Yes	/ No	lo the Compled Area				
Hydric Soil Present?	Yes	/No	Is the Sampled Area within a Wetland?	Yes 🗸	No		
Wetland Hydrology Present?	Yes	No	within a Wettana.	100			
Remarks: Cowardin Co	de: PEM	HGM: Slope	Water Type:	RPWWN			
Maintained pasture.		·					
HYDROLOGY							
Wetland Hydrology Indicato	rs:			Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum o		neck all that apply)		Surface Soil			
Surface Water (A1)	•	True Aquatic Plants (B14)		getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa			
Saturation (A3)		 Oxidized Rhizosphere 	. ,	Moss Trim L			
Water Marks (B1)		Presence of Reduced	d Iron (C4)		Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)		
Drift Deposits (B3)		Thin Muck Surface (0	C7)	Saturation V	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		tressed Plants (D1)		
Iron Deposits (B5)				Geomorphic	` '		
Inundation Visible on Aeri				Shallow Aqu			
Water-Stained Leaves (B9	9)			Microtopographic Relief (D4)			
Aquatic Fauna (B13)			ľ	FAC-Neutral	Test (D5)		
Field Observations: Surface Water Present?	Vac V No	Depth (inches):	1				
Water Table Present?	Yes V No	Depth (inches):	4				
			<u> </u>	luduala sur Duanas	42 Vas V Na		
Saturation Present? (includes capillary fringe)	Yes _ • No	Depth (inches):	wetiand H	iyarology Preser	nt? Yes V No		
Describe Recorded Data (stre	am gauge, monitori	ng well, aerial photos, pre	vious inspections), if ava	ilable:			
Remarks:							
Small ponded areas with	surface water i	n wetland interior.					

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

	plants.		Sampling Point: W-KL50
Absolute	Dominant	Indicator	Dominance Test worksheet:
			Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
	-		
	-	= (Total Number of Dominant Species Across All Strata: 4 (B)
	-		Species Across All Strata:4 (B)
	-		Percent of Dominant Species
			That Are OBL, FACW, or FAC: 75 (A/B)
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
_ 20% of	total cove	r: <u> </u>	OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
			UPL species x 5 =
	-		Column Totals: (A) (B)
			Drawalanca Inday D/A
			Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
	-		✓ 2 - Dominance Test is >50% 1
0 -	- Total Co		3 - Prevalence Index is ≤3.0 ¹
			4 - Morphological Adaptations ¹ (Provide supporting
		·	data in Remarks or on a separate sheet)
20	/	∩RI	Problematic Hydrophytic Vegetation ¹ (Explain)
			¹ Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
		<u>FACW</u>	- W
		FACU_	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
15		FACU_	height.
			Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
115 =	= Total Co	ver	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
20% of	total covei	r: 23	W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			Woody vine – All woody vines greater than 3.28 ft in height.
			neight.
		 	Hydrophytic
			Vegetation
	Total Co	_	
	0 = 20% of 20 25 10 5 20 15 115 = 115 =	0 = Total Co 20% of total cover 0 = Total Co 20% of total cover 20	O = Total Cover 20% of total cover: 0 20% of total cover: 0 Total Cover 20% of total cover: 0 OBL 20 FACW 5 FACW 5 FACW 5 FACW 15 FACU 15 FACU

Sampling Point: W-KL50

Profile Desc	cription: (Describe t	o the dept	h needed to docun	nent the i	ndicator	or confirm	the absence o	of indicators.)
Depth	Matrix		Redox	K Features	3			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-1.5	10YR 4/2	100					SICL	
1.5-15	10YR 6/1	60_	5YR 5/6	20_	С	M/PL	SCL	
	10YR 4/2	20						
15-20	7.5YR 5/6	80	10YR 6/1	20	D	M	SL	Coarse sandy loam
								_
					-			
1 _{Tymax} C. C.	ancentration D. Donl	otion DM	Doduced Metrix MC	· Maakad	Cond Cr		2l continue DI	Doro Lining M. Motriy
Hydric Soil	oncentration, D=Depl	etion, RIVI=	Reduced Matrix, MS	=IVIasked	Sand Gr	ains.		=Pore Lining, M=Matrix. tors for Problematic Hydric Soils ³ :
-			Dorle Curfoso	(07)				· ·
Histosol	oipedon (A2)		Dark Surface Polyvalue Be		00 (89) (1	II D A 147		cm Muck (A10) (MLRA 147) past Prairie Redox (A16)
	stic (A3)		Thin Dark Su		. , .			(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			47, 140)		edmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat	,	1 2)			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		·6)			ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar	,	,			her (Explain in Remarks)
	ark Surface (A12)	,	Redox Depre					- (
	Mucky Mineral (S1) (L	RR N,	Iron-Mangane			LRR N,		
	A 147, 148)		MLRA 130		, , ,			
Sandy G	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	6, 122)	³ Indic	cators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	18) wetl	land hydrology must be present,
Stripped	l Matrix (S6)		Red Parent M	1aterial (F	21) (MLR	A 127, 147	7) unle	ess disturbed or problematic.
Restrictive	Layer (if observed):							
Туре: <u>С</u>	ompressed soil							
Depth (in	ches): <u>15</u>						Hydric Soil F	Present? Yes <u> </u>
Remarks:								
•								
1								
1								
1								
1								
1								



Photograph Direction East

Comments:			

Project/Site: MVP		City/Co	_{ounty:} Roanoke		Sampling Date: 05/15/2017	
Applicant/Owner: MVP		State: VA			Sampling Point: W-KL50-UI	
	nvestigator(s): E. Foster, J. Cook, K. Gracie Section, Township, Range: N/A					
Landform (hillslope, terrace, etc.): Slo					Slope (%): 0-5	
Subregion (LRR or MLRA): LRR N					Datum: NAD 83	
Soil Map Unit Name: 16C - Edneyvill						
Are climatic / hydrologic conditions on						
Are Vegetation, Soil, or	r Hydrology	significantly disturb	ed? Are "Normal	Circumstances"	present? Yes No	
Are Vegetation, Soil, or	r Hydrology	naturally problema	tic? (If needed, e	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS - A	Attach site m	nap showing sam	pling point locatio	ns, transects	s, important features, etc.	
Hydrophytic Vegetation Present?	drophytic Vegetation Present? Yes No					
Hydric Soil Present?	Yes	No 🗸	Is the Sampled Area	Vaa	No 🗸	
Wetland Hydrology Present?	Yes	No V	within a Wetland?	Yes	No	
Remarks: Cowardin Code: U		I.	Water Type:			
Johnaram Goder O			riaio. Typo.			
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum of one is	s required; checl	k all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)		True Aquatic Plants (E	314)	Sparsely Ve	getated Concave Surface (B8)	
High Water Table (A2)		Hydrogen Sulfide Odd	or (C1)	Drainage Pa	atterns (B10)	
Saturation (A3)		Oxidized Rhizosphere	s on Living Roots (C3)	Moss Trim L	ines (B16)	
Water Marks (B1)		Presence of Reduced	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			isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Other (Explain in Rem	arks)		stressed Plants (D1)	
Iron Deposits (B5)					Position (D2)	
Inundation Visible on Aerial Imag	jery (B7)			Shallow Aqu		
Water-Stained Leaves (B9)					aphic Relief (D4)	
Aquatic Fauna (B13)			1	FAC-Neutra	T Test (D5)	
Field Observations:		Danilla (Cashasa)				
Surface Water Present? Yes _	No	Depth (inches):				
	_	Depth (inches):				
Saturation Present? Yes _ (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Prese	nt? Yes No	
Describe Recorded Data (stream gau	ige, monitoring v	well, aerial photos, prev	vious inspections), if ava	ilable:		
Remarks:						

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

30'

Sapling/Shrub Stratum (Plot size: 15')

Tree Stratum (Plot size: __

Herb Stratum (Plot size: ___

1. Anthoxanthum odoratum

2. Holcus lanatus

3. Poa pratensis

4. Apocynum cannabinum

Woody Vine Stratum (Plot size: ____15' ____)

____)

% Cover Species? Status

0 = Total Cover

0 = Total Cover

✓ FACU

✓ FAC

✔ FACU

Vegetation

Present?

10 FACU

100 = Total Cover

0 = Total Cover

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

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

50% of total cover: ______ 20% of total cover:____ 20

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

30

	Sampling Poi	nt: <u>W-KL50-</u> L	JP
	Dominance Test worksheet:		
-	Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
	Total Number of Dominant Species Across All Strata:	3	(B)
	Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)
-	Prevalence Index worksheet:		
-	Total % Cover of:	Multiply by:	
	OBL species x 1		
-	FACW species x 2		
		3 =	
-	FACU species x 4	1 =	_
	UPL species x 5	5 =	_
	Column Totals: (A)		_ (B)
-	Prevalence Index = B/A =		_
-	Hydrophytic Vegetation Indicat	ors:	
-	1 - Rapid Test for Hydrophyti	c Vegetation	
-	2 - Dominance Test is >50%		
-	3 - Prevalence Index is ≤3.0 ¹		
	4 - Morphological Adaptation	s¹ (Provide sup	porting
-	data in Remarks or on a s	eparate sheet)	
-	Problematic Hydrophytic Veg	jetation¹ (Explai	n)
	¹ Indicators of hydric soil and wetla be present, unless disturbed or p	roblematic.	nust
-	Definitions of Four Vegetation	Strata:	
1	Tree – Woody plants, excluding wore in diameter at breast height height.		
	Sapling/Shrub – Woody plants, than 3 in. DBH and greater than 6 m) tall.		
	Herb – All herbaceous (non-wood of size, and woody plants less that		rdless
-	Woody vine – All woody vines gr height.	eater than 3.28	ft in
-			
-			
-			
-	Hydrophytic		

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

Yes ____ No ___

		to the depth	needed to document the indicator or	confirm the a	bsence of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	Loc ² Te	xture	Remarks	
0-11	10YR 4/2	100			SL	rtomano	
		100			SL		
11-20	2.5Y 6/6	100			<u> </u>		
¹ Type: C=Co	oncentration, D=Dep	etion, RM=Re	educed Matrix, MS=Masked Sand Grain	s. ² Loc	ation: PL=Pore Lini	ng, M=Matrix.	
Hydric Soil I	ndicators:				Indicators for P		
Histosol	(A1)		Dark Surface (S7)		2 cm Muck (A10) (MLRA 1	47)
	pipedon (A2)		Polyvalue Below Surface (S8) (ML			e Redox (A16)	
Black Hi			Thin Dark Surface (S9) (MLRA 147	7, 148)	(MLRA 14		
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)			oodplain Soils	(F19)
	d Layers (A5) ick (A10) (LRR N)		Depleted Matrix (F3)Redox Dark Surface (F6)		(MLRA 13	v Dark Surface	(TE12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)			in in Remarks	, ,
	ark Surface (A12)	, , , , ,	Redox Depressions (F8)		00. (2./p.c.		,
	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LF	RN,			
	A 147, 148)		MLRA 136)				
	Sleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136,		³ Indicators of h		
	Redox (S5)		Piedmont Floodplain Soils (F19) (N		wetland hydro		
	Matrix (S6) Layer (if observed):		Red Parent Material (F21) (MLRA	127, 147)	unless disturb	ed or problem	atic.
	_ayer (ii observed).						
Type:			_	Usea	Iric Soil Present?	Vaa	No. V
	ches):		_	пус	ric Soil Present?	Yes	No V
Remarks:							

Project/Site: MVP		City/Co	_{unty:} Roanoke		Sampling Date: 05/15/2017		
oject/Site: MVP City/County: Roanoke pplicant/Owner: MVP State:					Sampling Point: W-KL49		
Investigator(s): E. Foster, J. Cook, K		<u> </u>					
Landform (hillslope, terrace, etc.): Slope					Slone (%): 0-3		
Subregion (LRR or MLRA): LRR N					Datum: NAD 83		
Soil Map Unit Name: 16C - Edneyville f							
Are climatic / hydrologic conditions on the		•		•	,		
Are Vegetation, Soil, or H	ydrology	_ significantly disturbe	ed? Are "Normal	Circumstances" p	resent? Yes No		
Are Vegetation, Soil, or H	ydrology	_naturally problemati	c? (If needed, e	xplain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS – Att	ach site ma	p showing samp	ling point locatio	ns, transects	, important features, etc.		
Hydrophytic Vegetation Present?	Hydrophytic Vegetation Present? Yes No						
Hydric Soil Present?	Yes 🗸	NI ₂	s the Sampled Area				
Wetland Hydrology Present?	Yes 🗸	No No	within a Wetland?	Yes	No		
Remarks: Cowardin Code: PEN		HGM: Slope	Water Type: I	RDWWNI			
Cowardin Code. PEN	/I I	iow. Slope	vvaler Type. I				
HYDROLOGY							
Wetland Hydrology Indicators:					tors (minimum of two required)		
Primary Indicators (minimum of one is re	-			Surface Soil	, ,		
Surface Water (A1)		rue Aquatic Plants (B			getated Concave Surface (B8)		
High Water Table (A2)		lydrogen Sulfide Odor	, ,	Drainage Pat			
Saturation (A3)	· <u></u>	xidized Rhizospheres	• , ,	Moss Trim Li			
Water Marks (B1)		Presence of Reduced I	` '		Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Burn			
Drift Deposits (B3)		hin Muck Surface (C7			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Iron Deposits (B5)	0	Other (Explain in Rema	iiks)	Geomorphic	tressed Plants (D1)		
Inundation Visible on Aerial Imagery	, (R7)				,		
Water-Stained Leaves (B9)	, (Br)			Shallow Aquitard (D3) Microtopographic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutral Test (D5)			
Field Observations:							
	No 🗸 [Depth (inches):					
Water Table Present? Yes	No V	Depth (inches):					
		Depth (inches):		vdrology Presen	t? Yes 🗸 No		
(includes capillary fringe)							
Describe Recorded Data (stream gauge	, monitoring we	ell, aerial photos, previ	ous inspections), if avai	ilable:			
Remarks:							

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

/EGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: W-KL49
30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:50 (A/B)
6				
7				Prevalence Index worksheet:
	0	= Total Cov	ver	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover	0	OBL species x 1 = 10
Sapling/Shrub Stratum (Plot size: 15')				FACW species 65 x 2 = 130
1				FAC species x 3 = 30
2				FACU species 30 x 4 = 120
3				UPL species x 5 = 0
4				Column Totals:115 (A)290 (B)
5				Prevalence Index = B/A =2.52
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
	0	= Total Cov	ver	✓ 3 - Prevalence Index is ≤3.0 ¹
50% of total cover:0				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:5'				data in Remarks or on a separate sheet)
1. Carex vulpinoidea	35		FACW_	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Juncus effuses	20		F <u>ACW</u>	4
3. Carex lurida	10		OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Carex scoparia	10		FACW_	Definitions of Four Vegetation Strata:
5. Dicanthelium clandestinum	10		FAC	Deminions of Four Vegetation Strata.
6. Anthoxanthum odoratum	30		FACU_	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
500/ //		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>57.5</u>	20% of <u>ر</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
50% of total cover: 0		= Total Cover	_	100 <u>100 100 100 100 100 100 100 100 100</u>
		total cover		
Remarks: (Include photo numbers here or on a separate s	neet.)			

Sampling Point: W-KL49

	ription: (Describe t	o the dept				or confirm	the absence	of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Features %	Type ¹	Loc ²	Texture		Remarks	
0-9	10YR 4/1	90	7.5YR 4/4	10	С	M/PL	SCL	Oxid	ized rhizosp	peres at 8"
9-14	10YR 4/1	60					SCL			
	10YR 6/4	40								
14-20	10YR 6/1	70	10YR 6/8	30	С	М	SC			
¹ Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand G	rains.			ing, M=Matrix.	
Hydric Soil I	Indicators:						Indica	tors for P	roblematic Hy	/dric Soils³:
Histosol			Dark Surface						A10) (MLRA 1	
	pipedon (A2)		Polyvalue Be				148) C		e Redox (A16)	
Black Hi			Thin Dark Su			147, 148)		(MLRA 14		
	n Sulfide (A4)		Loamy Gleye		F2)		Pi		oodplain Soils	(F19)
	d Layers (A5)		Depleted Ma	. ,	C)		V.	(MLRA 13		(TE40)
	ick (A10) (LRR N) d Below Dark Surface	\((\(1 \) \)	Redox Dark : Depleted Dark :	•					v Dark Surface iin in Remarks	
	ark Surface (A12)	(A11)	Redox Depre				0	illei (Expia	iii iii iteiliaiks)
	lucky Mineral (S1) (L	RR N.	Iron-Mangan			(LRR N.				
	\ 147, 148)	,	MLRA 13		, , , ,	(=,				
	Gleyed Matrix (S4)		Umbric Surfa	•	MLRA 1	36, 122)	³ Indi	cators of h	ydrophytic veg	getation and
	ledox (S5)		Piedmont Flo						logy must be i	
Stripped	Matrix (S6)		Red Parent N	/laterial (F	21) (MLF	RA 127, 147	') unl	ess disturb	ed or problem	atic.
Restrictive L	_ayer (if observed):									
Туре:			<u></u>							
Depth (inc	ches):						Hydric Soil	Present?	Yes	No
Remarks:										



Photograph Direction West

Comments:		

Project/Site: MVP		City/County: Roanoke		Sampling Date: 05/15/2017
Applicant/Owner: MVP				Sampling Point: W-KL49-UF
Investigator(s): E. Foster, J. Cook, K. (Gracie			_ ,
Landform (hillslope, terrace, etc.): Slope				Slope (%): 5
Subregion (LRR or MLRA): LRR N				Datum: NAD 83
Soil Map Unit Name: 16C - Edneyville fine				
Are climatic / hydrologic conditions on the sit				
Are Vegetation, Soil, or Hydr				
Are Vegetation, Soil, or Hydr				
SUMMARY OF FINDINGS – Attac				
	′es No ✓			•
	'es No	Is the Sampled Area	.,	🗸
	′es No	within a Wetland?	Yes	No
Remarks: Cowardin Code: UPLAN		Water Type:		
		71		
HYDROLOGY Wetland Hydrology Indicators:			Socondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is requ	uired: check all that annly)		Surface Soil	
Surface Water (A1)	True Aquatic P	lants (R14)		getated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfi		Drainage Pat	
Saturation (A3)		spheres on Living Roots (C3)	-	
Water Marks (B1)	Presence of Re			Water Table (C2)
Sediment Deposits (B2)		eduction in Tilled Soils (C6)	Crayfish Burr	
Drift Deposits (B3)	Thin Muck Surf		-	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain			tressed Plants (D1)
Iron Deposits (B5)			Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (E	37)		Shallow Aqui	tard (D3)
Water-Stained Leaves (B9)			Microtopogra	phic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)
Field Observations:	. 1			
	No Depth (inches			
	No Depth (inches			
Saturation Present? Yes (includes capillary fringe)	No Depth (inches): Wetland I	Hydrology Presen	t? Yes No
Describe Recorded Data (stream gauge, m	onitoring well, aerial photo	os, previous inspections), if ava	ailable:	
Remarks:				

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

Sampling Point: W-KL49-UP

Tree Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:		
Tiee Stratum (1 lot size.	% Cover			Number of Dominant Species	1	
1,				That Are OBL, FACW, or FAC:	1	(A)
2				Total Number of Dominant	0	
3				Species Across All Strata:	3	(B)
4				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC:	33	(A/B)
6				Prevalence Index worksheet:		
7				Total % Cover of:	Multiply by:	
		= Total Cov		OBL species x		
50% of total cover: 0 Sapling/Shrub Stratum (Plot size: 15')	20% of	total cover	:0			
<u>Japinig/Oniab Ottatum</u> (1 lot 3i2c)				FACW species x FAC species x		
1						
2				FACU species x		
3				UPL species x		
4				Column Totals: (A	.)	(B)
5				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indica		
7				1 - Rapid Test for Hydrophyt		
8				2 - Dominance Test is >50%		
9				3 - Prevalence Index is ≤3.0		
		= Total Cov		4 - Morphological Adaptation		porting
	20% of	total cover	:0	data in Remarks or on a s		
Herb Stratum (Plot size: 5')				Problematic Hydrophytic Ve		
1. Anthoxanthum odoratum	35		F <u>ACU</u>	1 Toblematic Tryatophytic ve	getation (Expla)
2. Holcus lanatus	25		F <u>AC</u>	¹ Indicators of hydric soil and wetl	land hydrology	muet
3. Poa pratensis	30		F <u>ACU</u>	be present, unless disturbed or p		iliust
4. Apocynum cannabinum	10		FACU_	Definitions of Four Vegetation		
5						,
6				Tree – Woody plants, excluding more in diameter at breast heigh		
7		_		height.	t (DDII), Togara	1000 01
8		_		Sapling/Shrub – Woody plants,		laca
9		_		than 3 in. DBH and greater than		
10		_		m) tall.		,
11				Herb – All herbaceous (non-woo	ndv) plants rega	ardless
	100	= Total Cov	/er	of size, and woody plants less th		ar drood
50% of total cover: 50	20% of	total cover	: 20	Woody vine – All woody vines g	rootor than 2 29	9 ft in
Woody Vine Stratum (Plot size: 15')				height.	reater triair 5.20	5 11 111
1				<u> </u>		
2						
3		_				
4				Hydrophytic		
5				Vegetation		
	0 .	= Total Cov	/er	Present? Yes	No <u> </u>	
50% of total cover:0	20% of	total cover	: <u> </u>			
Remarks: (Include photo numbers here or on a separate sl	neet.)					

		to the depth	needed to document the indicator or	confirm the a	bsence of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	Loc ² Te	xture	Remarks	
0-11	10YR 4/2	100			SL	rtomano	
		100			SL		
11-20	2.5Y 6/6	100			<u> </u>		
¹ Type: C=Co	oncentration, D=Dep	etion, RM=Re	educed Matrix, MS=Masked Sand Grain	s. ² Loc	ation: PL=Pore Lini	ng, M=Matrix.	
Hydric Soil I	ndicators:				Indicators for P		
Histosol	(A1)		Dark Surface (S7)		2 cm Muck (A10) (MLRA 1	47)
	pipedon (A2)		Polyvalue Below Surface (S8) (ML			e Redox (A16)	
Black Hi			Thin Dark Surface (S9) (MLRA 147	7, 148)	(MLRA 14		
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)			oodplain Soils	(F19)
	d Layers (A5) ick (A10) (LRR N)		Depleted Matrix (F3)Redox Dark Surface (F6)		(MLRA 13	v Dark Surface	(TE12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)			in in Remarks	, ,
	ark Surface (A12)	, , , , ,	Redox Depressions (F8)		00. (2./p.c.		,
	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LF	RN,			
	A 147, 148)		MLRA 136)				
	Sleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136,		³ Indicators of h		
	Redox (S5)		Piedmont Floodplain Soils (F19) (N		wetland hydro		
	Matrix (S6) Layer (if observed):		Red Parent Material (F21) (MLRA	127, 147)	unless disturb	ed or problem	atic.
	_ayer (ii observed).						
Type:			_	Usea	Iric Soil Present?	Vaa	No. V
	ches):		_	пус	ric Soil Present?	Yes	No V
Remarks:							

Project/Site: MVP		City/County: Roa	anoke	Sampling Date: 05/16/2017				
Applicant/Owner: MVP		State: VA	Sampling Point: W-KL51-PEN					
Investigator(s): E. Foster, J. Cook, K. Gracie Section, Township, Range: N/A								
Landform (hillslope, terrace, etc.): Slo			-	/e Slone (%): 0-5				
Subregion (LRR or MLRA): LRR N				Datum: NAD 83				
Soil Map Unit Name: 16D - Edneyville			=					
Are climatic / hydrologic conditions on the	* *	•		_				
Are Vegetation, Soil, or	Hydrology sign	ificantly disturbed?	Are "Normal Circumstance	es" present? Yes No				
Are Vegetation, Soil, or	Hydrologynatu	rally problematic?	(If needed, explain any ans	swers in Remarks.)				
SUMMARY OF FINDINGS – A	ttach site map sh	owing sampling po	int locations, transe	cts, important features, etc.				
Hudosobiatio Vanatation Brassat2	Yes No							
Hydrophytic Vegetation Present? Hydric Soil Present?		is the San	npled Area					
Wetland Hydrology Present?	Yes V No	Willillia W	/etland? Yes	No				
Remarks: Cowardin Code: PE			ater Type: RPWWD					
HYDROLOGY								
Wetland Hydrology Indicators:			·	dicators (minimum of two required)				
Primary Indicators (minimum of one is	-			Soil Cracks (B6)				
Surface Water (A1)		quatic Plants (B14)		Vegetated Concave Surface (B8)				
High Water Table (A2)		en Sulfide Odor (C1) d Rhizospheres on Living		Patterns (B10)				
Saturation (A3) Water Marks (B1)		ce of Reduced Iron (C4)		son Water Table (C2)				
Sediment Deposits (B2)	· 	Iron Reduction in Tilled S	· ·					
Drift Deposits (B3)		uck Surface (C7)		n Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Explain in Remarks)		or Stressed Plants (D1)				
Iron Deposits (B5)				phic Position (D2)				
Inundation Visible on Aerial Image	ery (B7)		Shallow A	Aquitard (D3)				
✓ Water-Stained Leaves (B9)				ographic Relief (D4)				
Aquatic Fauna (B13)			FAC-Neu	utral Test (D5)				
Field Observations:								
Surface Water Present? Yes	No Depth	(inches):						
	No Depth							
Saturation Present? Yes (includes capillary fringe)	No 🔽 Depth	(inches):	Wetland Hydrology Pre	esent? Yes V No				
Describe Recorded Data (stream gaug	ge, monitoring well, aeri	al photos, previous insped	ctions), if available:					
Bernada								
Remarks:								

	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:3 (A)
2				Total New Long (Device of
3				Total Number of Dominant Species Across All Strata: 3 (B)
4				(B)
		-		Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
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	0	
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Cornus amomum	10		FACW_	FAC species x 3 =
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
	10	= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 5	20% of	total cover	2	
Herb Stratum (Plot size: 5'				data in Remarks or on a separate sheet)
1. Symplocarpus foetidus	10	✓	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Impatiens capensis	15	~	FACW	
3 Solidago altissima	5		FACU	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				One line of Ohmoha Wasaka alasa ka sanaka finansi sanaka sanaka
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	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: 15		Total Cover total cover	_	or size, and woody plants less than 3.20 it tall.
4 E !	20% 01	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		total cover	_	
Remarks: (Include photo numbers here or on a separate s				
Tremaine. (module phote humbers here of on a separate o	11001.)			

Sampling Point: W-KL51-PEM

Profile Desc	ription: (Describe to	the depth r	needed to docun	nent the i	ndicator c	r confirm	the absence	of indicators.)	
Depth	Matrix			x Features		. 2			
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remark	
0-20	10YR 2/1	100					SCL	Organic bodies	s throughout
					<u> </u>				
¹Type: C=Co	oncentration, D=Deple	etion, RM=Re	duced Matrix, MS	S=Masked	Sand Gra	ins.	² Location: P	L=Pore Lining, M=Matr	ix.
Hydric Soil I								ators for Problematic	
Histosol		_	Dark Surface					cm Muck (A10) (MLRA	A 147)
	pipedon (A2)	-	Polyvalue Be				148) C	oast Prairie Redox (A1	6)
Black His		-	Thin Dark Su			47, 148)	5	(MLRA 147, 148)	U- (E40)
	n Sulfide (A4) I Layers (A5)	-	Loamy Gleye Depleted Mat		F2)		_ r	iedmont Floodplain Soi (MLRA 136, 147)	iis (F19)
	ck (A10) (LRR N)	-	Redox Dark S		·6)		V	ery Shallow Dark Surfa	ice (TF12)
	Below Dark Surface	(A11)	Depleted Dar					other (Explain in Remar	
	ark Surface (A12)	-	Redox Depre						
	lucky Mineral (S1) (LI	RR N,	Iron-Mangane		es (F12) (L	.RR N,			
	147, 148) sleyed Matrix (S4)		MLRA 130 Umbric Surfa	-	MI DA 136	: 122\	³ Ind	icators of hydrophytic v	regetation and
	edox (S5)	-	Piedmont Flo					tland hydrology must b	
	Matrix (S6)		Red Parent M					less disturbed or proble	
Restrictive L	ayer (if observed):								
Type:			_						
Depth (inc	ches):		_				Hydric Soil	Present? Yes	No
Remarks:							<u> </u>		
Soils distur	bed.								

Wetland Photograph Page

Wetland ID W-KL51-PEl Date 05/16/2017



Photograph Direction SE

Comments:		

Project/Site: MVP	City/0	County: Roanoke		Sampling Date: 05/16/2017				
Applicant/Owner: MVP		State: VA	_ Sampling Point: W-KL51-PSS					
Investigator(s): E. Foster, J. Cook, K. Gracie Section, Township, Range: N/A								
Landform (hillslope, terrace, etc.): Floodplai				Slone (%): 0-5				
Subregion (LRR or MLRA): LRR N		Long: <u>-80</u>		Datum: NAD 83				
Soil Map Unit Name: 16D - Edneyville fine s								
Are climatic / hydrologic conditions on the site								
Are Vegetation, Soil, or Hydrolo	gy significantly distu	rbed? Are "Normal	I Circumstances" pr	resent? Yes No				
Are Vegetation, Soil, or Hydrolo	gy naturally problem	natic? (If needed, e	explain any answer	s in Remarks.)				
SUMMARY OF FINDINGS – Attach	site map showing sar	npling point location	ons, transects,	important features, etc.				
Hydrophytic Vegetation Present? Yes	No							
	No_	Is the Sampled Area	V V	No				
	No	within a Wetland?	res	_ NO				
Remarks: Cowardin Code: PSS	HGM: Riverine	Water Type:	RDWWD					
HYDROLOGY								
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two required)				
Primary Indicators (minimum of one is require	d; check all that apply)		Surface Soil C					
Surface Water (A1)	True Aquatic Plants	(B14)	- 	etated Concave Surface (B8)				
✓ High Water Table (A2)	Hydrogen Sulfide Oc	dor (C1)	Drainage Patt					
Saturation (A3)	Oxidized Rhizospher	res on Living Roots (C3)	Moss Trim Lir	nes (B16)				
Water Marks (B1)	Presence of Reduce	` '	Dry-Season V	Vater Table (C2)				
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burro					
Drift Deposits (B3)	Thin Muck Surface (sible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Re	marks)	Geomorphic F	ressed Plants (D1)				
Iron Deposits (B5)Inundation Visible on Aerial Imagery (B7)			Shallow Aquit					
Water-Stained Leaves (B9)				phic Relief (D4)				
Aquatic Fauna (B13)			FAC-Neutral					
Field Observations:				· · ·				
Surface Water Present? Yes N	o Depth (inches):							
Water Table Present? Yes N	o Depth (inches):	12						
	o Depth (inches):	3 Wetland H	Hydrology Present	? Yes <u> </u>				
(includes capillary fringe) Describe Recorded Data (stream gauge, mor	itoring well, aerial photos, pre		ailable:					
(3 3		, ,,						
Remarks:								

Sampling Point: W-KL51-PSS

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species	
1				That Are OBL, FACW, or FAC:	4 (A)
2				Total Nicoshan of Danis and	
3				Total Number of Dominant Species Across All Strata:	5 (B)
1		-			(2)
	-	-		Percent of Dominant Species	80 (A/B)
5				That Are OBL, FACW, or FAC:	(A/B)
6	-			Prevalence Index worksheet:	
1				Total % Cover of: Multip	ply by:
0		= Total Cov		OBL species x 1 =	
50% of total cover: 0 Sanling/Shrub Stratum (Plot size: 15')	20% of	total cover	. 0		
Caping/Chiab Chatam (1 lot 5/20)	0.5	,		FACW species x 2 =	
1. Lindera benzoin	35		FAC	FAC species x 3 =	
2. Rubus allegheniensis	15		FACU_	FACU species x 4 =	
3. Rosa multiflora	10		FACU_	UPL species x 5 =	
4				Column Totals: (A)	(B)
5					
6				Prevalence Index = B/A =	
o		-		Hydrophytic Vegetation Indicators:	
7		-		1 - Rapid Test for Hydrophytic Vege	etation
8				✓ 2 - Dominance Test is >50%	
9				3 - Prevalence Index is ≤3.0 ¹	
		= Total Cov		4 - Morphological Adaptations ¹ (Pro	ovide supporting
50% of total cover: 30	20% of	total cover	12		
Herb Stratum (Plot size: 5'				data in Remarks or on a separat	,
1. Symplocarpus foetidus	25	~	OBL	Problematic Hydrophytic Vegetation	า' (Explain)
2. Woodwardia virginica	12		OBL		
3. Impatiens capensis	15		FACW	¹ Indicators of hydric soil and wetland hy	
		-	171011	be present, unless disturbed or problem	
	-			Definitions of Four Vegetation Strata:	
5	-	-		Tree – Woody plants, excluding vines, 3	3 in (7.6 cm) or
6	-			more in diameter at breast height (DBH)	
7				height.	
8				Septime/Shrub \\/\adv.nlente eveludi	ing vinos loss
9				Sapling/Shrub – Woody plants, excludi than 3 in. DBH and greater than or equa	
10.				m) tall.	
11		-			. "
	52	= Total Cov		Herb – All herbaceous (non-woody) plan of size, and woody plants less than 3.28	
50% of total cover: 26		total cover		or size, and woody plants less than 5.20	, it tall.
Woody Vine Stratum (Plot size: 15')	2070 01	total oover		Woody vine – All woody vines greater t	han 3.28 ft in
1 Smilax rotundifolia	5	/	FAC	height.	
·· <u> </u>	-		FAC		
2					
3					
4				Hydrophytic	
5				Vegetation	
	5	= Total Cov	er	Present? Yes V No	
50% of total cover: 2.5		total cover			
Remarks: (Include photo numbers here or on a separate s					
	,				

Sampling Point: W-KL51-PSS

Profile Desc	ription: (Describe t	o the depth	needed to docum	nent the in	ndicator o	r confirm	the absenc	e of indicate	ors.)	
Depth	Matrix			K Features		. 2				
(inches) 0-8	Color (moist) 10YR 3/1	<u>%</u> _	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture SL	_	Remarks	
<u>8-15</u>	<u>5G 5/2</u>	100					SL			
			_							
								-		
1 _{Type:} C-C	nacontration D_Donl	otion DM_D	laduaad Matrix, MS		Cond Cro	ino	² Location:	DI –Doro Lini	ina M-Motriy	
Hydric Soil I	oncentration, D=Deple Indicators:	elion, Rivi=R	teduced Matrix, MS	= waskeu	Sand Gra	iiris.			ing, M=Matrix. roblematic Hy	dric Soils ³ :
Histosol			Dark Surface	(S7)					A10) (MLRA 1	
	pipedon (A2)		Polyvalue Be		ce (S8) (M	LRA 147,			e Redox (A16)	,
Black Hi			Thin Dark Su			47, 148)		(MLRA 14		
	n Sulfide (A4)		Loamy Gleye		F2)				oodplain Soils	(F19)
	d Layers (A5) ick (A10) (LRR N)		Depleted Mat		6)			(MLRA 13	v Dark Surface	(TF12)
	Below Dark Surface	(A11)	Depleted Dar						in in Remarks)	
	ark Surface (A12)		Redox Depre							
	lucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (L	RR N,				
	147, 148) sleyed Matrix (S4)		MLRA 136 Umbric Surfa	-	MI RA 130	5 122)	³ In	ndicators of h	ydrophytic veg	etation and
	edox (S5)		Piedmont Flo						ology must be p	
	Matrix (S6)		Red Parent M						ed or problem	
Restrictive I	_ayer (if observed):									
Type:									,	
	ches):		<u>—</u>				Hydric So	il Present?	Yes	No
Remarks:										

Wetland Photograph Page

Wetland ID W-KL51-PS: Date 05/16/2017



Photograph Direction West

Comments:			

Project/Site: MVP	City/County:	Roanoke		Sampling Date: 05/16/2017
Applicant/Owner: MVP				Sampling Point: W-KL51/52-UP
Investigator(s): E. Foster, J. Cook, K. Gracie	Section, Toy			
Landform (hillslope, terrace, etc.): Slope				Slope (%): 0-5
Subregion (LRR or MLRA): LRR N		Long: <u>-80.1</u>		Datum: NAD 83
Soil Map Unit Name: 16D - Edneyville fine sandy				
		_		
Are climatic / hydrologic conditions on the site typical	· · · · · · · · · · · · · · · · · · ·			·
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal C	Circumstances" p	resent? Yes No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, ex	plain any answer	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling	g point location	s, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No 🗸			
	No V	e Sampled Area n a Wetland?	Vas	No 🗸
	No	ii a welland:	165	
Remarks: Cowardin Code: UPLAND	HGM:	Water Type:		
G 27 11 12				
HYDROLOGY				
Wetland Hydrology Indicators:		<u>§</u>	Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; che			Surface Soil (
Surface Water (A1)	_ True Aquatic Plants (B14)	-		etated Concave Surface (B8)
High Water Table (A2)	_ Hydrogen Sulfide Odor (C1)		Drainage Pat	
Saturation (A3)	_ Oxidized Rhizospheres on L		Moss Trim Li	
Water Marks (B1)	_ Presence of Reduced Iron (· —		Vater Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Til	led Solls (Cb) _	Crayfish Burr	
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (C7)Other (Explain in Remarks)	_		sible on Aerial Imagery (C9) ressed Plants (D1)
Iron Deposits (B5)	_ Other (Explain in Remarks)	=	Stanted or St Geomorphic	
Inundation Visible on Aerial Imagery (B7)		_	Shallow Aqui	
Water-Stained Leaves (B9)				phic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)
Field Observations:				
Surface Water Present? Yes No	Depth (inches):			
Water Table Present? Yes No	Depth (inches):			
	Depth (inches):	Wetland Hy	drology Presen	t? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring	r well aerial photos previous i	nenections) if avail:	ahla:	
Besonde Resorded Bata (Stream gauge, monitoring	y well, derial priotos, previous i	nopeodono), ii avaiic	3510.	
Remarks:				

Sampling Poin	t· W-KL51/52-UP
---------------	-----------------

20'	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30')	% Cover	Species?	Status	Number of Dominant Species
1,				That Are OBL, FACW, or FAC:1 (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: 33 (A/B)
				That Are OBL, FACW, or FAC: 33 (A/B)
6			· ·	Prevalence Index worksheet:
7	0			Total % Cover of: Multiply by:
500/ // / 0		= Total Cov	_	OBL species x 1 =
50% of total cover: 0 Sanling/Shrub Stratum (Plot size: 15')	20% of	total cover	:0	FACW species x 2 =
Japinig/Ornab Ottatam (1 lot 3126)				
1				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 =
7				Hydrophytic Vegetation Indicators:
			· ——	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	:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')	0.5			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Anthoxanthum odoratum	35		F <u>ACU</u>	1 Toblematio Trydrophytio Vegetation (Explain)
2. Dichanthelium clandestinum	25		FAC	11. Parton of house and and house a sure
3. Poa pratensis	30		FACU_	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Apocynum cannabinum	10		FACU	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
	100	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:50	20% of	total cover	<u>20 </u>	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')				height.
1				_
2				
3				
4			· ———	
5.				Hydrophytic
J	0	T-1-1 O-1		Vegetation Present? Yes No ✔
50% of total cover: 0		= Total Cover	_	
		total cover		
Remarks: (Include photo numbers here or on a separate s	neet.)			

		to the depth	needed to document the indicator or	confirm the a	bsence of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	Loc ² Te	xture	Remarks	
0-11	10YR 4/2	100			SL	rtomano	
		100			SL		
11-20	2.5Y 6/6	100			<u> </u>		
¹ Type: C=Co	oncentration, D=Dep	etion, RM=Re	educed Matrix, MS=Masked Sand Grain	s. ² Loc	ation: PL=Pore Lini	ng, M=Matrix.	
Hydric Soil I	ndicators:				Indicators for P		
Histosol	(A1)		Dark Surface (S7)		2 cm Muck (A10) (MLRA 1	47)
	pipedon (A2)		Polyvalue Below Surface (S8) (ML			e Redox (A16)	
Black Hi			Thin Dark Surface (S9) (MLRA 147	7, 148)	(MLRA 14		
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)			oodplain Soils	(F19)
	d Layers (A5) ick (A10) (LRR N)		Depleted Matrix (F3)Redox Dark Surface (F6)		(MLRA 13	v Dark Surface	(TE12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)			in in Remarks	, ,
	ark Surface (A12)	, , , , ,	Redox Depressions (F8)		00. (2./p.c.		,
	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LF	RN,			
	A 147, 148)		MLRA 136)				
	Sleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136,		³ Indicators of h		
	Redox (S5)		Piedmont Floodplain Soils (F19) (N		wetland hydro		
	Matrix (S6) Layer (if observed):		Red Parent Material (F21) (MLRA	127, 147)	unless disturb	ed or problem	atic.
	_ayer (ii observed).						
Type:			_	Usea	Iric Soil Present?	Vaa	No. V
	ches):		_	пус	ric Soil Present?	Yes	No V
Remarks:							

Project/Site: MVP	City/C	county: Roanoke		Sampling Date: 05/15/2017		
Applicant/Owner: MVP			State: VA	Sampling Point: W-MN7-PEM		
Investigator(s): S Ryan, K Pulver, H I						
Landform (hillslope, terrace, etc.): Flood				Slope (%): 5-8		
Subregion (LRR or MLRA): LRR N				Datum: NAD 83		
Soil Map Unit Name: 16C- Edneyville fine		Long				
Are climatic / hydrologic conditions on the	site typical for this time of year? Y	es No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hy	drology significantly distur	bed? Are "Normal	l Circumstances" p	resent? Yes No		
Are Vegetation, Soil, or Hy			explain any answe			
SUMMARY OF FINDINGS – Atta						
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes	Is the Sampled Area within a Wetland?	Yes	No		
Remarks: Cowardin Code: PEM	HGM: Riverine	Water Type:				
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)		
Wetland Hydrology Indicators:	aviando de alemanto de alemanto de			tors (minimum of two required)		
Primary Indicators (minimum of one is red			Surface Soil			
Surface Water (A1) High Water Table (A2)	True Aquatic Plants (Hydrogen Sulfide Ode		Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16)			
Saturation (A3)						
Water Marks (B1)	Presence of Reduced	=		Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reductio		Crayfish Burr			
Drift Deposits (B3)	Thin Muck Surface (C	27)	Saturation Vi	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			
Inundation Visible on Aerial Imagery	(B7)		Shallow Aqui Microtopogra			
Water-Stained Leaves (B9) Aquatic Fauna (B13)			FAC-Neutral	. , ,		
Field Observations:			TAO Neditai	1031 (123)		
Surface Water Present? Yes	No Depth (inches):					
Water Table Present? Yes		6				
Saturation Present? Yes	No Depth (inches):	1 Wetland F	lydrology Presen	t? Yes ✔ No		
(includes capillary fringe)			,			
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, pre	vious inspections), if ava	illable:			
Remarks:						

Sampling Point:	W-	-M	N7	7-P	E	V
Samonno Poini					_	٧.

20'	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30') 1	% Cover	Species?	Status	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				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
500/ of total course 0		= Total Cov	_	OBL species x 1 =
50% of total cover: 0 Sapling/Shrub Stratum (Plot size: 15'	20% of	total cover:	0	FACW species x 2 =
Japinig/Sinab Stratum (1 lot size)				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				✓ 1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	0	= Total Cov	er	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')				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Scirpus polyphyllus	50		OBL	Problematic Hydrophytic Vegetation (Explain)
2. Impatiens capensis	30	'	FACW_	1
3. Viola cucullata	5		FACW_	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Osmundastrom cinnamomeum	5		FACW_	Definitions of Four Vegetation Strata:
5. Amphicarpaea bracteara	3		FAC	Definitions of Four Vegetation offata.
6. Dichanthilium clandestinum	3		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
8				noight.
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.
11	96			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 48		= Total Cov total cover:		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 15')	20% 01	total cover.	10.2	Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
		-		
3				
4		-		Hydrophytic
5				Vegetation Present? Yes ✓ No
		= Total Cov	_	resent: res No
50% of total cover:0		total cover:	0	
Remarks: (Include photo numbers here or on a separate si	heet.)			

Sampling Point: W-MN7-PEM

Profile Desc	ription: (Describe t	to the dept	h needed to docur	nent the i	ndicator	or confirm	n the absence of	indicators.)
Depth (in the ca)	Matrix	0/		x Feature		Loc ²	T	Demonto
(inches) 0-4	Color (moist) 10YR 3/1	100	Color (moist)	<u> </u>	Type ¹	LOC	Texture SaLo	Remarks
4-12	5YR 4/1	97	5YR 4/6	3	С	M	SaLo	
12-18	7.5YR 5/1	70	7.5YR 5/8	25	C	M	SaCILo	
			5YR 4/4	5	C	M		
	·							
	·							
¹ Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	Indicators:							ors for Problematic Hydric Soils ³ :
Histosol			Dark Surface	. ,	(00) (m Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be Thin Dark Su					ast Prairie Redox (A16) MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			147, 140)		dmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		. –,			MLRA 136, 147)
2 cm Mu	ick (A10) (LRR N)		Redox Dark		- 6)			y Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Da				Oth	er (Explain in Remarks)
	ark Surface (A12)	DD M	Redox Depre					
	lucky Mineral (S1) (L \ 147, 148)	KK N,	Iron-Mangan MLRA 13		es (F12) (LRK N,		
	Gleyed Matrix (S4)		Umbric Surfa	-	MLRA 13	6. 122)	³ Indica	ators of hydrophytic vegetation and
	tedox (S5)		Piedmont Flo					and hydrology must be present,
	Matrix (S6)		Red Parent N	Material (F	21) (MLR	A 127, 147	7) unles	ss disturbed or problematic.
	_ayer (if observed):							
Type:							Unadaia Cail D	
Remarks:	ches):						Hydric Soil P	resent? Yes V No No
Remarks.								

Wetland Photograph Page

Wetland ID $\underline{\text{W-MN7-P}}\text{EN}$ Date $\underline{\text{05/15/201}}\text{7}$



Photograph Direction WNW

Comments:	

Project/Site: MVP			City/C	County: Roanoke		Sampling Date: 05/15/2017		
Applicant/Owner: MVP			-	-		Sampling Point: W-MN7-PEM-UP		
Investigator(s): S Ryan, K F	Pulver, H Phe	lan						
• ()						Slope (%): 3-7		
Subregion (LRR or MLRA): L						Datum: NAD 83		
Soil Map Unit Name: 16C- Ed								
Are climatic / hydrologic condit								
· · · · · ·			•			present? Yes No		
Are Vegetation, Soil								
_	•					s, important features, etc.		
Hydrophytic Vegetation President Hydric Soil Present?			No	Is the Sampled Area		.1		
Wetland Hydrology Present?				within a Wetland?	Yes	No		
Describe	ode: UPLANI		HGM:	l Water Typ∈	 2 :			
HYDROLOGY								
Wetland Hydrology Indicate					·	ators (minimum of two required)		
Primary Indicators (minimum	of one is require				Surface Soil			
Surface Water (A1)			True Aquatic Plants		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)			Hydrogen Sulfide Od		Drainage Pa			
Saturation (A3)			Presence of Reduce	es on Living Roots (C3				
Water Marks (B1)Sediment Deposits (B2)				on in Tilled Soils (C6)	Dry-Season Water Table (C2) Crayfish Burrows (C8)			
Drift Deposits (B3)			Thin Muck Surface (-	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)			Other (Explain in Rei			Stressed Plants (D1)		
Iron Deposits (B5)					Geomorphic	Position (D2)		
Inundation Visible on Ae	rial Imagery (B7				Shallow Aqu	uitard (D3)		
Water-Stained Leaves (E	39)				· -	aphic Relief (D4)		
Aquatic Fauna (B13)					FAC-Neutra	I Test (D5)		
Field Observations:		./						
Surface Water Present?			_ Depth (inches):					
Water Table Present?			_ Depth (inches):			nt? Yes No 🗸		
Saturation Present? (includes capillary fringe)	Yes N	o <u> </u>	_ Depth (inches):	Wetland	d Hydrology Prese	nt? Yes No		
Describe Recorded Data (str	eam gauge, mor	itoring	well, aerial photos, pre	evious inspections), if a	vailable:			
Demode								
Remarks:								

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species	
_{1.} Prunus virginiana	30	~	FACU	That Are OBL, FACW, or FAC:	A)
2. Cornus florida	10		UPL	(,
3. Quercus rubra	25	~	FACU	Total Number of Dominant Species Across All Strata: 5 (F	5 \
· · ·			FACU	Species Across All Strata:5 (E	3)
4				Percent of Dominant Species	
5					A/B)
6				Barrelon and Indiana and Indiana	
7	-	-		Prevalence Index worksheet:	
	65	= Total Cov	/er	Total % Cover of: Multiply by:	
50% of total cover: _ 32.5	20% of	total cover	: 13	OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =	
1				FAC species x 3 =	
				FACU species x 4 =	
2				UPL species x 5 =	
3		-			(D)
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	
		= Total Cov	_	4 - Morphological Adaptations ¹ (Provide suppor	rting
50% of total cover:0	20% of	total cover	:0	data in Remarks or on a separate sheet)	J
Herb Stratum (Plot size: 5')					
1. Dactylis glomerata	25		F <u>ACU</u>	Problematic Hydrophytic Vegetation ¹ (Explain)	
2. Actaea pachypoda	10		UPL		
3. Galium mollugo	15	<u> </u>	FACU	¹ Indicators of hydric soil and wetland hydrology mus	st
4. Amphicarpaea bracteata	15		FAC	be present, unless disturbed or problematic.	
5. Viola sp.	10		ND	Definitions of Four Vegetation Strata:	
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm	ı) or
6. Fragaria virginiana	5		FACU_	more in diameter at breast height (DBH), regardless	
7. Poa pratensis	10		<u>FACU</u>	height.	
8				Continue/Charle Was devaluate acceleding visco la	
9				Sapling/Shrub – Woody plants, excluding vines, let than 3 in. DBH and greater than or equal to 3.28 ft (
10.				m) tall.	(.
11					
- 111	90	T		Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.	ess
50% of total cover: 45		= Total Cover total cover		of size, and woody plants less than 3.26 it tall.	
	20% 01	total cover	:10	Woody vine – All woody vines greater than 3.28 ft i	in
Woody Vine Stratum (Plot size: 15')				height.	
1			- ——		
2					
3					
4					
5.				Hydrophytic Vegetation	
	0	= Total Cov	ıor	Present? Yes No	
50% of total cover: 0		total cover	_		
		total cover	·		
Remarks: (Include photo numbers here or on a separate s	neet.)				

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the ir	ndicator o	or confirm	the abse	ence of indicate	ors.)	
Depth	Matrix		Redo	x Features						
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type ¹	Loc ²	Textur		Remarks	
0-10	10YR 4/4	100					SiLo	<u> </u>		
	-									-
										_
										_
1- 0.0							21			
	oncentration, D=Deple	etion, RM=Re	educed Matrix, MS	S=Masked	Sand Gra	iins.		n: PL=Pore Lini		
Hydric Soil I							"	ndicators for P		-
Histosol			Dark Surface		(00) (11		- 440	2 cm Muck (, .	•
	oipedon (A2)		Polyvalue Be				148) _	Coast Prairie)
Black Hi			Thin Dark Su			47, 148)		(MLRA 14		· (E40)
	n Sulfide (A4) I Layers (A5)		Loamy Gleye Depleted Ma		-2)		-	Piedmont Flo (MLRA 13		s (F19)
	ck (A10) (LRR N)		Redox Dark \$		6)			•	v Dark Surfac	e (TF12)
	Below Dark Surface	(A11)	Depleted Dar				_	Other (Expla		
	ark Surface (A12)	()	Redox Depre				_			-,
	lucky Mineral (S1) (L	RR N,	Iron-Mangan			RR N,				
	147, 148)		MLRA 13							
Sandy G	leyed Matrix (S4)		Umbric Surfa					³ Indicators of h	ydrophytic ve	getation and
	edox (S5)		Piedmont Flo					wetland hydro	logy must be	present,
	Matrix (S6)		Red Parent N	Naterial (F2	21) (MLR	A 127, 147	7)	unless disturb	ed or probler	natic.
	ayer (if observed):									
Туре: <u>Ro</u>			_							
Depth (inc	ches): 10		_				Hydric	Soil Present?	Yes	No
Remarks:										

Project/Site: MVP	ct/Site: MVP City/County: Roanoke							
Applicant/Owner: MVP	State: VA	Sampling Point: W-EF44						
Investigator(s): D Hadersbeck, S Therkildson, K Pulver Section, Township, Range: N/A								
Landform (hillslope, terrace, etc.): Slope			-	ve Slope (%): 4-6				
Subregion (LRR or MLRA): LRR N				Datum: NAD 83				
Soil Map Unit Name: 16D-Edneyville fine								
Are climatic / hydrologic conditions on the								
	* *	-						
Are Vegetation, Soil, or Hy								
Are Vegetation, Soil, or Hy			(If needed, explain any ar	,				
SUMMARY OF FINDINGS – Atta	ich site map sho	wing sampling poi	nt locations, transe	ects, important features, etc.				
Hydrophytic Vegetation Present?	Yes No	Is the Sam	wlad Araa					
Hydric Soil Present?	Yes V No			✓ No				
Wetland Hydrology Present?	Yes No							
Remarks: Cowardin Code: PEM	HGM: §	Slope Wa	ter Type: RPWWD					
		•	• •					
HYDROLOGY								
Wetland Hydrology Indicators:			Secondary I	ndicators (minimum of two required)				
Primary Indicators (minimum of one is re	quired; check all that a	upply)	` <u></u>	Soil Cracks (B6)				
Surface Water (A1)	-	atic Plants (B14)		y Vegetated Concave Surface (B8)				
High Water Table (A2)		Sulfide Odor (C1)		e Patterns (B10)				
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 Sc		Burrows (C8)				
Drift Deposits (B3)	Thin Muc	k Surface (C7)	Saturati	on Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Ex	plain in Remarks)	Stunted	or Stressed Plants (D1)				
Iron Deposits (B5)			<u>✓</u> Geomor	rphic Position (D2)				
Inundation Visible on Aerial Imagery	(B7)		Shallow	Aquitard (D3)				
✓ Water-Stained Leaves (B9)				pographic Relief (D4)				
Aquatic Fauna (B13)			FAC-Ne	eutral Test (D5)				
Field Observations:								
	_ No Depth (ii							
	_ No _ 🗸 Depth (ii	-						
Saturation Present? Yes (includes capillary fringe)	_ No Depth (ii	nches):1	Wetland Hydrology Pr	resent? Yes No				
Describe Recorded Data (stream gauge,	monitoring well, aerial	photos, previous inspec	tions), if available:					
Remarks:								

Sampling	Point.	W-	·EF44	ŀ

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: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4		·		` ,
5				Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
6				That Are OBL, FACW, or FAC: 100 (A/B)
				Prevalence Index worksheet:
7	0	Tatal Car		Total % Cover of: Multiply by:
50% of total cover: 0		= Total Cov		OBL species x 1 =
	20 /6 01	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15')				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%
v	0	= Total Cov	or.	3 - Prevalence Index is ≤3.0¹
50% of total cover:0		total cover	_	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	2070 01	total cover		data in Remarks or on a separate sheet)
1. Pilea pumila	30	~	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Impatiens capensis	30			
	10		FACW_	¹ Indicators of hydric soil and wetland hydrology must
3. Leersia orizoides			OBL	be present, unless disturbed or problematic.
4. Glyceria striata	5	-	OBL	Definitions of Four Vegetation Strata:
5. Persicaria sagittata	15		OBL	Trans. Mancharlanta analastica aire Oir (70 an) an
6. Symplocarpus foetidus	5		OBL	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				
	95	= Total Cov		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.5				of size, and woody plants less than 5.20 it tall.
Woody Vine Stratum (Plot size: 15')	2070 01	total cover		Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2		-		
3				
4				Hydrophytic
5	-			Vegetation
	0	= Total Cov	er	Present? Yes No
50% of total cover: 0	20% of	total cover	. 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: W-EF44

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Redo	x Features	<u> </u>					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	e	Remarks	
0-10	10yr 3/1	100					LS			
10-24	5GY 5/1	70					SCL			_
	N 8/0	30								_
	-						•			
							-			_
1							2			_
	oncentration, D=Depl	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ins.		n: PL=Pore Lining, ndicators for Prob		nia Caila ³ .
Hydric Soil I			V David Ourt	(07)			ın		-	
Histosol	(A1) pipedon (A2)		✓ Dark Surface✓ Polyvalue Be		o (CO) (M	I D A 147	140\	_ 2 cm Muck (A10 _ Coast Prairie Re		<i>(</i>)
Black Hi			Thin Dark Su		. , .		140) _	Coast Plaine Re (MLRA 147, 1	, ,	
	n Sulfide (A4)		Loamy Gleye			-17, 140)		Piedmont Flood		F19)
	d Layers (A5)		Depleted Mar		,		_	(MLRA 136, 1		-,
	ıck (A10) (LRR N)		Redox Dark	•	,		_	_ Very Shallow Da		TF12)
	d Below Dark Surface	(A11)	Depleted Dar				_	_ Other (Explain in	n Remarks)	
	ark Surface (A12)		Redox Depre							
	lucky Mineral (S1) (L \ 147, 148)	RR N,	Iron-Mangan		es (F12) (I	LKK N,				
	Gleyed Matrix (S4)		Umbric Surfa		MIRA 13	6 122\		³ Indicators of hydro	onhytic yeae	tation and
	ledox (S5)		Piedmont Flo				8)	wetland hydrolog		
	Matrix (S6)		Red Parent N					unless disturbed		
Restrictive I	_ayer (if observed):									
Type:										
Depth (inc	ches):						Hydric	Soil Present? Y	es 🗸	No
Remarks:							1			



Photograph Direction West

Comments:			

Project/Site: MVP Applicant/Owner: MVP Applicant/Owner: MVP Investigator(s): D Hadersbeck, S Therkildson, K Pulver Section, Township, Range: N/A Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 5-7 Subregion (LRR or MLRA): LRR N Lat: 37.143044 Long: -80.138181 Datum: NAD 83 Soil Map Unit Name: 16D-Edneyville fine sandy loam, 15 to 25 percent slopes Are climatic / hydrologic conditions on the site typical for this time of year? Yes Vo Mo (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No No Market Normal Circumstances in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Vestand Hydrology Present? Wettand Hydrology Present? Water Type:
Investigator(s): D Hadersbeck, S Therkildson, K Pulver Section, Township, Range: N/A Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 5-7 Subregion (LRR or MLRA): LRR N Lat: 37.143044 Long: -80.138181 Datum: NAD 83 Soil Map Unit Name: 16D-Edneyville fine sandy loam, 15 to 25 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 "Normal Circumstances" present? Yes No 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 Vest No
Landform (hillslope, terrace, etc.): Slope
Subregion (LRR or MLRA): LRR N Lat: 37.143044 Long: -80.138181 Datum: NAD 83 Soil Map Unit Name: 16D-Edneyville fine sandy loam, 15 to 25 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 "Normal Circumstances" present? Yes No 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 Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No No No Wetland Hydrology Present? Yes No No No
Soil Map Unit Name: 16D-Edneyville fine sandy loam, 15 to 25 percent slopes 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 "Normal Circumstances" present? Yes No 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 Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No No No No Wetland? Yes No No No No No
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 "Normal Circumstances" present? Yes No 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 Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No No
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No 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 Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No within a Wetland? Yes No
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 Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No No
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Yes No Wetland Hydrology Present? Yes No Yes No Yes No Yes No Yes No Yes No
Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? Yes No Within a Wetland? Yes No
Hydric Soil Present? Yes No within a Wetland? Yes No Wetland Hydrology Present? Yes No
Wetland Hydrology Present? Yes No
Danastin
Remarks: Cowardin Code: UPLAND HGM: Water Type:
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Notes (A1)
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Saturation (A3) Oxidized Knizospheres on Elving Roots (C3) Moss Trin Ellies (B10) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Votes Marks (B1) 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:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No V (includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

Sampling Point: W-EF44-UP	I-UP	W-EF44	Point:	nlina	Samo
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Trop Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:		
Tiee Stratum (Fiot Size)		Species?		Number of Dominant Species	2	
1. Tsuga canadensis	25	<u> </u>	<u>FACU</u>	That Are OBL, FACW, or FAC: _	3	(A)
2. Nyssa sylvatica	15		FAC	Total Number of Dominant		
3. Quercus alba	15		FACU_	Species Across All Strata:	6	(B)
4				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC:	50	(A/B)
6						(' /
7				Prevalence Index worksheet:		
	55	= Total Cov	er		Multiply by:	
50% of total cover: <u>27.5</u>				OBL species x 1	=	_
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2	=	_
1. Hamamelis virginiana	30	✓	FACU	FAC species x 3	=	_
2				FACU species x 4	=	_
		(UPL species x 5		
3				Column Totals: (A)		
4				(*,		_ (-/
5				Prevalence Index = B/A = _		_
6				Hydrophytic Vegetation Indicato	ors:	
7				1 - Rapid Test for Hydrophytic	Vegetation	
8				2 - Dominance Test is >50%	· ·	
9		-		3 - Prevalence Index is ≤3.0 ¹		
	30	= Total Cov	er	4 - Morphological Adaptations	1 (Provide sur	norting
50% of total cover: 15	20% of	total cover:	6	data in Remarks or on a se		porting
Herb Stratum (Plot size: 5')					•	. ,
1. Pilea pumila	15		FACW_	Problematic Hydrophytic Vege	etation (Expla	in)
2. Amphicarpaea bracteata	10	✓	FAC			
3				¹ Indicators of hydric soil and wetlan		must
4				be present, unless disturbed or pro		
		-		Definitions of Four Vegetation S	trata:	
5				Tree – Woody plants, excluding vii	nes, 3 in. (7.6	cm) or
6				more in diameter at breast height ((DBH), regard	less of
7				height.		
8				Sapling/Shrub – Woody plants, ex	xcluding vines	, less
9				than 3 in. DBH and greater than or	r equal to 3.28	3 ft (1
10				m) tall.		
11				Herb - All herbaceous (non-wood)	y) plants, rega	rdless
		= Total Cov		of size, and woody plants less than	n 3.28 ft tall.	
50% of total cover: <u>12.5</u>	20% of	total cover:	5	Woody vine – All woody vines gre	eater than 3.28	R ft in
Woody Vine Stratum (Plot size: 15')				height.	74101 111411 0.20	,
1,						
2		-				
3						
4						
5.				Hydrophytic Vegetation		
· ·	^	= Total Cov		Present? Yes	No	
50% of total cover: 0		total cover:	_			
Remarks: (Include photo numbers here or on a separate s		10101 00101				
remarks. (include prioto numbers here of off a separate s	neet.)					

Depth	Matrix	to the depth i	needed to document the indicate Redox Features	or or confirm the	absence of indic	ators.)	
(inches)	Color (moist)	%	Color (moist) % Type	1 Loc ² T	exture	Remarks	
0-8	10yr 3/1	100			SIL		
8-12	10yr 6/8	100			SIL	Refusal - ro	ot mass
<u> </u>							
		letion, RM=Re	educed Matrix, MS=Masked Sand	Grains. ² Lo	cation: PL=Pore		
Hydric Soil I	ndicators:					r Problematic H	-
Histosol			Dark Surface (S7)			k (A10) (MLRA	•
	pipedon (A2)	•	Polyvalue Below Surface (S8)	•		airie Redox (A16)
Black Hi		-	Thin Dark Surface (S9) (MLR	A 147, 148)		. 147, 148)	· (F40)
	n Sulfide (A4) I Layers (A5)	-	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)			Floodplain Soils 136, 147)	S (F19)
	ck (A10) (LRR N)	•	Redox Dark Surface (F6)		•	llow Dark Surfac	o (TF12)
	Below Dark Surface	e (A11)	Depleted Dark Surface (F7)			plain in Remarks	, ,
	ark Surface (A12)		Redox Depressions (F8)		00. (2)	prant in recinant	-,
	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LRR N,			
	\ 147, 148)	,	MLRA 136)	, ,			
	leyed Matrix (S4)	_	Umbric Surface (F13) (MLRA	136, 122)	³ Indicators of	of hydrophytic ve	getation and
Sandy R	edox (S5)	-	Piedmont Floodplain Soils (F1	9) (MLRA 148)	wetland hy	drology must be	present,
Stripped	Matrix (S6)		Red Parent Material (F21) (MI	-RA 127, 147)	unless dist	urbed or problen	natic.
Restrictive I	ayer (if observed):						
· · ·	efusal - root mas	S	_				4/
• '	ches): 12		_	Hy	dric Soil Presen	t? Yes	_ No
Remarks:							

Project/Site: MVP	City/County	_{/:} Roanoke	Sampling Date: 07/14/2016
Applicant/Owner: MVP		State:	VA Sampling Point: W-IJ36
Investigator(s): E. Foster, K. Lew, J. Bittne			
Landform (hillslope, terrace, etc.): Floodplain			ncave Slope (%): 0-2
Subregion (LRR or MLRA): LRR N			
Soil Map Unit Name: 1A-Alderflats silt loam, 0			
Are climatic / hydrologic conditions on the site typ			
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology			
SUMMARY OF FINDINGS – Attach si			
Hydrophytic Vegetation Present? Yes _	V No le ti		
Hydric Soil Present? Yes _	No No with	ne Sampled Area nin a Wetland? Ye	s/ No
Wetland Hydrology Present? Yes _	No	iii a Wedaliu: Te	S NO
Remarks: Cowardin Code: PSS	HGM: Riverine	Water Type: RPWW	D
Large scrub shrub floodplain wetland a	ssociated with S-IJ43.		
HYDROLOGY			
Wetland Hydrology Indicators:		Seconda	ry Indicators (minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)		ace Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)		rsely Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C		nage Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres on		s Trim Lines (B16)
Water Marks (B1)	Presence of Reduced Iron		Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in 1		/fish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)		ration Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Other (Explain in Remarks	· ·	nted or Stressed Plants (D1) morphic Position (D2)
Inundation Visible on Aerial Imagery (B7)			llow Aquitard (D3)
Water-Stained Leaves (B9)			otopographic Relief (D4)
Aquatic Fauna (B13)			-Neutral Test (D5)
Field Observations:			, ,
	Depth (inches):		
	Depth (inches):		
	Depth (inches):		y Present? Yes <u>✓</u> No
(includes capillary fringe)			,
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous	inspections), if available:	
Remarks:			
Appears to be a moist-wet floodplain. N	light be starting to revert t	o upland. Hydrology pa	sses, but is weak.

/EGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: W-IJ36
201	Absolute	Dominant	Indicator	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:6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 7 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 85 (A/B)
6				
7				Prevalence Index worksheet:
	0 :	= Total Co	ver	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.} Cornus amomum	30		FACW	FAC species x 3 =
2		-		FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5.	<u> </u>			
6		_		Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				✓ 2 - Dominance Test is >50%
ə	30	= Total Co		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 15				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	2070 01	total oovel		data in Remarks or on a separate sheet)
1. Apocynum cannabinum	15	/	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Woodwardia virginica	5		FACW	
2. Agrimonia parviflora	15		FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Rudbeckia laciniata	15		FACW	be present, unless disturbed or problematic.
	25			Definitions of Four Vegetation Strata:
5. Phalaris arundinacae			FACW_	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Impatiens capensis			FACW_	more in diameter at breast height (DBH), regardless of
7. Symplocarpus foetidus	5		OBL	height.
8. Clematis virginiana			<u>FACW</u>	Sapling/Shrub – Woody plants, excluding vines, less
9. Thalictrum pubescens	10		FACW_	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
		= Total Co		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>62.5</u>	<u>ة</u> 20% of	total cover	:25	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')				height.
1				· ·
2				
3				
4				The discrete of the
5.				Hydrophytic Vegetation
-	0 .	= Total Co	ver	Present? Yes No
50% of total cover:0			_	
Remarks: (Include photo numbers here or on a separate s			-	
extremely dense overgrown scrub shrub vegeta				
extremely defise overgrown scrub siliub vegeta	tion.			

Sampling Point: W-IJ36

SOIL

		to the dept	h needed to docume	ent the indicator of Features	or confirm	the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	<u>reatures</u> Type ¹	Loc ²	Texture	Remarks
0-2	10yr 4/3	100				SiL	
2-5	10yr 4/3	100				SiCL	
<u> </u>	10yr 4/2	90	7 5yr 5/9		N/	SiCL	
3-16	10yr 4/2	90	7.5yr 5/8	<u>C</u>	<u>M</u>	SICL	
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS=	Masked Sand Gra	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:					Indica	ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface (cm Muck (A10) (MLRA 147)
	oipedon (A2)		·	w Surface (S8) (N		148) C	Coast Prairie Redox (A16)
	stic (A3)			ace (S9) (MLRA 1	47, 148)	_	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed			P	Piedmont Floodplain Soils (F19)
	d Layers (A5) uck (A10) (LRR N)		Depleted Matri Redox Dark Su			V	(MLRA 136, 147) /ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark				Other (Explain in Remarks)
	ark Surface (A12)	(, , , ,)	Redox Depress	, ,		_ `	vine: (2/p/air iii remaine)
	Mucky Mineral (S1) (L	.RR N,		se Masses (F12) (LRR N,		
MLR	A 147, 148)		MLRA 136)				
	Gleyed Matrix (S4)			e (F13) (MLRA 13			licators of hydrophytic vegetation and
	Redox (S5)			dplain Soils (F19)			etland hydrology must be present,
	Matrix (S6)		Red Parent Ma	aterial (F21) (MLR	A 127, 147	<u>') un</u>	less disturbed or problematic.
	Layer (if observed):						
Type:							
Depth (in	cnes):					Hydric Soil	Present? Yes No
Remarks:							



Photograph Direction NNW

Comments:	

Project/Site: MVP	City/County: Roanoke	Sampling Date: <u>07/14/2016</u>
Applicant/Owner: MVP	Sta	te: VA Sampling Point: W-IJ36-UP
• •	Section, Township, Range: N/A	
	Local relief (concave, convex, none): L	_inear Slope (%): 10
Subregion (LRR or MLRA): LRR N		047 Datum: NAD 83
	loam, 25 to 55 percent slopes	
	cal for this time of year? Yes No (If no,	_
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circu	ımstances" present? Yes No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain	n any answers in Remarks.)
SUMMARY OF FINDINGS – Attach sit	e map showing sampling point locations,	transects, important features, etc.
Lhidrophitia Vanetation Present?	No. V	
	No V Is the Sampled Area within a Wetland?	
Wetland Hydrology Present? Yes	No within a Wetland?	Yes No
Remarks: Cowardin Code: UPLAND		
Cowardin Code: UPLAND	HGM: Water Type:	
HYDROLOGY		
Wetland Hydrology Indicators:	Seco	ondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; of		Surface Soil Cracks (B6)
Surface Water (A1)		Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)		Drainage Patterns (B10)
Saturation (A3)		Moss Trim Lines (B16)
Water Marks (B1)		Dry-Season Water Table (C2)
Sediment Deposits (B2)		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:	V 5 (1 (1))	
Surface Water Present? Yes No _	Depth (inches):	
	Depth (inches):	
Saturation Present? Yes No _ (includes capillary fringe)	Depth (inches): Wetland Hydro	logy Present? Yes No
	ing well, aerial photos, previous inspections), if available	
Devent		
Remarks:		

Sampling Point, M.1930-01	Sampling	Point: W-IJ36-UF
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Troo Stratum (Plot cizo: 30'	Absolute	Dominant		Dominance Test worksheet:
Tiee Stratum (Fiot Size)		Species?		Number of Dominant Species
1. Acer rubrum	30		<u>FAC</u>	That Are OBL, FACW, or FAC:3 (A)
2. Pinus strobus	25		<u>FACU</u>	Total Number of Dominant
3. Prunus serotina	5		FACU	Species Across All Strata: 8 (B)
4. Acer pensylvanicum	10		FACU	
				Percent of Dominant Species That Are OBL FACW or FAC: 38 (A/B)
•				That Are OBL, FACW, or FAC:38 (A/B)
6				Prevalence Index worksheet:
7	70			Total % Cover of: Multiply by:
0.5		= Total Co		OBL species x 1 =
50% of total cover: 35	20% of	total cover	:14	
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Rubus allhegeniensis	20		<u>FACU</u>	FAC species x 3 =
2. Berberis thunbergii	5		FACU_	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 Co		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: <u>12.5</u>	20% of	total cover	: <u> </u>	
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1. Dicanthelium clandestinum	30	✓	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2 Parathelypteris noveboracensis	10	V	FAC	
3				¹ Indicators of hydric soil and wetland hydrology must
i				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.				Heat. All beat access (see success) a least a great disc.
	40	= Total Co	uor.	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 20		total cover		or oleo, and woody planto loop than oleo it tail.
Woody Vine Stratum (Plot size: 15')	2070 01	total oovel		Woody vine – All woody vines greater than 3.28 ft in
1. Vitis aestivitus	15	~	FACU	height.
2 Parthenocissus quinquefolia	10			
2. Fartheriocissus quinqueiona			FACU	
3				
4				Hydrophytic
5			_	Vegetation
	25	= Total Co	ver	Present? Yes No
50% of total cover:12.5			_	
Remarks: (Include photo numbers here or on a separate s				
(menual prote numbers note of on a separate of	,			
				I

Depth	Matrix	-	needed to document the inc Redox Features					
(inches)	Color (moist)	%	Color (moist) %	Type ¹ Loc ²	Texture		Remarks	3
0-18	7.5yr 4/4	100			L			
						-		
		· _						
	-	· 						
		· —— —						
	·	·						
	-	· 						
	-							
Type: C=Co	oncentration, D=Dep	letion, RM=Re	educed Matrix, MS=Masked S	Sand Grains.	² Location: P	L=Pore Lini	ng, M=Matrix	x .
lydric Soil I		,	,					Hydric Soils ³ :
Histosol	(A1)		Dark Surface (S7)				A10) (MLRA	-
	pipedon (A2)		Polyvalue Below Surface	(S8) (MLRA 147.			Redox (A16	
Black His			Thin Dark Surface (S9) (·-, `	(MLRA 14		- /
	n Sulfide (A4)		Loamy Gleyed Matrix (F2		F		odplain Soil	s (F19)
	Layers (A5)		Depleted Matrix (F3)	,		(MLRA 13		
	ck (A10) (LRR N)		Redox Dark Surface (F6))	\		Dark Surfac	ce (TF12)
	Below Dark Surface	e (A11)	Depleted Dark Surface (=7)			in in Remark	
Thick Da	ark Surface (A12)		Redox Depressions (F8)					
Sandy M	lucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses	(F12) (LRR N,				
MLRA	147, 148)		MLRA 136)					
Sandy G	leyed Matrix (S4)		Umbric Surface (F13) (M	LRA 136, 122)	³ Inc	licators of hy	drophytic ve	egetation and
Sandy R	edox (S5)		Piedmont Floodplain Soi	s (F19) (MLRA 14	8) we	etland hydro	logy must be	e present,
Stripped	Matrix (S6)		Red Parent Material (F2) (MLRA 127, 147	') un	less disturb	ed or proble	matic.
Restrictive L	ayer (if observed):							
Туре:			<u> </u>					
Depth (inc	ches):				Hydric Soil	Present?	Yes	No _ 🗸
Remarks:	,		_		,			
tomanto.								

Project/Site: MVP		City/C	ounty: Roanoke		Sampling Date: 07/14/2015
Applicant/Owner: MVP		 .			Sampling Point: W-Z7-WP1
Investigator(s): S. Townsend	d, S. Therkildson,	D. McCullough Section	on, Township, Range: N		
Landform (hillslope, terrace, et	_{tc.):} floodplain	Local reli	ef (concave, convex, nor	ne): concave	Slope (%): 0
Subregion (LRR or MLRA): L			Long: <u>-80</u>	,	Datum: NAD 83
Soil Map Unit Name: Alderfla		to 4 nercent slones			
				NWI classific	
Are climatic / hydrologic condit		•			
Are Vegetation, Soil	, or Hydrology	y significantly distur	bed? Are "Normal	Circumstances" p	resent? Yes No
Are Vegetation, Soil	, or Hydrology	y naturally problema	atic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDIN	GS – Attach si	ite map showing sam	pling point location	ons, transects	, important features, etc.
Lhydranhytia Vagatatian Drag	ent? Yes	✓ No.			
Hydrophytic Vegetation Pres Hydric Soil Present?	ent? Yes _ Yes		Is the Sampled Area		
Wetland Hydrology Present?	_	✓ No	within a Wetland?	Yes	No
Remarks:					
Cowardin Code: PSS					
HGM: RIVERINE					
WT: RPWWD					
HYDROLOGY					
Wetland Hydrology Indicate	ors:			Secondary Indica	tors (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 Veg	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Pat	tterns (B10)
Saturation (A3)				Moss Trim Li	
Water Marks (B1) Presence of Reduced Iron (C4)					Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burr	
Drift Deposits (B3)		Thin Muck Surface (C Other (Explain in Ren			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)		Other (Explain in Ren	narks)	Geomorphic	tressed Plants (D1)
Inundation Visible on Ae	rial Imagery (R7)			Shallow Aqui	` ′
Water-Stained Leaves (F	• • • •				phic Relief (D4)
Aquatic Fauna (B13)	30)			FAC-Neutral	
Field Observations:					,
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?	Yes No	Depth (inches):	Wetland H	lydrology Presen	t? Yes 🗸 No
(includes capillary fringe) Describe Recorded Data (str				iilahle:	
Boothis Noorland Bala (st.	oam gaago, mome	ming won, acriai priotoc, pro	viodo inopositorio), ii ava	mabio.	
Remarks:					
Adjacent to S-Z16, upla	nd point used is	s W-Z6-UP1. PSS exte	ends to NE outside	of current acce	ss road alignment.

Sampling Point: W-Z7-WP1	Sampling	Point:	W-Z7	-WP1
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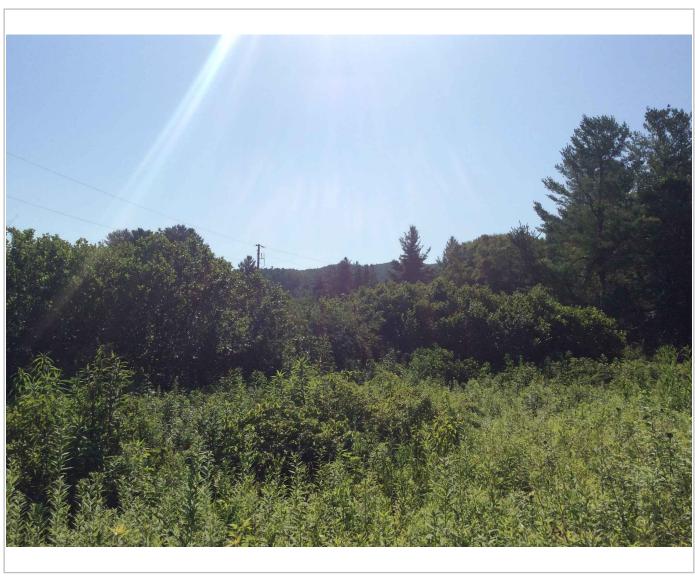
0.01	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Newhord Dominant
3				Total Number of Dominant Species Across All Strata: 3 (B)
4				(=/
5		-		Percent of Dominant Species That Are OBL_FACW_or_FAC: 67 (A/R)
				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
7	0	Tatal Car		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. Rosa palustris	30	~	OBL	FAC species x 3 =
· · · · · · · · · · · · · · · · · · ·			OBL	FACU species x 4 =
2		-		
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%
v	30	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 15		total cover:	_	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	2070 01	total oover.		data in Remarks or on a separate sheet)
1. Symplocarpus foetidus	50	~	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Solidago canadensis	35			
	15		FACU_	¹ Indicators of hydric soil and wetland hydrology must
3. Impatiens capensis			F <u>ACW</u>	be present, unless disturbed or problematic.
4. Verbisina alternifolia	5		F <u>AC</u>	Definitions of Four Vegetation Strata:
5. Convolvulus sp.	5		ND	Total Washington and all and a control of
6. Eupatorium fistulosum	10		F <u>ACW</u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7. Carex stricta	15		OBL	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		-		
···.	135	= Total Cov		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 67.5				or size, and woody plants less than 5.20 it tall.
Woody Vine Stratum (Plot size: 15')	2070 01	total oover.		Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cov	er	Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

SOIL Sampling Point: W-Z7-WP1

Profile Desc	ription: (Describe t	o the dep	th needed to docun	nent the i	indicator	or confirn	n the absen	ice of indicators.)
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12"	10yr4/2	97	5yr4/6	3	С	M/PL	SaLo	
12+	10yr4/1	90	7.5yr4/6	10	С	M/PL	SaLo	
					-		-	
						· ———	-	
								
							,	
						· 	-	
						· 	-	
¹ Type: C=Ce	oncentration, D=Depl	etion. RM=	Reduced Matrix. MS	S=Masked	d Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil								dicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ice (S8) (N	/ILRA 147,	, 148)	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				· -	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix ((F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat					(MLRA 136, 147)
	ıck (A10) (LRR N)		Redox Dark S				_	Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar					Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			. DD N		
	Mucky Mineral (S1) (L \ 147, 148)	KK N,	Iron-Mangan		es (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	-	(MI RΔ 13	86 122)	3	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed):				, ,		Ť	
Type:	,							
	ches):						Hydric S	soil Present? Yes No
Remarks:							11,741.10	
itemarks.								

Wetland Photograph Page

Wetland ID <u>W-Z7-WP1</u> Date <u>07/14/201</u>5



Photograph Direction East

Comments:		

Project/Site: MVP		City/C	ounty: Roanoke		Sampling Date: 07/14/2015
Applicant/Owner: MVP					Sampling Point: W-Z6
Investigator(s): S. Townsend, S. T	herkildson, D. Mo	Cullough Section	on, Township, Range: N//	A	
Landform (hillslope, terrace, etc.): S			·		Slope (%): 0
Subregion (LRR or MLRA): LRRN		37.136344	Long: -80.	128296	Datum: NAD 83
Soil Map Unit Name: Alderflats si		ercent slopes		NWI classific	cation: None
Are climatic / hydrologic conditions o					
Are Vegetation, Soil,		•			
Are Vegetation, Soil,					
SUMMARY OF FINDINGS -					
Hydrophytic Vegetation Present?	Yes 🗸	No			
Hydric Soil Present?	Yes		Is the Sampled Area	Yes 🗸	No
Wetland Hydrology Present?	Yes 🔽	No	within a Wetland?	res	NO
Remarks:					
Cowardin Code:PFO; HGM:	· ·				
The presence of wetland hyd		ytic vegetation, a	and hydric soils was	unable to be	confirmed because of
construction activity within th	e LOD.				
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one	e is required; check	all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)		Frue Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Pa	
Saturation (A3)			es on Living Roots (C3)	Moss Trim L	
Water Marks (B1)		Presence of Reduced	=		Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Bur	
Drift Deposits (B3)	т	Thin Muck Surface (C	27)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	0	Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)				✓ Geomorphic	Position (D2)
Inundation Visible on Aerial Im	agery (B7)			Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)				Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:					
	s No <u> </u>				
Water Table Present? Yes	s No	Depth (inches): 1	6"		
Saturation Present? Yes	s No	Depth (inches):	4" Wetland H	ydrology Preser	nt? Yes <u>/</u> No
(includes capillary fringe) Describe Recorded Data (stream g	auga manitaring uu	all agrici phatag pro	vieve inercetions) if evei	lahla	
Describe Recorded Data (stream g	auge, monitoring we	eli, aeriai priotos, pre	vious irispections), ii avai	iable.	
Remarks:					

Sampling	Point: W-Z6
Sambilliu	FUILL VV Z

30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species
1. Acer saccharum	60		<u>FACU</u>	That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 25 (A/B)
6				
7				Prevalence Index worksheet:
	60	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 30	20% of	total cover	12	OBL species5 x 1 =5
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 = 40
1. Rosa multiflora	20		<u>FACU</u>	FAC species 20 x 3 = 60
2				FACU species95 x 4 =380
3				UPL species0 x 5 =0
4				Column Totals: 140 (A) 485 (B)
5.	-	-		2.46
6				Prevalence Index = B/A =3.46
7		-		Hydrophytic Vegetation Indicators:
0				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
э	20	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 10		total cover		4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')	20 /0 01	total cover		data in Remarks or on a separate sheet)
1. Impatiens capensis	20	~	FACW	✓ Problematic Hydrophytic Vegetation¹ (Explain)
2. Iris pseudacorus	5		OBL	
3. Solidago canadensis	15			¹ Indicators of hydric soil and wetland hydrology must
4 Holcus lanatus	10		FACU_	be present, unless disturbed or problematic.
5. Echinochloa crus-galli	10		FAC	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
0.0		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>30</u>	20% of	total cover	12	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.)			
Plants are disturbed, possibly mowed. Strong hy	ydric soils	s and hyd	lrology pi	resent.

Sampling Point: W-Z6

Profile Desc	ription: (Describe t	o the dept	h needed to docur	nent the	indicator	or confire	n the absence o	of indicators.)
Depth	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-5"	10yr4/2	95	7.5yr4/4	5	С	М	Lo	
6-16"	2.5y4/1	85	5yr3/4	5	С	М	CILo	
			7.5yr4/4	10	С	M		
				-	•			
				-				
					. <u> </u>			
					· .			
						- · · <u></u>		
¹Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Matrix.
Hydric Soil							Indicat	ors for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			2 c	m Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfa	ace (S8) (I	VILRA 147	, 148) Co	ast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	ırface (S9) (MLRA	147, 148)	((MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)			edmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)	(4.4.4)	Redox Dark					ry Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Date		. ,		Oth	ner (Explain in Remarks)
	ark Surface (A12) /lucky Mineral (S1) (L	DD N	Redox Depre Iron-Mangan			I DD N		
	A 147, 148)	.NN IN,	MLRA 13		65 (112)	LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	•	(MLRA 1:	36, 122)	³ Indic	eators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					and hydrology must be present,
	Matrix (S6)		Red Parent N					ess disturbed or problematic.
	Layer (if observed):				, ,	<u> </u>	ĺ	'
Туре:	,							
Depth (inc	ches):						Hydric Soil F	Present? Yes No
Remarks:							,	
rtomanto.								



Photograph Direction North

Comments:	

Project/Site: MVP	City/0	_{County:} Roanoke		Sampling Date: 07/14/2015	
Applicant/Owner: MVP				Sampling Point: W-Z6-UP1	
	Secti				
Landform (hillslope, terrace, etc.): hillslope		ief (concave, convex, none)	convex	Slope (%): 5	
Subregion (LRR or MLRA): LRRN	Lat: 37.136311	Long: -80.12	28352	Datum: NAD 83	
Soil Map Unit Name: Alderflats silt loam,					
Are climatic / hydrologic conditions on the site					
Are Vegetation, Soil, or Hydrol					
Are Vegetation, Soil, or Hydrol			lain any answers		
SUMMARY OF FINDINGS – Attach			•		
		ipinig ponit recanon			
	es No	Is the Sampled Area		•	
	es No es No	within a Wetland?	Yes	No	
Wetland Hydrology Present? Ye Remarks:	es NO				
HYDROLOGY					
Wetland Hydrology Indicators:		·		ors (minimum of two required)	
Primary Indicators (minimum of one is requir	ed; check all that apply)		_ Surface Soil C		
Surface Water (A1)	True Aquatic Plants			etated Concave Surface (B8)	
High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patterns (B10) C3) Moss Trim Lines (B16) Dry-Season Water Table (C2)		
Saturation (A3)	Oxidized Rhizospher	= : : :			
Water Marks (B1) Sediment Deposits (B2)	Presence of Reduce Recent Iron Reduction		-		
Sediffient Deposits (B2) Drift Deposits (B3)	Thin Muck Surface (ls (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Re			essed Plants (D1)	
Iron Deposits (B5)			_ Geomorphic F		
Inundation Visible on Aerial Imagery (B7	7)	_	_ . _ Shallow Aquita	, ,	
Water-Stained Leaves (B9)		_	_ Microtopograp	phic Relief (D4)	
Aquatic Fauna (B13)			_ FAC-Neutral T	est (D5)	
Field Observations:					
	No Depth (inches):				
	No Depth (inches):				
Saturation Present? Yes Note that the saturation Present?	No Depth (inches):	Wetland Hyd	Irology Present	? Yes No	
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, pre	evious inspections), if availab	ole:		
Remarks:					
ixemarks.					

Sampling Point W-Zb-UP	Sampling	Point: W-Z6-UP1	
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Troo Stratum (Blot size: 30'	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tiee Stratum (Flot Size)		Species?		Number of Dominant Species
1. Acer saccharum	75		<u>FACU</u>	That Are OBL, FACW, or FAC: (A)
2				Total Number of Deminerat
3				Total Number of Dominant Species Across All Strata: 3 (B)
4				eposico / toroco / tir etrata.
		· ——		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6		·		Prevalence Index worksheet:
7	· 			
		= Total Cove		
50% of total cover: 37.	<u>5 </u>	f total cover:	15	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				
	_	= Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 0				4 - Morphological Adaptations ¹ (Provide supporting
E!	20 /0 01	total oover.		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5) 1. Dactylis glomerata	5		EACH.	Problematic Hydrophytic Vegetation ¹ (Explain)
			FACU_	
2. Phleum pratense	15	-	F <u>ACU</u>	¹ Indicators of hydric soil and wetland hydrology must
3. Solidago canadensis	50		F <u>ACU</u>	be present, unless disturbed or problematic.
4. Daucus carota	5		<u>UPL</u>	Definitions of Four Vegetation Strata:
5				Johnson Grand Golden Grand
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	75	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>37.</u>	5_ 20% of	f total cover:	15	We advise All we advise a property than 2 20 ft in
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1				noight.
2				
3				
4				Hydrophytic
5				
				Vegetation
		= Total Cove	 er	Vegetation Present? Yes No
50% of total cover: 0	0	= Total Cover:	_	
50% of total cover: 0 Remarks: (Include photo numbers here or on a separate s	0 20% of		_	
	0 20% of		_	
	0 20% of		_	
	0 20% of		_	
	0 20% of		_	
	0 20% of		_	
	0 20% of		_	
	0 20% of		_	
	0 20% of		_	

SOIL Sampling Point: W-Z6-UP1

Profile Desc	cription: (Describe to	o the depth	needed to docur	nent the in	ndicator	or confirm	the ab	sence of indicat	ors.)	
Depth	Matrix			x Features	<u> </u>					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		ture	Remarks	3
0-16"	10yr4/4	100					Sa	Lo		
			_					· ·		
			_							
							-			
-										
			_							
-										
	oncentration, D=Deple	etion, RM=Re	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Locat	tion: PL=Pore Lin		
Hydric Soil								Indicators for P		-
Histosol			Dark Surface						(A10) (MLRA	
·	pipedon (A2)		Polyvalue Be		. , .		148)		e Redox (A16	5)
	istic (A3)		Thin Dark Su			47, 148)		(MLRA 1		
	en Sulfide (A4)		Loamy Gleye		=2)				oodplain Soil	s (F19)
	d Layers (A5)		Depleted Ma	, ,	->			(MLRA 1		(== : =)
	uck (A10) (LRR N)	(0.4.4)	Redox Dark						w Dark Surfa	
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Date Redox Depreted					Other (Expir	ain in Remark	(S)
	Mucky Mineral (S1) (L l	RR N	Iron-Mangan			RR N				
	A 147, 148)	ixix i v ,	MLRA 13		53 (1 12 <i>)</i> (1	-IXIX I 4 ,				
	Gleyed Matrix (S4)		Umbric Surfa	•	MIRA 13	6. 122)		³ Indicators of h	ovdrophytic ve	egetation and
	Redox (S5)		Piedmont Flo				8)	wetland hydro		
	d Matrix (S6)		Red Parent N					unless disturb		
	Layer (if observed):				, (,	<u>′</u>			
Type:	, ,									
	ches):		_				Hydr	ic Soil Present?	Yes	No. 🗸
Remarks:	C1103).		-				riyui	ic doil i resent:		
Remarks:										

Project/Site: MVP	City/County: Roanoke	Sampling Date: 10/10/2016
Applicant/Owner: MVP	State:	VA Sampling Point: W-IJ62
• •	S. Pilcher Section, Township, Range: N/A	
• , ,	Local relief (concave, convex, none): Co	oncave Slope (%): 0-5
	Lat: 37.135526 Long: -80.13415	
	to 4 percent slopes NW	
	ical for this time of year? Yes No (If no, ex	
	significantly disturbed? Are "Normal Circums	
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain a	ny answers in Remarks.)
SUMMARY OF FINDINGS – Attach si	te map showing sampling point locations, tra	ansects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area	
Hydric Soil Present? Yes _	is the Sampled Area	res 🗸 No
Wetland Hydrology Present? Yes	V No within a Wetland? Y	es No
Remarks: Cowardin Code: PEM	HGM: Riverine Water Type: RPWW	VD.
	tation. Heavy rains, 5-6" rain event within past 2	
Cattle grazing, trampled soils and vege	ation. Heavy failis, 3-0 failt event within past 2	4-40 110013.
HYDROLOGY		
Wetland Hydrology Indicators:	Second	lary Indicators (minimum of two required)
Primary Indicators (minimum of one is required;		rface Soil Cracks (B6)
Surface Water (A1)		arsely Vegetated Concave Surface (B8)
High Water Table (A2)		ainage Patterns (B10)
Saturation (A3)		oss Trim Lines (B16)
Water Marks (B1)		y-Season Water Table (C2)
Sediment Deposits (B2)		ayfish Burrows (C8)
Drift Deposits (B3)		turation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		unted or Stressed Plants (D1)
Iron Deposits (B5)	 -	omorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		allow Aquitard (D3) crotopographic Relief (D4)
Water-Stained Leaves (B9)Aquatic Fauna (B13)		C-Neutral Test (D5)
Field Observations:		C-Neutral Test (D3)
	Depth (inches):	
	Depth (inches): 2	
	_	gy Present? Yes No
(includes capillary fringe)		, y 1 1030m. 103 <u> </u>
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous inspections), if available:	
Remarks:		

Sampling Point: W-IJ62

201	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:3 (A))
2				T. IN 1 (5)	
3				Total Number of Dominant Species Across All Strata: 3 (B)	١
				Opedies Adioss All Strata.	,
4		-		Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 100 (A	/B)
6				Prevalence Index worksheet:	
7					
	0	= Total Co	/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 =	
				FACU species x 4 =	
2		-		UPL species x 5 =	
3				Column Totals: (A) (I	D۱
4				Column Totals (A) (i	رد
5				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
8					
9				2 - Dominance Test is >50%	
<u>. </u>	^	= Total Co		3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: 0				4 - Morphological Adaptations ¹ (Provide support	ing
E!	20 /0 01	total cover		data in Remarks or on a separate sheet)	
TIEID Stratum (Flot Size)	25	~	EA 0\A/	Problematic Hydrophytic Vegetation ¹ (Explain)	
1. Juncus effuses			FACW_		
2. Aster novi-belgii	10		FACW_	Indicators of hydric soil and wetland hydrology must	t
3. Scirpus atrovirens	20		OBL	be present, unless disturbed or problematic.	•
4. Impatiens capensis	5		FACW	Definitions of Four Vegetation Strata:	
5. Persicaria sagittata	15		OBL		
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)	
7				more in diameter at breast height (DBH), regardless height.	of
				noight.	
8		-		Sapling/Shrub – Woody plants, excluding vines, les	
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	l
10				iii) taii.	
11				Herb - All herbaceous (non-woody) plants, regardles	SS
		= Total Co		of size, and woody plants less than 3.28 ft tall.	
50% of total cover: <u>37.5</u>	20% of	total cover	:15	Woody vine – All woody vines greater than 3.28 ft in	1
Woody Vine Stratum (Plot size:15')				height.	•
1		-			
2					
3					
4			-		
				Hydrophytic	
5	0			Vegetation Present? Yes ✓ No	
500/ (1/1)		= Total Co		1100m. 100 NO	
50% of total cover:0		total cover	:		
Remarks: (Include photo numbers here or on a separate s	heet.)				
Grazed and trampled vegetation in cow pasture					
	-				
	-				
	•				
	•				

Sampling Point: W-IJ62

SOIL

Depth	cription: (Describe to Matrix	to the depti		x Features		or commi	the absence	or maicate)is.)	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>		Remarks	
0-6	10YR 5/1	60	7.5YR 4/6	40	С	M/PL	SCL		Some gra	avel
6-12	10YR 5/1	90	7.5YR 4/6	7	<u>C</u>	M/PL	SCL		Some gra	avel
			2.5Y 5/3	3	С	M/PL	SCL			
								-		
										
		· -								
¹ Type: C=Co	oncentration, D=Depl	letion, RM=F	Reduced Matrix, MS	S=Masked	Sand G	rains.			ng, M=Matrix.	
Hydric Soil	Indicators:						Indica	ators for Pr	roblematic Hy	/dric Soils³:
Histosol			Dark Surface	. ,					A10) (MLRA 1	
	oipedon (A2)		Polyvalue Be		. , .		148) C		Redox (A16)	
Black Hi	stic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye			147, 148)	D	(MLRA 14	oodplain Soils	(E10)
	d Layers (A5)		Depleted Mai		۷)		_ '	(MLRA 13		(1 19)
	ick (A10) (LRR N)		Redox Dark S	` '	3)		V		Dark Surface	e (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)				in in Remarks	
	ark Surface (A12)		Redox Depre							
	Mucky Mineral (S1) (L	.RR N,	Iron-Mangan		s (F12)	(LRR N,				
	A 147, 148) Gleyed Matrix (S4)		MLRA 136 Umbric Surfa	•	MI DA 1	26 122\	³ Ind	icators of b	ydrophytic veg	otation and
	Redox (S5)		Piedmont Flo						logy must be p	
	Matrix (S6)		Red Parent N						ed or problem	
	Layer (if observed):									
Type: Re	efusal, gravel									
Depth (inc	ches): <u>6</u>						Hydric Soil	Present?	Yes 🗸	No
Remarks:							I.			
Disturbed s	soils in pasture.									



Photograph Direction North

Comments:			

Project/Site: MVP	City/County: Roanoke	Sampling Date: 10/10/2016		
Applicant/Owner: MVP		State: VA Sampling Point: W-IJ62-UP		
Investigator(s): E. Foster, S. Therkildson, S				
		none): Linear Slope (%): 5-10		
		80.134319 Datum: NAD 83		
Soil Map Unit Name: 1A - Alderflats silt loam, 0				
Are climatic / hydrologic conditions on the site typi				
		mal Circumstances" present? Yes No		
Are Vegetation, Soil, or Hydrology				
-		ations, transects, important features, etc.		
Lindrophytic Vegetation Present?	No V Is the Sampled Ar			
Hydrophytic Vegetation Present? Yes _ Hydric Soil Present? Yes _	No V			
Wetland Hydrology Present? Yes	No within a Wetland?	Yes No		
Remarks: Cowardin Code: UPLAND		e:		
Grazed by cattle, soils compressed. Re				
LIVERGLOGY				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required;		Surface Soil Cracks (B6)		
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)		
	High Water Table (A2) Hydrogen Sulfide Odor (C1)			
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C			
<pre> Water Marks (B1) Sediment Deposits (B2)</pre>	Presence of Reduced Iron (C4)Recent Iron Reduction in Tilled Soils (C6)	Dry-Season Water Table (C2) Crayfish Burrows (C8)		
Sediment Deposits (B2) 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)	Guier (Explain in Normano)	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:				
Surface Water Present? Yes No _	Depth (inches):			
Water Table Present? Yes No _	Depth (inches):			
Saturation Present? Yes No _ (includes capillary fringe)	Depth (inches): Wetlar	nd Hydrology Present? Yes No		
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous inspections), if	available:		
Remarks:				
Nemarks.				

Sampling Point: W-IJ62-UP

30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: (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: (A/B)
6				That Are OBL, FACW, OF FAC.
7			·	Prevalence Index worksheet:
r	0	= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')	20 /0 01	total cover		FACW species x 2 =
<u>Japinig/Ornab Otratam</u> (1 lot 3i2c)				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				1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
	0 :	= Total Cov	/er	3 - Prevalence Index is ≤3.0¹
50% of total cover:0				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1. Trifolium repens	15		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Poa pratensis	60		FACU	
3. Solanum carolinense	10		FACU	¹ Indicators of hydric soil and wetland hydrology must
4 Taraxacum officinale	9	-	FACU	be present, unless disturbed or problematic.
"———				Definitions of Four Vegetation Strata:
5. Rumex crispus	10	-	FAC	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
	104 .	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:52	20% of	total cover	20.8	W 1 2 20 6 5
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				Vegetation Present? Yes No _ ✓
		= Total Cov	_	rieseiit: ies No
50% of total cover:0		total cover	:0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Color (moist)	/dric Soils ³ : 47)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Stratified Layers (A5) Depleted Matrix (F2) Depleted Matrix (F3) Coast Prairie Redox (A16) MIRA 147, 148) Piedmont Floodplain Soils (MLRA 136, 147) Very Shallow Dark Surface Other (Explain in Remarks) MLRA 147, 148) MLRA 147, 148) MLRA 147, 148)	/dric Soils ³ : 47)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Loamy Gleyer Matrix (F2) Depleted Matrix (F3) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) MLRA 136) PL=Pore Lining, M=Matrix PL=Pore Lining, M=Matrix PL=Pore Lining, M=Matrix PL=Pore Lining, M=Matrix (MLRA 140) (MLRA 10) (MLRA 147, 148) (MLRA 147, 148) (MLRA 147, 148) Coast Prairie Redox (A16) (MLRA 147, 148) (MLRA 147, 148) (MLRA 147, 148) (MLRA 147, 148)	/dric Soils³: 47)
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark Surface (A11) _ Thick Dark Surface (A12) _ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) _ Histosol (A1) _ Dark Surface (S9) (MLRA 147, 148) _ Coast Prairie Redox (A16) _ MLRA 147, 148)	/dric Soils ³ : 47)
Adric Soil Indicators: Histosol (A1) 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) Indicators for Problematic Hy 2 cm Muck (A10) (MLRA 14, 148) Muck (A10) (MLRA 147, 148) MILRA 136, 147, 148) Indicators for Problematic Hy 2 cm Muck (A10) (MLRA 14, 148) MLRA 147, 148) Indicators for Problematic Hy 2 cm Muck (A10) (MLRA 14, 148) MLRA 147, 148) Indicators for Problematic Hy 2 cm Muck (A10) (MLRA 14, 148) MLRA 147, 148) Indicators for Problematic Hy 2 cm Muck (A10) (MLRA 14, 148) MLRA 147, 148) Indicators for Problematic Hy 2 cm Muck (A10) (MLRA 14, 148) MLRA 147, 148) Indicators for Problematic Hy 2 cm Muck (A10) (MLRA 14, 148) MLRA 147, 148) Other (Explain in Remarks Hy Thick Dark Surface (A12) Indicators for Problematic Hy 2 cm Muck (A10) (MLRA 147, 148) MLRA 136)	/dric Soils ³ : 47)
Histosol (A1) Histosol (A2) Black Histic Epipedon (A2) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Histosol (A1) Dark Surface (S7) Polyvalue Below Surface (S8) (MLRA 147, 148) Polyvalue Below Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Indicators for Problematic Hy Loamy Gleyed Matrix (F3) Coast Prairie Redox (A16) (MLRA 147, 148) MLRA 147, 148) Depleted Matrix (F2) Depleted Matrix (F3) Nedox Dark Surface (F6) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136)	/dric Soils³: 47)
dric Soil Indicators:Indicators for Problematic Hy. Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148). 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. Stratified Layers (A5) Depleted Matrix (F3) Piedmont Floodplain Soils. 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface. Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks. Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks. Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Iron-Manganese Masses (F12) (LRR N, MLRA 136)	/dric Soils³: 47)
dric Soil Indicators:Indicators for Problematic Hy. Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148). 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. Stratified Layers (A5) Depleted Matrix (F3) Piedmont Floodplain Soils. 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface. Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks. Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks. Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Iron-Manganese Masses (F12) (LRR N, MLRA 136)	/dric Soils ³ : 47)
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Piedmont Floodplain Soils	/dric Soils ³ : 47)
Histosol (A1) Histosol (A2) Black Histic Epipedon (A2) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Histosol (A1) Dark Surface (S7) Polyvalue Below Surface (S8) (MLRA 147, 148) Polyvalue Below Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Indicators for Problematic Hy Loamy Gleyed Matrix (F3) Coast Prairie Redox (A16) (MLRA 147, 148) MLRA 147, 148) Depleted Matrix (F2) Depleted Matrix (F3) Nedox Dark Surface (F6) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136)	/dric Soils ³ : 47)
dric Soil Indicators:Indicators for Problematic Hy. Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148). 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. Stratified Layers (A5) Depleted Matrix (F3) Piedmont Floodplain Soils. 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface. Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks. Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks. Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Iron-Manganese Masses (F12) (LRR N, MLRA 136)	/dric Soils ³ : 47)
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Piedmont Floodplain Soils Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Other (Explain in Remarks	/dric Soils ³ : 47)
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Piedmont Floodplain Soils Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Other (Explain in Remarks	/dric Soils ³ : 47)
Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Below Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Histosol (A1) Dark Surface (S7) Polyvalue Below Surface (S8) (MLRA 147, 148) Thin Dark Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Indicators for Problematic Hy Dark Surface (S7) Loam Muck (A10) (MLRA 147, 148) MLRA 136, Indicators for Problematic Hy Deplematic Hy Deplematic Hy Loam Muck (A10) (MLRA 147, 148) MLRA 147, 148) Indicators for Problematic Hy Loam Muck (A10) (MLRA 147, 148) MLRA 147, 148)	/dric Soils ³ : 47)
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (MLRA 136, 147) Very Shallow Dark Surface Depleted Dark Surface (F6) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) MLRA 136)	47)
Histic Epipedon (A2)	·
Black Histic (A3)	
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (MLRA 136, 147) Piedmont Floodplain Soils (MLRA 136, 147) Piedmont Floodplain Soils (MLRA 136, 147) Very Shallow Dark Surface Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) MLRA 136)	
Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Media Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136)	(F10)
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface 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, MLRA 147, 148) MLRA 136)	(1 13)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136)	(TF12)
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136))
MLRA 147, 148) MLRA 136)	
_ Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) South Barbary (S5) Umbric Surface (F13) (MLRA 136, 122) Biodinant Floridation (S6) (MLRA 136, 122) Sinding of Floridation (S6) (MLRA 136, 122)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be	
_ Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problem estrictive Layer (if observed):	alic.
Type:	
	No 🗸
Depth (inches): Hydric Soil Present? Yes	. NO <u>*</u>
emarks:	

Project/Site: MVP	City/C	county: Monroe		Sampling Date: 07/14/2015	
Applicant/Owner: MVP	-			· -	
Investigator(s): D Hadersbeck, K Lew				_ ,	
Landform (hillslope, terrace, etc.): Terrace		· · · · · ·		Slope (%):_1	
Subregion (LRR or MLRA): LRRN					
Soil Map Unit Name: 16D, Edneyville fi					
Are climatic / hydrologic conditions on the s					
Are Vegetation, Soil, or Hyd				_	
Are Vegetation, Soil, or Hyd					
SUMMARY OF FINDINGS – Attac			-		
Hadarahadia Varadadia Barando	Yes		<u> </u>	· · · · · · · · · · · · · · · · · · ·	
	Yes No Yes No	Is the Sampled Area		•	
	Yes No No	within a Wetland?	Yes	No	
Remarks:					
Cowardin Code:PEM; HGM:riverin	e; WT:RPWWD				
Information listed on this form repr	esents the data collected in	n 2015. The wetland w	vas not acces	ssible for survey in 2019	
to reconfirm the presence of wetland	nd hydrology, hydrophytic	vegetation, and hydric	soils.		
HYDROLOGY					
Wetland Hydrology Indicators:		<u>Se</u>	econdary Indicat	tors (minimum of two required)	
Primary Indicators (minimum of one is req	uired; check all that apply)		_ Surface Soil (
Surface Water (A1)	True Aquatic Plants (Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfide Ode		Drainage Patterns (B10)		
Saturation (A3)	Oxidized Rhizosphere				
Water Marks (B1)	Presence of Reduced		Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reductio		Crayfish Burrows (C8)		
Drift Deposits (B3)	Thin Muck Surface (C		Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Ren	narks)		ressed Plants (D1)	
Iron Deposits (B5)		_	_ Geomorphic I	, ,	
Inundation Visible on Aerial Imagery (B7)	_	_ Shallow Aquit		
✓ Water-Stained Leaves (B9)		_		phic Relief (D4)	
Aquatic Fauna (B13)			_ FAC-Neutral	Test (D5)	
Field Observations:	No. / Double (Southern)				
	No Depth (inches): No Depth (inches):				
		24 Wetland Hyd			
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland Hyd	Irology Presen	t? Yes V No	
Describe Recorded Data (stream gauge, r	monitoring well, aerial photos, pre	vious inspections), if availal	ole:		
Remarks: Abutting S-Y07					
Abutting 5-107					

Sampling Point: W-Y2

Tree Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size: 30°)	% Cover	Species?	<u>Status</u>	Number of Dominant Species	0	
1				That Are OBL, FACW, or FAC:	3	(A)
2				Total Number of Dominant		
3				Species Across All Strata:	4	(B)
4						(-)
				Percent of Dominant Species	100	
5				That Are OBL, FACW, or FAC:	100	(A/B)
6				Prevalence Index worksheet:		
7		·		Total % Cover of:	Multiply by	
		= Total Co				
50% of total cover: 0	20% of	total cover	:0	OBL species x		
Sapling/Shrub Stratum (Plot size: 15')				FACW species x	2 =	_
1. Lindera benzoin	10	✓	FAC	FAC species x	3 =	_
2				FACU species x	4 =	
				UPL species x		
3						
4				Column Totals: (A)	(D)
5				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicar		_
7						
8				1 - Rapid Test for Hydrophyt		
				✓ 2 - Dominance Test is >50%	,	
9	10	T / 10		3 - Prevalence Index is ≤3.0	1	
50% -(1-1-1-1		= Total Co		4 - Morphological Adaptation	ns ¹ (Provide sup	porting
50% of total cover: 5	20% of	total cover	: <u> </u>	data in Remarks or on a s	separate sheet)	
Tiero Stratum (Fiot Size)				Problematic Hydrophytic Veg		
1. Impatiens capensis	30		FACW_	r roblematic riyarophytic veg	getation (Expla	,
2. Glyceria striata	20	~	OBL			
3. Symplocarpus phoetidus	10		OBL	¹ Indicators of hydric soil and wetl		must
4. Viola sororia	30		FAC	be present, unless disturbed or p		
				Definitions of Four Vegetation	Strata:	
5				Tree – Woody plants, excluding	vines. 3 in. (7.6	cm) or
6				more in diameter at breast height		
7				height.		
8				Sapling/Shrub – Woody plants,	oveluding vinos	locc
9				than 3 in. DBH and greater than		
10				m) tall.		(.
11.						
	90	T-1-10-		Herb – All herbaceous (non-woo		ırdless
500/ of total account 45		= Total Cot total cover		of size, and woody plants less the	an 3.20 it tall.	
50% of total cover: <u>45</u>	20% 01	total cover	:10	Woody vine – All woody vines g	reater than 3.28	3 ft in
Woody Vine Stratum (Plot size: 15')				height.		
1						
2						
3						
4						
				Hydrophytic		
5	^			Vegetation Present? Yes	No	
500/ // /		= Total Co	_	1103CHC. 103		
50% of total cover:0		total cover	:0			
Remarks: (Include photo numbers here or on a separate s	heet.)					

nt: W-Y2

		to the depth	n needed to document the indicator or co	ntirm the abse	ence of indicators.)
Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	c ² Textur	e Remarks
0-8"	10yr2/1	100	20.01 (1110101) /0 Type LU	SCL	
		· -			<u> </u>
8-24"	Gley1 5/N	100		LS	
		· -			
	-				
	-				
		· — -			
		· — — -			
¹ Type: C=Co	oncentration, D=Dep	letion, RM=R	Reduced Matrix, MS=Masked Sand Grains.		n: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:			Ir	ndicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface (S7)	_	_ 2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA		Coast Prairie Redox (A16)
Black Hi			Thin Dark Surface (S9) (MLRA 147, 1	48)	(MLRA 147, 148)
	en Sulfide (A4)		✓ Loamy Gleyed Matrix (F2)	_	_ Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	ick (A10) (LRR N)	(4.4.1)	Redox Dark Surface (F6)	_	Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)	_	_ Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depressions (F8)	N.I	
	Mucky Mineral (S1) (L	LKK N,	Iron-Manganese Masses (F12) (LRR	N,	
	147, 148)		MLRA 136)	3)	³ Indicators of hydrophytic vocatation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surface (F13) (MLRA 136, 12Piedmont Floodplain Soils (F19) (MLF		³ Indicators of hydrophytic vegetation and wetland hydrology must be present,
	Matrix (S6)		Red Parent Material (F21) (MLRA 12)		unless disturbed or problematic.
	Layer (if observed):		Red Falent Material (F21) (MERA 12)	7, 147)	unless disturbed of problematic.
	Layer (II Observed).				
Type:	1 \		_		0 11 D 10 11 M 11
	ches):			Hyaric	Soil Present? Yes No
Remarks:					



Photograph Direction SW

Comments:		

Project/Site: MVP		City/C	county: Monroe		Sampling Date: 07/14/2015
Applicant/Owner: MVP					Sampling Point: W-Y2-UP1
Investigator(s): D Hadersbeck, K	Lew, G Buda,				
Landform (hillslope, terrace, etc.): Hil					Slope (%): 3
Subregion (LRR or MLRA): LRRN					Datum: NAD83
Soil Map Unit Name: 16D, Edneyv					
Are climatic / hydrologic conditions on	the site typical fo	r this time of year? Y			
Are Vegetation, Soil, o					
Are Vegetation, Soil, o				explain any answer	
SUMMARY OF FINDINGS – A					
					•
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes		Is the Sampled Area	.,	🗸
Wetland Hydrology Present?	Yes		within a Wetland?	Yes	No
upland					
HYDROLOGY					
Wetland Hydrology Indicators:					tors (minimum of two required)
Primary Indicators (minimum of one	•			Surface Soil (
Surface Water (A1)		True Aquatic Plants (etated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od	or (C1) es on Living Roots (C3)	Drainage Pat	
Saturation (A3) Water Marks (B1)		Presence of Reduced	= : : :	Moss Trim Li	Nater Table (C2)
Sediment Deposits (B2)	·	Recent Iron Reductio	, ,	Crayfish Burn	
Drift Deposits (B3)		Thin Muck Surface (C		-	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Ren			ressed Plants (D1)
Iron Deposits (B5)				Geomorphic l	Position (D2)
Inundation Visible on Aerial Imag	gery (B7)			Shallow Aquit	tard (D3)
Water-Stained Leaves (B9)					phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:	•	5			
		Depth (inches):			
		Depth (inches):		landardaran Danasara	40 Vaa Na V
Saturation Present? Yes _ (includes capillary fringe)	No	Depth (inches):	wetland h	lydrology Presen	t? Yes No
Describe Recorded Data (stream gar	uge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:					
remarks.					

Sampling Poi	nt: W-Y2-UP1
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Troo Strotum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:
Tiee Stiatum (Fiot Size.		Species?		Number of Dominant Species
1. Acer saccharum	10		<u>FACU</u>	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:4 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6				
7				Prevalence Index worksheet:
	10	= Total Cov	/er	Total % Cover of: Multiply by:
50% of total cover:5	20% of	total cover	:2	OBL species x 1 = 0
Sapling/Shrub Stratum (Plot size: 15')				FACW species
1. Lindera benzoin	25		FAC	FAC species <u>45</u> x 3 = <u>135</u>
2				FACU species 20 x 4 = 80
3				UPL species0 x 5 =0
4				Column Totals:65(A)215(B)
5				2 207
				Prevalence Index = B/A =3.307
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
500/ - () -		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 12.5	20% of	total cover	:5	data in Remarks or on a separate sheet)
(Fior Size)	10	./	E4.011	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Polystichum acrostichoides			F <u>ACU</u>	
2. Viola sororia	20		F <u>AC</u>	¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				The analysis of the state of th
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/Charle Woody plants evaluating vines less
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		total cover		
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height.
1				noight.
2			·	
3.				
4				
5.				Hydrophytic Vegetation
<u>. </u>	0	= Total Cov	· · · · · · · · · · · · · · · · · · ·	Present? Yes No
50% of total cover: 0		total cover	_	
Remarks: (Include photo numbers here or on a separate s		10101 00101	•	
Tremains. (include priore numbers here or on a separate s	ricci.)			

SOIL Sampling Point: W-Y2-UP1

Depth Matrix Redox Features Color (moist) % Type Loc Texture Remarks
0-1" 10yr3/2 100 SCL
1-24" 10yr3/4 100 SCL
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)
Black Histic (A3) Inin 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)
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) Sa
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. Restrictive Layer (if observed):
Type:
Depth (inches): Hydric Soil Present? Yes No V
Remarks: