P. 1 A	•	City/County: _	PAWOTTEN		Sampling Date: 08	120 20
roject/Site:SERP				State: VA	_ Sampling Point: _	MUSITUE
ΩO <sub>V</sub>	ninion	Section, Tow		A JA		
	HELTURA  Hetc.): 706-07 - Slope  1277   Jan 37	Section, row	cave, convex, none)	· NONE	Slope (	%): NABH
ILIII-land torrace	etc.)	7 781868843	Long: 78.	2309196	Datum:	VAD1983
bregion (LRR or MLRA):	LRRP Lat: 37	W WAM UNDU	LATZOC PHAS	NWI classific	ation: MA	
			/ (If	no evolain in R	emarks.)	
	aditions on the site lybical for the	o tillio di j	Are "Normal C	ircumstances" p	resent? Yes	_ No
. 0-1	or HVOTOLOUV	Jigi iii oa i ii j	(If needed, ex	plain any answe	rs in Remarks.)	in a month
_	" or Hydrology 1	tatul unj pi			· ·	tures, etc.
OF EINT	DINGS – Attach site map	showing sampling	g point location	is, transects	, important lea	
SUMMARY OF FINE	,			* *		
Hydrophytic Vegetation F	Present? Yes	No Is th	e Sampled Area in a Wetland?	Yesi		
Hydric Soil Present?	Yes	10	iii a victiana.			
Deco		No				arc.
Remarks: DoTWI &	istables theo IN Nam	NOW FWALK	AT TOE -0	K- COWOR	RUCKE 300	wes.
ALL 3 CRIT	WIA MOT					
~ <b>.</b>	0236 70 0240					
PHOTOS. 100-	0236 10 0240					
IYDROLOGY					to the free free transport of the	vo required)
Wetland Hydrology Inc	dicators:				ators (minimum of the	wo tedanea)
	mum of one is required; check al	I that apply)		Surface Soi		
Surface Water (A1)	-	ue Aquatic Plants (B14)			egetated Concave S	urface (B8)
High Water Table (/		drogen Sulfide Odor (C	,	▶ Drainage Page Page 1		
Saturation (A3)		kidized Rhizospheres on		Moss Trim I		
Water Marks (B1)		esence of Reduced Iron			Water Table (C2)	
Sediment Deposits	. ,	ecent Iron Reduction in T	illed Soils (Cb)	Crayfish Bu		aon((CO)
Drift Deposits (B3)	- · ·	in Muck Surface (C7)			/isible on Aerial Ima	
Algal Mat or Crust (	B4) Ot	her (Explain in Remarks			Stressed Plants (D1)	
Iron Deposits (B5)	on Aerial Imagery (B7)			<b>1</b> Geomorphic		
Water-Stained Leav				Shallow Aqu	aphic Relief (D4)	
Aquatic Fauna (B13				Microtopogr FAC-Neutra		14
Field Observations:	7		· · ·		11 1001 (DO)	
Surface Water Present?	Yes No Do	epth (inches): NA				
Water Table Present?		epth (inches): NA				
Saturation Present?		epth (inches): NA	Wetland Hy	drology Prese	nt? Yes	No
(includes capillary fringe	)		1		100	
Describe Recorded Data	a (stream gauge, monitoring well,	, aeriai photos, previous	inspections), if avail	able:		
Pomerke	<b>/</b> VA					
Remarks: SEVELAE	PRIMARY AND SY	ECONDARY TWO	ciptors of	HYDROLDE	Y DRECKE	
					וטושונטיוק	
4 •	×					
			-		1	
					· ×	
**					1. 7	
					•	

2.1.	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 10 / R ) 1. NA		Species?	_Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
5.	1 .			Percent of Dominant Species \( \int \mathcal{O} \mathcal{O} \) That Are OBL, FACW, or FAC: \( (A/B) \)
6	y X. 5			That the OBE, Thow, SI Tho.
		= Total Cov	/er	Prevalence Index worksheet:
50% of total cover:				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 10 /2 )	20 70 01	total cover	•	OBL species x 1 =
1. LIQUIDAMBAR STYRACIFUVA	5	Y	FAL	FACW species x 2 =
				FAC species x 3 =
2				FACU species x 4 =
0				UPL species x 5 =
4				Column Totals: (A) (B)
5		<del> </del>	-	, 1
6	5			Prevalence Index = B/A =
		= Total Cov	er er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover	:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 10 12				2 - Dominance Test is >50%
1. MAGNOLIA VIRGINIANA	<u>is</u>	<u> </u>	FACW	3 - Prevalence Index is ≤3.01
2. LIQUED AMBAR STYRACICUA	10	7	FAL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. NIOSPYROS VIRGINIANA	<i>j</i> 0	Y	FAC	data in Remarks or on a separate sheet)
4. CORNUS AMOMUM	10	F	FALW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. SAMBUCUS NIGER	٢	N	FACW	
6.			·	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	50	= Total Cov		be present, unless disturbed or problematic.
I and the second		= 10fal Cov	er	
50% of the land 25				Definitions of Five Vegetation Strata:
50% of total cover: 25				Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: / D / R )	20% of			Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: / D / R )	20% of	total cover	10	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: / D / R )  1. AUG )  2. RUBUS ARLUTUS	20% of	total cover	10	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: IDIR )  1. AND  2. RUBUS ARLUTUS  3.	20% of	total cover	10	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: IDIR )  1. AND 2. RUBUS ARLUTUS  3. 4. 4.	20% of	total cover	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: IDIR )  1. AND  2. RUBUS ARLUTUS  3.	20% of	total cover	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size:   / D / R   )   1.	20% of	total cover	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size: / / / / )  1. MAT  2. Pubus Arium's  3. 4. 5. 6. 7.	20% of	total cover	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including
Herb Stratum (Plot size:   / D / R   )   1.	20% of	total cover	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size: 1012)  1. Addr.  2. Pubus Ariums  3. 4. 5. 6. 7. 8. 9. 9.	20% of	total cover	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size:   / D / R   )   1.	20% of	total cover	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 1012)  1. Addr.  2. Pubus Ariums  3. 4. 5. 6. 7. 8. 9. 9.	20% of	Y	FAL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size:   / D / R   )   1.	20% of	total cover	FAL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:   / D / R   )   1.	20% of	Y	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: / / / / )   1.		Y = Total Cov	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: / / / / )   1.	20% of	Y = Total Cov	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: / D / R   )   1.		Y = Total Cov	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: / D / R )   1.	20% of	Y = Total Cov	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: / D / R   )   1.		Y = Total Cov	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: / D / R )   1.	20% of	Y = Total Cov	FAC FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: / D / R   )   1.		Y = Total Cov	FAC PAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: / D / R   )   1.	\$\frac{5}{135} =	= Total Covers	FAC FAC FAC er	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: / D / R   )   1.	5	Total Cover	FAC FAC FAC er	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: / D / R   )   1.	55 = 20% of 80   15   20% of heet.)	= Total Covers	FAC FAC FAC er	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.

Profile Des	cription: (Describe	to the der	oth needed to docum	nent the i	ndicator	or confirm	n the absence	of indicators \	ming Point. tolveste
Depth	Matrix			x Features		o. 00:11111	ii uie auseiice (	or mulcators.)	
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	R	emarks
0-4	10 9R 4/2	50	7.5 YR 3/4	50	C	M	SELF L	oam	
4-9	10 YK 5/1	95	7.5 424/6	10	$\mathcal{O}$	-70		JANDY CI	24m
9-18	10 TR SI	50	108 R 6/1	45	1)	m	COARJE	SANOT	CO.40
9-18			2542 4/6		c	PL	COARIE		wan
		,	<u> </u>	_>			Cook	711097	00.47h
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							-		
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				. ——					
¹Type: C=C	oncentration, D=Depl	etion, RM=	=Reduced Matrix, MS	=Masked	Sand Gra	ins	21 ocation: DI	=Pore Lining, M	=Motrix
Hydric Soil	Indicators:		, readood matrix, mo	Madica	Ourid Ore		Indicat	ors for Probler	natic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				m Muck (A10) (	
	oipedon (A2)		Polyvalue Bel	ow Surfac	e (S8) (M	LRA 147,		ast Prairie Redo	
Black Hi			Thin Dark Sur	face (S9)	(MLRA 1	47, 148)		MLRA 147, 148	
	en Sulfide (A4) d Layers (A5)		Loamy Gleyed	d Matrix (F	-2)			dmont Floodpla	, ,
	ick (A10) (LRR N)		Depleted Matr	IX (F3) Jurface (F6	3)	-		MLRA 136, 147	
	d,Below Dark Surface	(A11)	Depleted Dark					ry Snallow Dark ner (Explain in R	Surface (TF12)
Thick Da	ark Surface (A12)		Redox Depres				011	ici (Explaiii iii i	(Ciriains)
	lucky Mineral (S1) (L	RR N,	Iron-Mangane		s (F12) (L	.RR N,			8
	147, 148)		MLRA 136	•					
	Bléyed Matrix (S4) ledox (S5)		Umbric Surfac				<sup>3</sup> Indic	ators of hydroph	nytic vegetation and
	Matrix (S6)		Piedmont Floor Red Parent M	odpiain So aterial (E2	011S (F19) (	MLRA 14		and hydrology m	
	ayer (if observed):		rear aren w	aterial (1 2	. 1) (WILIVE	127, 147	) unle	ss disturbed or p	problematic.
Type:	NA								*
Depth (inc	ches):NA	•.,					Hydric Soil P	resent? Yes	√ No
Remarks:							Tiyano don't	Tesent: Tes	NO
			1					1/	Α
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Wetland data point wnok021s\_w facing North



Wetland data point wnok021s\_w facing South



Wetland data point wnok021s\_w soil sample

Drainet/Sito: SERP	City/County: NoiTowe	Sampling Date: 09/25/24/
Project/Site:		State: UA Sampling Point: Wルックリング
Application owner.	Section, Township, Range:	
14711 S. 154	16 Land - 15-6 (	2011 NOWE Stone (%). 370%
Landform (hillslope, terrace, etc.):	Lat. 27. 28199 4123 Long. 75	7, 231053117 Datum: N401933
Subregion (LRR or MLRA):	NOY LOAM, UNDVINTANT PHASE	NIMI classification: V4
Soil Map Unit Name: 1779 State Consult of	and for this time of year? Yes	(If no, explain in Remarks )
Are climatic / hydrologic conditions on the site typi		I Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		explain any answers in Remarks.)
Are Vegetation, Soil, or Hydrology	naturally problematic? (if fleeded,	explain any answers in Nemarks.
SUMMARY OF FINDINGS – Attach sit	e map showing sampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	NoX Is the Sampled Area	
	No within a Wetland?	Yes No
Wetland Hydrology Present? Yes	No	
Remarks: State (:Tagist://ca	ON HELLI WOPE IN MILED P	DOUT
DOWN ESTABOLITAD	de macej tork the times y	
PHOTO 100-00241 TO 024		
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)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3)	
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)	<ul><li>Saturation Visible on Aerial Imagery (C9)</li><li>Stunted or Stressed Plants (D1)</li></ul>
Algal Mat or Crust (B4) Iron Deposits (B5)	Other (Explain in Remarks)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	•	Shallow Aquitard (D3)
Water-Stained Leaves (B9)		Microtopographic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral Test (D5)
Field Observations:		
	Depth (inches): NA	
	Depth (inches): VA	
		Hydrology Present? Yes No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous inspections), if ava	ailable:
WA		•
Remarks: No INVILATORS OF	WETLAND HYDROLDERY	
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\$ .	•	
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Tree Stratum (Plot size: 30'A)	Absolute	Species?	Indicator	Dominance Test worksheet:
1. GREDORNDROW TULFFREEA	40	Opecies:		Number of Dominant Species
		- <del></del>	FACU	That Are OBL, FACW, or FAC:(A)
2. QUELCUS ALBA	30		FALU	Total Number of Dominant
3. PINVI TAEDA	20	N	FAL	Species Across All Strata: (B)
4. Ctars Amagn STYRACTFUR	Zo	N	FAL	Specific file of the citate.
5. QUELCUS ZUBRA	20	N	FALU	Percent of Dominant Species
5. QUECOS /2 CORA			F1100	That Are OBL, FACW, or FAC: (A/B)
6				
	130	= Total Co	ver	Prevalence Index worksheet:
50% of total cover: _んよ	000/		76	Total % Cover of: Multiply by:
50% of total cover:		t total cove	:	OBL species x 1 =
Sapling Stratum (Plot size: 15'R)	<del></del>	1.2	Tar	FACW species x 2 =
1. LI QUID AMBAR STYRACE FULLA	50	7	FAC	
2. CARYA CORDIFORMIS	20	7	FACU	FAC species x 3 =
3. QUEZLUS RUBRA	10	$\sim$	FACU	FACU species x 4 =
·	10		FALL	UPL species x 5 =
4. CORN'S FLOREDA			rnu	Column Totals: (A) (B)
5				Column Totals. (A)
6			5	Prevalence index = B/A =
. "	90	= Total Co		1
				Hydrophytic Vegetation Indicators:
50% of total cover:	20% o	f total cover	. / V	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:				2 - Dominance Test is >50%
1. LIQUID AMBAR STYRACTEWA	30	4	FAL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
	10.	<del>- /</del>		
2. CARYA COROTPORINTS		- <del></del>	FALV	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
3. LIRIODENDRON TULLPIFERA	5	~	FAIN	
4. PINUI TAKOA	5	N	FAL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. QUEZZI ALBA		$\overline{\mathcal{N}}$	FALL	
		-	PACO	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
	.***			be present, unless distarbed of problematic.
	55	= Total Co	ver	
50% of total covers 28			• 1	Definitions of Five Vegetation Strata:
50% of total cover: 28		= Total Cor f total cover	• 1	
Herb Stratum (Plot size: 3 16 )	20% of		:	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 3 16 )			• 1	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 R)  1. VALISHIM CORYMBUSUM	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. VALISATION (Plot size: 5 R) 2.	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
1. VALUSATUM (Plot size: 5 R) 2	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
1. VALISATION (Plot size: 5 R) 2.	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
1. VALUSATUM (Plot size: 5 R) 2	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 R )   1.   UALUSATUM (CORYMBUSOM)   2.     3.     4.     4.	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: 5 R )   1.   VALUENTUM   CORYMBUSUM	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size: 5 R )   1.   VALUENTUM   CORYMBUSUM	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including
Herb Stratum (Plot size: 5 R )   1.   VALUENTUM   CORYMBUSUM	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size: 5 R )   1.   VALUENTUM   CORYMBUSUM	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including
Herb Stratum (Plot size: 5 R )   1.	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size:   5   R   )	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 5 R )   1.	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:   5   R   )	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 R )	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 R )	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:)   1.	20% of	f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:)   1.		f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:)   1.		f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:)   1.		f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 R )   1.		f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 R )   1.		f total cover	FALW	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 R )   1.		f total cover	FALL FALL	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:   S R   )   1   UAUCNIUM   CORYMBUSUM		f total cover	FALL FALL	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size:   S R   )   1.   UAUGNIUM   CORYMBUSUM   2.     3.     4.     5.     6.     7.     8.     9.     10.     11.		= Total Cover	FAL FAL	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: 5 R )   1.		f total cover	FAL FAL	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size:   S R   )   1.   UAUGNIUM   CORYMBUSUM   2.     3.     4.     5.     6.     7.     8.     9.     10.     11.		= Total Cover	FAL FAL	Definitions of Five Vegetation Strata:  Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.

Sampling Point:	Tronory	u
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								Sampling	point: ひんじん
SOIL	vintiani (Doscribo t	to the dent	h needed to docum	ent the in	dicator o	r confirm	the absence	of indicators.)	
1		to the dept	Redox	Features					
Depth	Matrix Color (moist)	%	Color (moist)	%	Type <sup>1</sup> _	Loc2	Texture	Rema	ırks
(inches)		100	-		_	. –	SANOY	10.9m	
0-3	10 YR 4/2						LOAM Y	SANO	
3-18	10 YR 6/6.	100						7	
	•								
			<del></del>						
				<del></del>					
¹Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.		L=Pore Lining, M=M	
Hydric Soil				-			Indic	ators for Problemat	ic Hydric Soils*:
Histosol			Dark Surface	(S7)			2	cm Muck (A10) (ML	.RA 147)
_	oipedon (A2)		Polyvalue Bel	ow Surfac	ce (S8) (N	ILRA 147,	148) 0	Coast Prairie Redox (	A16)
Black Hi			Thin Dark Sur	face (S9)	(MLRA 1	47, 148)		(MLRA 147, 148)	,
1 —	en Sulfide (A4)		Loamy Gleye	d Matrix (I	F2) ·		F	iedmont Floodplain	Soils (F19)
	Layers (A5)		Depleted Mat	rix (F3)				(MLRA 136, 147)	
ı —	ick (A10) (LRR N)		Redox Dark S	Surface (F	6)		\	ery Shallow Dark Su	urface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dark	•			0	ther (Explain in Ren	narks)
	ark Surface (A12)	,	Redox Depre						
	lucky Mineral (S1) (I	LRR N.	Iron-Mangane			LRR N,			
	A 147, 148)		MLRA 136						
1	Sleyed Matrix (S4)		Umbric Surfac	ce (F13) (	MLRA 13	6, 122)	3Inc	licators of hydrophyti	ic vegetation and
Sandy R			Piedmont Floo				18) we	etland hydrology mus	t be present,
	Matrix (S6)		Red Parent M	aterial (F	21) (MLR	A 127, 147	7) un	less disturbed or pro	blematic.

Remarks:

Type: \_\_\_

Depth (inches): \_

SEE SHERLY ON WNOHOZIJ W DATA FORM

Hydric Soil Present?



Upland data point wnok021\_u facing North



Upland data point wnok021\_u facing South



Upland data point wnok021\_u soil sample

Project/Site: 5 ELP	Citv/C	ounty: NoTToWA	Y Sa	mpling Date: 68/28/201
Applicant/Owner: DOMINFON			State: VA	Sampling Point: WUOKOZ
Investigator(s): J. Switther	Section	on, Township, Range:	NA	Jan pin g r on u
Landform (hillslope, terrace, etc.): Conv. Stop	Local reli	ef (concave, convex, no		Slope (%): 3-5
Subregion (LRR or MLRA): LRRP	Lat: 37.2804824	45 Long: 7	8.229576053	Datum: NAD 198
Soil Map Unit Name: LOVES QUEL SAND	1 LUAM EDONER		HASENWI classificatio	
Are climatic / hydrologic conditions on the site typ			(If no, explain in Rema	
Are Vegetation, Soil, or Hydrology				ent? Yes No
Are Vegetation, Soil, or Hydrology			explain any answers in	
, 00, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	natarany prosionis	, (11100000,	oxpiani any anomoro i	Tromano.
SUMMARY OF FINDINGS - Attach si	te map showing sam	pling point location	ons, transects, in	nportant features, etc.
Hydrophytic Vegetation Present? Yes	No			
Hydric Soil Present? Yes _	No.	Is the Sampled Area within a Wetland?	Yes	No
Wetland Hydrology Present? Yes _	No	,		
Remarks: POINT ESTABLES SED	IN WETLAND	ASSOCIATED O	WITH AW E	PHENERAL
SWALL ALL 3 CRETERIA	MED			
, who 7 1,000 y of co. 2,000,				
194000 100-0247 TO 023	51			
HYDROLOGY			9.0	2 .
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil Cra	cks (B6)
Surface Water (A1)	True Aquatic Plants (I	B14)	Sparsely Vegeta	ted Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odd		Drainage Patterr	
Saturation (A3)	Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim Lines	
Water Marks (B1)	Presence of Reduced	I Iron (C4)	Dry-Season Wat	er Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Burrows	s (C8)
Drift Deposits (B3)	Thin Muck Surface (C	•		e on Aerial Imagery (C9)
Algai Mat or Crust (B4)	Other (Explain in Ren	narks)	Stunted or Stres	
Iron Deposits (B5)			Geomorphic Pos	
Inundation Visible on Aerial Imagery (B7)			Shallow Aquitare	, ,
Water-Stained Leaves (B9)			Microtopographi	
Aquatic Fauna (B13)			FAC-Neutral Tes	t (D5)
Field Observations:	/ A			
	Depth (inches):			, •
Water Table Present? YesNo _		44 (1)		
Saturation Present? Yes V No (includes capillary fringe)	Depth (inches):	Wetland F	lydrology Present?	Yes No
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, pre-	vious inspections), if ava	ilable:	
NA	#I			
Remarks:				
HYMOLOUY CRIT	TENIA MEN			
				*
				* =
			2 2 2 4 A	
				*
			•	
* *				

94(7	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: Z0 (Z))		Species?		Number of Dominant Species
1. ACEL RUBEUM	60	<del></del>	FAL	That Are OBL, FACW, or FAC: (A)
2. ULMUS RUBBA	30	· <del></del>	FAL	Total Number of Dominant
3. LIRUID AMBAR FTYLAUTFLUA	10	$\nu$	FALON	Species Across All Strata:
4. LIRIODENDRON TULD DERRA	10	$\sim$	FAW	
5.				Percent of Dominant Species / DO That Are OBL, FACW, or FAC: (A/B)
9	·			That Are OBL, FACW, or FAC: (A/B)
0	110	= Total Cov		Prevalence Index worksheet:
			- 3	Total % Cover of: Multiply by:
50% of total cover: <u>55</u>	20% of	f total cover:	22	OBL species x 1 =
Sapling Stratum (Plot size: 1510		٠.		FACW species x 2 =
1. NYLLA & STLVATILA	_5		FAC	·
2. ALER RUBRUM	5	7	FAC	FAC species x 3 =
3				FACU species x 4 =
4.				UPL species x 5 =
4.	• —			Column Totals: (A) (B)
5				B11 BW
6	· · · · · · · · · · · · · · · · · · ·		* "	Prevalence Index = B/A =
_		= Total Cov	er -	Hydrophytic Vegetation Indicators:
50% of total cover:	20% 0	f total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:				2 - Dominance Test is >50%
1. LIQUID AMBAR STYRAUT FLUA	10	Y	FAL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2 CINDERA BENZOEN	10	<del>-                                    </del>	FAL	4 - Morphological Adaptations (Provide supporting
3. RUBUS ARLUTUS	5	· <del>- 'y -</del>	FAL	data in Remarks or on a separate sheet)
3. Kubos Arturios			1770	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
	Z5	= Total Cov	er	Definitions of Five Vegetation Strata:
50% of total cover: 13	20% 0	f total cover:	S	
Herb Stratum (Plot size: 5'R)	2070 0	·		Tree – Woody plants, excluding woody vines,
	50	$\dot{\mathcal{L}}$	FACW	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. CAREX INTUMESCENS		- ن		(7.0 cm) of larger in diameter at breast height (DBH).
2. mtckosteGtuh VIMINGUM	20	- <del>- : : :</del>	FAL	Sapling – Woody plants, excluding woody vines,
3. ATHYRIUM ALPLENSOIDES	<u> </u>	<del></del>	Fai	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4. LEELITA ORTZOIDES	10	. <del>~</del>	086	than 3 iii. (7.0 dili) DBH.
5			<u> </u>	Shrub – Woody plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7.			_	Herb – All herbaceous (non-woody) plants, including
8.				herbaceous vines, regardless of size, and woody
0				plants, except woody vines, less than approximately 3
10.				ft (1 m) in height.
		-		Woody vine – All woody vines, regardless of height.
11,	14.0	· · · · · · · · · · · · · · · · · · ·		
		= Total Cov		
50% of total cover:	, 20% o	f total cover	_Zo	
Woody Vine Stratum (Plot size: ZO (R)				
1. NA				
3			·	
4.			· —	
5				Hydrophytic
		= Total Cov	er ,	Vegetation
50% of total cover:	20% ი	f total cover	:	Present? Yes No
Remarks: (Include photo numbers here or on a separate				<u> </u>
VEHETATION PASSES DOM	INAMU	TEST	١	

Sampling Point WNONOZZE U

Profile Description: (Describe to the description)	4				Sampling Point: W/661
Profile Description: (Describe to the dep	oth needed to document	the indicator	or confirn	n the absence of	indicators.)
Depth Matrix (inches) Color (moist) %	Redox Fea	atures % Type <sup>1</sup>	_Loc <sup>2</sup>	T	
48-0-4 104R411 80	(Indist)	70 Type	LOC	Texture	Remarks
10 YR 3/2 20		<del></del>		SILY U	
	- X Vn / /	<u></u>			LE MATERIAL
4-20 10 yr 5/1 95	10 YR 6/1	2 [3	m	SAMDY	LOAM
·					
				. ,	
				<del></del>	-
<sup>1</sup> Type: C=Concentration, D=Depletion, RM	=Reduced Matrix, MS=Ma	sked Sand Gr	ains	<sup>2</sup> l ocation: DI =	Poro Lining M-Matrix
Hydric Soil Indicators:	wand mo ind	zou caria Gr	an 10,	· Indicator	Pore Lining, M=Matrix. rs for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Dark Surface (S7)		,		Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below S	urface (S8) (N	ILRA 147.		st Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface	(S9) (MLRA 1	47, 148) <sup>^</sup>		ILRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Ma				mont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F				LRA 136, 147)
2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11)	Redox Dark Surface				Shallow Dark Surface (TF12)
Thick Dark Surface (A12)	Depleted Dark Sur			Othe	r (Explain in Remarks)
Sandy Mucky Mineral (S1) (LRR N,	Redox Depression				
MLRA 147, 148)	Iron-Manganese M MLRA 136)	lasses (F12) (L	RR N,		***
Sandy Gleyed Matrix (S4)	Umbric Surface (F	12) /MI DA 424	. 400)	3,	
Sandy Redox (S5)	Piedmont Floodpla	in Soils (E10)	0, 122) (MIDA 44)	Indicat	ors of hydrophytic vegetation and
Stripped Matrix (S6)	Red Parent Materia	al (F21) (MLR4	1127 147		d hydrology must be present, disturbed or problematic.
Restrictive Layer (if observed):		(1 2 1) (III 2 1 0	(121, 141)	uness	disturbed of problematic.
Туре: // А					
Depth (inches):				Hydric Soil Pre	sent? Yes No
Remarks:	1			1	
H 150 FF	\	.10		,	<u>A</u>
14 12 1	John John	NP		$\rightarrow$	
	WIED UPLAY				\ .
FORF	C)	<u> </u>		^	18
\	, <u>y</u>	. ~		Ψ.	182
		1 1			) Es
		\ @	HOMEL	021F-W	
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E. Rutte		\			\^\cap{\cap{c}}
(CEL)		+			\5
	*	Υ-			
Estery		for			
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*************************************			(P) W	INOKOZZLU	
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			7	upua ND	\
		FORTE	-60	Ul C	\
		casase	11 0		1
		Loion	\		
				٠	150 Pt
				E+	(30



Wetland data point wnok022f\_w facing North



Wetland data point wnok022f\_w facing South



Wetland data point wnok022f\_w soil sample

Project/Site: SERP	City/County:	NOTTOWAY		Sampling Date:	08/28/201
Applicant/Owner: DomINION			tate: VA	Sampling Date:	nt: WNONOZZ
Investigator(s): J. SWLITLIN	Section Towns	hip, Range:	1/8	Sampling For	III.
Landform (hillslope, terrace, etc.): _/+ILL 5 COPE	Local relief (concav			-	7-12
		_ Long:		0.0	ppe (%): 370
_	LAND (MA)	_ Long: _ / 0 1			m: <u>NA0198</u>
Are climatic / hydrologic conditions on the site typical for		N- "	NWI classific		4
Are Vegetation, Soil, or Hydrology	significantly disturbed	No (If no			/
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?			resent? Yes	No
		(If needed, expla			
SUMMARY OF FINDINGS – Attach site ma	p showing sampling po	oint locations	transects	, important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes	/				
Hydric Soil Present? Yes	Is the Sa	mpled Area			/-
Wetland Hydrology Present? Yes		Wetland?	Yes	_ No	-
Remarks: POINT ESTABLESHID ON					
VOLKI 12314000 1410 CA	V HICLICIAN OF CA	POINT LO	WILTER	NP, NV	CRITERIA
MED					
PHOTOS: 100-0252 To 025	-G				
HYDROLOGY					
Wetland Hydrology Indicators:					
Primary Indicators (minimum of one is required; check a	11 41-4 1->			ors (minimum of	two required)
			Surface Soil (		
	ue Aquatic Plants (B14)			etated Concave S	Surface (B8)
	ydrogen Sulfide Odor (C1)	_	Drainage Patt	erns (B10)	
	xidized Rhizospheres on Living	g Roots (C3)	Moss Trim Lir	nes (B16)	
	resence of Reduced Iron (C4)	_	Dry-Season V	Vater Table (C2)	
	ecent Iron Reduction in Tilled S		Crayfish Burro	, ,	
	nin Muck Surface (C7)		Saturation Vis	ible on Aerial Ima	agery (C9)
Iron Deposits (B5)	ther (Explain in Remarks)			essed Plants (D1	1)
Inundation Visible on Aerial Imagery (B7)			Geomorphic F	. ,	
Water-Stained Leaves (B9)			Shallow Aquita		
Aquatic Fauna (B13)				hic Relief (D4)	
Field Observations:			FAC-Neutral 7	Test (D5)	
/ /					
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	epth (inches): NA				
	epth (inches): NA				
Saturation Present? Yes No D (includes capillary fringe)	epth (inches): NA	Wetland Hydro	logy Present	? Yes	No
Describe Recorded Data (stream gauge, monitoring well	, aerial photos, previous inspe	ctions), if available	j*		
NA		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•		
Remarks: NO Hypnasis Ey Falaria			· · · · · · · · · · · · · · · · · · ·		
NO HYDNOLOGY INDICA	tori prejent.				
					- 1
					57
%.					

7-01-1- 701-1- 3010	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30'R)  1. LINIOPENDRON TULTPIFERA	% Cover	Species?		Number of Dominant Species
2 PINVI TAKOA		<u> </u>	FAW	That Are OBL, FACW, or FAC: (A)
3 ALER RUBERM BULLUG RUBRA	50	N	FAU	Total Number of Dominant
	20			Species Across All Strata: (B)
4. LIQUED AMBAR STYRACIFUA	20	<b>.</b>	FAL	Dercent of Deminent Creation
5		<u> </u>		Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6			-	
4.7		= Total Cov		Prevalence Index worksheet:
50% of total cover:	<b>2</b> 0% of	total cover:	28	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 15'R)	2070 01	total cover.	-	OBL species x 1 =
1. CIRLO DENORON TULLPIPHUA	20	Y	FALL	FACW species x 2 =
2. CARYA GROFFORM IS	20		FALL	FAC species x 3 =
3. QUEALUS ALBA	10	<del>-/</del>	FACU	FACU species x 4 =
4. LIQUID AMBAR STYRA LIFUA	10	<del>- 10</del>	PHO	UPL species x 5 =
	_/_		FARC	Column Totals: (A) (B)
5	,			,
6				Prevalence Index = B/A =
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: <u>30</u>	20% of	total cover:	12	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15'n)				2 - Dominance Test is >50%
1. NA				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3				data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5				
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6		T-1-1 0		be present, unless disturbed or problematic.
		= Total Cov		Definitions of Five Vegetation Strata:
50% of total cover:	20% of	total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 'R )				approximately 20 ft (6 m) or more in height and 3 in.
1. NA				(7.6 cm) or larger in diameter at breast height (DBH).
2				Sapling – Woody plants, excluding woody vines,
3				approximately 20 ft (6 m) or more in height and less
4				than 3 in. (7.6 cm) DBH.
5				Shrub – Woody plants, excluding woody vines,
6				approximately 3 to 20 ft (1 to 6 m) in height.
7.				Herb – All herbaceous (non-woody) plants, including
8		,		herbaceous vines, regardless of size, and woody
9.				plants, except woody vines, less than approximately 3
10	<del></del>			ft (1 m) in height.
11				Woody vine - All woody vines, regardless of height.
		T-1-1 0 -		
		= Total Cove		
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 30 'n)	7.0			
1. CONSIGNA JAPONELA	20	_Y	FAC	
2				
3				
4				
5				
	_70 =	Total Cove	er	Hydrophytic Vegetation
50% of total cover:				Present? Yes No
Remarks: (Include photo numbers here or on a separate si				
VELETATION FACES DOME	NANUR	TELT		_

											Point: Word
Profile Desc	cription: (Des	scribe to the o	lepth ne	eded to docu	ment the i	ndicator	or confirm	the absenc	e of indicat	ors.)	
Depth		atrix			ox Feature						
(inches)	Color (mo			olor (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	(S
0-7	104R 3	12 100	) —. ——			_		FINE	SANDY	CDAM	
7-16	10 YR 6	16 100	)			_		FINE	SANDY	LOAM	w/919re
16-	AULER	REFUSAL									•
					-						
				2					-		
	-						· .				
				-	<u> </u>						
	-										
							-	-			
					·		100				
	-										
Type: C=C	oncentration [	D=Depletion, F	M=Redu	iced Matrix M	IS=Masked	Sand Gr	aine	<sup>2</sup> l ocation:	PL=Pore Lin	ina M-Matr	·iv
	Indicators:			Toda Matrix, M	io madico	ound on	anio.	Indi	cators for P	roblematic	Hydric Soils <sup>3</sup> :
_ Histosol				Dark Surfac	e (S7)						
	oipedon (A2)			Polyvalue B		ce (S8) (N	II RA 147	148)	2 cm Muck ( Coast Prairi		
	stic (A3)		_	Thin Dark S				140)	(MLRA 14		0)
	en Sulfide (A4)			Loamy Gley			,,		Piedmont FI		ils (F19)
_ Stratified	d Layers (A5)			Depleted Ma		-/			(MLRA 1		110 (1 10)
2 cm Mu	ick (A10) (LRF	RN)		Redox Dark		6)			Very Shallov		ace (TF12)
Deplete	d Below Dark S	Surface (A11)		Depleted Da					Other (Expla		
	ark Surface (A			Redox Depr					, ,		
	lucky Mineral	(S1) (LRR N,		Iron-Mangar	nese Masse	es (F12) (I	LRR N,				
	147, 148)			MLRA 1	•		,				
	Bleyed Matrix (	S4)		Umbric Surf				3ln	dicators of h	ydrophytic y	egetation and
	Redox (S5)			Piedmont FI					etland hydro		
	Matrix (S6)			Red Parent	Material (F.	21) (MLR	A 127, 147	') u	nless disturb	ed or proble	ematic.
	ayer (if obse				,						
Type:	40%										./
Depth (inc	ches):	Roux			,			Hydric So	il Present?	Yes	No
Remarks;	11./0	۲									
	1440AEC	SOIL	CREI	FERTA	NOT	MET					
									•		
	566	EM NB	K OZ	2 F_W	D.	ATA	FURA	FOR	SKE	rcll	
	SEE	<b>₽</b> ₩ ~	.( - 0	2 1 3 00		, ,		10	, ,		
											•
							•				
				*1							



Upland data point wnok022\_u facing Northwest



Upland data point wnok022\_u facing Southeast



Upland data point wnok022\_u soil sample

Project/Site: Southeast Reliability Project	City/County: NA/Nottoway Sampling Date: 07/24/14
Applicant/Owner: Dominion	State: VA Sampling Point: wnok001f_w
Investigator(s): W. Medlin, J. Sweitzer	Section, Township, Range: NA
•	ocal relief (concave, convex, none): concave Slope (%): 2-4
Subregion (LRR or MLRA): LRR P Lat: 37.273847	Long: <u>-</u> 78.220592 Datum: <u>NAD 1983</u>
Soil Map Unit Name: Appling angular cobbly sandy loam, ro	Iling phase NWI classification: PFO1B
Are climatic / hydrologic conditions on the site typical for this time of you	
Are Vegetation Soil , or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes V
Are Vegetation Soil , or Hydrology naturally pr	•
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Yes   No   No   No   No   No   No   No   N	Is the Sampled Area
Hydric Soil Present?  Yes   No	within a Wetland? Yes No
Wetland Hydrology Present? Yes V. No.	
Remarks:	
	dge of a recent clear-cut area. Groundwater appears to be
three criteria met. Area is a wetland.	ved. This area has been planted with pines (~20 years old). All
*Photos 100-0224 to 0228	
HYDROLOGY	
	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
	_
✓ Surface Water (A1)       ☐ True Aquatic F         ✓ High Water Table (A2)       ☐ Hydrogen Sulf	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
I <del></del>	educed Iron (C4) Dry-Season Water Table (C2)
	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Sur	· · · · · · · · · · · · · · · · · · ·
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 Vo Depth (inches	
Water Table Present? Yes Vo Depth (inches	
Saturation Present? Yes V No Depth (inches	S): 0 Wetland Hydrology Present? Yes V No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
NA	
Remarks:	
Hydrology criteria met.	
Try arology criteria moss	

#### **VEGETATION** (Five Strata) – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft radius		Species?		Number of Dominant Species
1. Pinus taeda	40	Ý	FAC	That Are OBL, FACW, or FAC: 9 (A)
2. Liriodendron tulipifera	50	Y	FACU	(,,
			17100	Total Number of Dominant
3				Species Across All Strata: 15 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 60 (A/B)
6				
	90	= Total Cov		Prevalence Index worksheet:
				Total % Cover of: Multiply by:
50% of total cover: 45	20% of	total cover:	18	OBL species 20 x 1 = 20
Sapling Stratum (Plot size: 15 ft radius				FACW species $42$ $x = 84$
1. Prunus serotina	15	Υ	FACU	115 X Z = 01
2. Liriodendron tulipifera	20	Y	FACU	FAC species 115 x 3 = 345
I Illumina amaguia ama	15	Y	FACW	FACU species 135 x 4 = 540
	15	<u>'</u>	FAC	UPL species $0 \times 5 = 0$
4. Pinus taeda	15	<u> </u>	FAC	Column Totals: 312 (A) 989 (B)
5				(-)
6				Prevalence Index = B/A = 3.17
	65	= Total Cov	er	Hydrophytic Vegetation Indicators:
00.5				1 <u></u>
50% of total cover: <u>32.5</u>	20% of	total cover:	13	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15 ft radius				2 - Dominance Test is >50%
1. Liquidambar styraciflua	40	Υ	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Ulmus americana	20		FACW	4 - Morphological Adaptations (Provide supporting
3. Sambucus canadensis	25	Y	FACU	data in Remarks or on a separate sheet)
		<u></u>		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4. Quercus marlandica	5		NI	- · · · · · · · · · · · · · · · · · · ·
5. Liriodendron tulipifera	15			
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	105	= Total Cov	or	·
50.5				Definitions of Five Vegetation Strata:
50% of total cover: <u>52.5</u>	20% of	total cover:	21	Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius				approximately 20 ft (6 m) or more in height and 3 in.
1. Juncus coriaceus	5	Υ	<b>FACW</b>	(7.6 cm) or larger in diameter at breast height (DBH).
2. Cicuta maculata	15	Y	OBL	<b>_</b>
3. Carex lurida	5	Y	OBL	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
		<u>'</u>		than 3 in. (7.6 cm) DBH.
4. Platanthera clavellata	2		FACW	and the (7.5 only BB).
<sub>5.</sub> Fragaria virginiana	5	Y	FACU	Shrub – Woody plants, excluding woody vines,
6. Acer rubrum	5	Υ	FAC	approximately 3 to 20 ft (1 to 6 m) in height.
7				Harb All barbassaus (non woody) plants including
7				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
8				plants, except woody vines, less than approximately 3
9				ft (1 m) in height.
10				
11.				<b>Woody vine</b> – All woody vines, regardless of height.
	37	= Total Cov	or	
40.5				
50% of total cover: 18.5	20% of	total cover:	7.4	
Woody Vine Stratum (Plot size: 15 ft radius )				
1. Campsis radicans	15	Υ	FAC	
2. Parthenocissus quinquefolia	20	Y	FACU	
		<u> </u>	17100	
3				
4				
5				Undrambutia
	35	= Total Cov	er	Hydrophytic Vegetation
			_	Present? Yes No
50% of total cover: 17.5		total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			
Hydrophytic vegetation criteria met.				

Sampling Point: wnok001f\_w

Depth	Matrix			ox Feature	es1	1 ?	T 4	Demode
(inches) 0-1	Color (moist) 10YR 3/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
			10) (5, 0) (6			<del></del>	sandy	organic muck present
I-8	10YR 4/1	95	10YR 6/6	5	<u> </u>	<u>M</u>	SL	SL - sandy loam
-16	10YR 5/1	95	10YR 5/6	5	<u>C</u>	М	SL	
					-			
	-							
		epletion, RM	=Reduced Matrix, N	IS=Maske	ed Sand Gr	ains.		L=Pore Lining, M=Matrix.
<b>–</b>	Indicators:			(0=)				ators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surfac		ooo (CO) (	AL DA 447		cm Muck (A10) (MLRA 147)
_	pipedon (A2) listic (A3)		Polyvalue B Thin Dark S				148)	Coast Prairie Redox (A16) (MLRA 147, 148)
	en Sulfide (A4)		Loamy Gley			147, 140)	Пр	iedmont Floodplain Soils (F19)
	ed Layers (A5)		✓ Depleted Ma		(1 2)		<u> </u>	(MLRA 136, 147)
_	luck (A10) <b>(LRR N)</b>		Redox Dark		(F6)		<b>□</b> ∨	'ery Shallow Dark Surface (TF12)
	ed Below Dark Surfa		Depleted Da					other (Explain in Remarks)
	ark Surface (A12)		Redox Depr	essions (I	F8)			
_	Mucky Mineral (S1)	(LRR N,	☐ Iron-Manga		ses (F12) (	LRR N,		
	A 147, 148)		MLRA 13				3	
	Gleyed Matrix (S4)		Umbric Surf					licators of hydrophytic vegetation and
_	Redox (S5)		Piedmont FI	•				etland hydrology must be present,
	d Matrix (S6)  Layer (if observed	۹)،	Red Parent	iviateriai (	FZI) (IVILR	A 127, 14	/) un	less disturbed or problematic.
Type: N		u).						
J. —	nches): NA						Hydric Soil	Present? Yes No No
	icries): 147 t						Hydric Soil	Present? Yes No
emarks: F	lydric soils crite	ria met. B	elow 16 inches s	soils are	too wat	erlogged	to pull a sa	mple.



Wetland data point wnok001f\_w facing Northwest



Wetland data point wnok001f\_w facing West



Wetland data point wnok001f\_w soil sample

Project/Site: Dominion Southeast Reliability Project	City/County: Nottaway		Sampling Date: 07/24/2014
Applicant/Owner: Dominion Transmission			Sampling Point:wnok001_u
	Section, Township, Ranç		
Landform (hillsland, tarrage, etc.). hillslape	Local relief (conceys, conve	, none). none	Slone (%). 5-10
Subragion (LRR or MLRA), LRR P Lat. 37.2	7380773	. 78.220486653	Slope (%) Datum, NAD 1983
Subregion (LRR or MLRA): LRR P Lat: 37.2  Soil Map Unit Name: Appling angular cobbly sandy loam, rol	lling phase		NA
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil, or Hydrology signs of the second	gnificantly disturbed? Are "N	lormal Circumstances" p	resent? Yes No
Are Vegetation, Soil, or Hydrology na	aturally problematic? (If nee	ded, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling point lo	cations, transects,	, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No			
Hydric Soil Present? Yes No	is the Sampled A		/
Wetland Hydrology Present? Yes No	within a Wetland	i? fes	No
Remarks:			
Photos 104-4586 soil, 4587 n, 4588 s (J. Sweitzer Camera)			
	and former		
Upland plot established on hillslope in mixed secondary gro	wtn forest.		
HYDROLOGY			
Wetland Hydrology Indicators:		-	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all the		Surface Soil (	` '
<u> </u>	Aquatic Plants (B14)		etated Concave Surface (B8)
	ogen Sulfide Odor (C1)	Drainage Pat	
	zed Rhizospheres on Living Roots		
<u> </u>	ence of Reduced Iron (C4)	-	Nater Table (C2)
<u> </u>	nt Iron Reduction in Tilled Soils (C6	· —	
	Muck Surface (C7)		sible on Aerial Imagery (C9) ressed Plants (D1)
<u> </u>	r (Explain in Remarks)	<del></del>	
Iron Deposits (B5)		Geomorphic   Shallow Aqui	
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		-	phic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	` '
Field Observations:		I AC-Neutiai	1 est (D3)
Surface Water Present? Yes No ✓ _ Dep	th (inches):		
Water Table Present? Yes No _✓ Dep			
Saturation Present? Yes No _ ✓ Dep	<b>.</b>	land Hydrology Presen	t? Yes No_ ✓
(includes capillary fringe)		,	
Describe Recorded Data (stream gauge, monitoring well, a NA	erial photos, previous inspections),	if available:	
Remarks:			
No indicators of wetland hydrology.			
, , , , , , , , , , , , , , , , , , , ,			

Sampling Point: wnok001_	Sampling	Point:	wnok001	_u
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20 ft D	Absolute	Dominant In	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft R )		Species?	<u>Status</u>	Number of Dominant Species
1. Pinus taeda	80	Y	FAC	That Are OBL, FACW, or FAC:4 (A)
2. Liriodendron tulipifera	20	N	FACU	Total Number of Dominant
3. Liquidambar styraciflua	10	N	FAC	Species Across All Strata: 6 (B)
4. Juniperus virginiana	5	N	FACU	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cove		
50% of total cover:58	20% of	total cover:_	23	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft R				FACW species x 2 =
1. Liriodendron tulipifera	40	<u>Y</u>	FACU	FAC species x 3 =
2. Acer rubrum	30	<u> </u>	FAC	FACU species x 4 =
3. Liquidambar styraciflua	20	N	FAC	UPL species x 5 =
4. Ulmus rubra	5	N	FAC	Column Totals: (A) (B)
5. Alnus incana	10	N	FACU	
6. Ulmus alata	10	N	FACU	Prevalence Index = B/A =
7 Prunus avium	5	N	UPL	Hydrophytic Vegetation Indicators:
8.				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
ы <u></u>	120	T-1-1-0		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 60		= Total Cover total cover:	~ 4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
56 % St total 66 (61)	20% 01	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 511 R )  1. Carex sp. (fruiting bodies absent)	5	Y	NI	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
3				¹Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
_				Definitions of Four Vegetation Strata:
				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
		= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:3	20% of	total cover:_	1	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 Ft R )				height.
1. Campsis radicans	10	Y	FAC	
2. Lonicera japonica	10	Y	FAC	
3. Smilax bona-nox	5	Υ	FACU	
4.				
5.				Hydrophytic Vegetation
•-	25	Total Cove		Present? Yes No
50% of total cover: 13		total cover:_	_	
557,7 51 15141 557511		total cover		
Remarks: (Include photo numbers here or on a separate s	neet.)			
Vegetation passes dominance test.				

Sampling Point: wnok001\_u

	cription: (Describe t	o the dep				or confirm	the absence	of indicato	ors.)		
Depth (in a land)	Matrix	0/	Redo	x Features		12	T 4		D		
(inches) 0-18	Color (moist) 2.5Y 6/3	<del>%</del> 100	Color (moist) NA	 NA	Type <sup>1</sup> NA	Loc <sup>2</sup>	Texture loamy Sand	w/gravel	Remark	<u>(S</u>	
<u>U-10</u>	2.51 0/3		<u> </u>	- INA	- NA	- INA		w/graver			
											<del></del>
<sup>1</sup> Type: C=Ce	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location: Pl	L=Pore Lini	ng, M=Matr	ix.	
Hydric Soil	Indicators:						Indica	itors for Pr	oblematic	Hydric So	ils³:
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A	410) <b>(MLR</b>	A 147)	
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	ILRA 147,	<b>148)</b> C	oast Prairie	Redox (A1	6)	
	stic (A3)		Thin Dark Su				· —	(MLRA 14	7, 148)	·	
	en Sulfide (A4)		Loamy Gleye				P		odplain So	ils (F19)	
	d Layers (A5)		Depleted Ma		,			(MLRA 13			
	ıck (A10) <b>(LRR N)</b>		Redox Dark		6)		v	ery Shallow	Dark Surfa	ace (TF12)	
	d Below Dark Surface	(A11)	Depleted Dar						in in Remar		
Thick Da	ark Surface (A12)		Redox Depre	ssions (F	8)						
Sandy M	lucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	es (F12) (	LRR N,					
MLRA	A 147, 148)		MLRA 13								
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) (	MLRA 13	6, 122)	<sup>3</sup> Ind	icators of hy	ydrophytic v	egetation	and
	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	<b>l8)</b> we	tland hydro	logy must b	e present,	
Stripped	Matrix (S6)		Red Parent N	/laterial (F	21) <b>(MLR</b>	A 127, 147	7) unl	ess disturb	ed or proble	ematic.	
Restrictive I	Layer (if observed):										
Type: NA	4										
Depth (inc	ches): NA						Hydric Soil	Present?	Yes	No	✓
Remarks:	,										
	of hydric soils observ	rod									
INO IIIUICALOIS	of flydric soils observ	eu.									



Upland data point wnok001\_u facing North



Upland data point wnok001\_u facing South



Upland data point wnok001\_u soil sample

Project/Site: Dominion Souther	ast Reliability Project	City/C	county: Nottoway		Sampling Date: 07/25/2014
Applicant/Owner: Dominion Tr					Sampling Point: wnok002f_w
Investigator(s): J. Sweitzer, W.		Section	on, Township, Range: NA	<u></u>	
Land (and (b))	toe-of-slope	Secur	on, rownship, Kange	. seep	Olara (01) 0-5
Landform (hillslope, terrace, etc Subregion (LRR or MLRA): LR	C.):	Local reli	et (concave, convex, none 78 21	4036060	Slope (%):
Subregion (LRR or MLRA):	Lat:		Long: 70.21	+030009	Datum: NAD 1909
Soil Map Unit Name: Enon-Va	nce-Heiena solls, erodeo	a rolling		NWI classific	eation: PFOTB
Are climatic / hydrologic conditi	ions on the site typical fo	or this time of year? Y	res No (If	no, explain in R	emarks.)
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal C	Circumstances" p	oresent? Yes No
Are Vegetation, Soil				plain any answe	
					, important features, etc.
Hydrophytic Vegetation Prese Hydric Soil Present?	Yes <u>√</u>	No	Is the Sampled Area within a Wetland?	Yes✓	No
Wetland Hydrology Present?	Yes <u> </u>	_ No			
Remarks: Photos 104-4589 soil, 4590 e, Wetland point established in to		,	Wetland also associated w	vith stream SNO	K002.
HYDROLOGY					
Wetland Hydrology Indicato	ors:		S	Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is required; checl	call that apply)		Surface Soil	Cracks (B6)
✓ Surface Water (A1)	_	True Aquatic Plants (	B14) _	Sparsely Ve	getated Concave Surface (B8)
✓ High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa	tterns (B10)
✓ Saturation (A3)			• , -	Moss Trim L	
Water Marks (B1)		Presence of Reduced	, ,	-	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio	· · ·	Crayfish Bur	
Drift Deposits (B3)		Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	Other (Explain in Rer			tressed Plants (D1)
Iron Deposits (B5)			<u>-</u>	✓ Geomorphic	
Inundation Visible on Aer			-	Shallow Aqu	
✓ Water-Stained Leaves (B	i9)		-		aphic Relief (D4)
Aquatic Fauna (B13)			<u>-</u>	FAC-Neutral	Test (D5)
Field Observations:	,	0	11		
Surface Water Present?	Yes No		1-1		
Water Table Present?	Yes No		10		
Saturation Present?	Yes No	Depth (inches):	0 Wetland Hy	drology Preser	nt? Yes No
(includes capillary fringe)  Describe Recorded Data (streen NA	eam gauge, monitoring v	vell, aerial photos, pre	vious inspections), if availa	able:	
Remarks:					
Several primary and secondar	rv hvdrology indicators o	bserved. Hydrology c	riteria met.		
· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,			

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

50% of total cover: <u>48</u>

50% of total cover: \_\_\_13

50% of total cover: \_\_ 30 Ft R )

50% of total cover: \_\_

5 ft R

15 ft R

30 ft R

Tree Stratum (Plot size:

Liriodendron tulipifera

<u>Sapling/Shrub Stratum</u> (Plot size: 1 Liriodendron tulipifera

Quercus velutina

Acer rubrum

2. Alnus serrulata

3. Asimina triloba

4. Carya glabra

Bidens sp.

Microstegium vimineum

Persicaria pensylvanica Impatiens capensis

Lycopus americanus

Absolute Dominant Indicator

% Cover Species? Status

Υ

Ν

= Total Cover

\_ 20% of total cover:\_\_\_19

25 = Total Cover

Ν

\_\_\_\_\_\_ 54 \_\_ = Total Cover 27 \_\_\_\_ 20% of total cover:\_\_\_ 11

> 15 = Total Cover 20% of total cover:

20% of total cover:\_\_\_

FAC

**FACU** 

NL

**FACU** 

OBL

FACU

FACU

**FACW** 

FAC

FACW

FACW

NI

OBL

FAC FAC

50

15

10

5

5

15

25

5

2

2

5

	Consultana Doi:	-+. wnok002f w	ı
	Sampling Poir	nt:	
	Dominance Test worksheet:		
-	Number of Dominant Species That Are OBL, FACW, or FAC:	6	(A)
-	Total Number of Dominant Species Across All Strata:	10	(B)
-	Percent of Dominant Species That Are OBL, FACW, or FAC:	60	(A/B)
-	Prevalence Index worksheet:		
-	Total % Cover of:	Multiply by:	
	OBL species x 1		
-	FACW species x 2	•	
	FAC species x 3		
-			
-	FACU species x 4		
-		i =	
-	Column Totals: (A)		_ (B)
-	Prevalence Index = B/A =		_
-	Hydrophytic Vegetation Indicate	ors:	
-	1 - Rapid Test for Hydrophyti	c Vegetation	
-	✓ 2 - Dominance Test is >50%		
-	3 - Prevalence Index is ≤3.0 <sup>1</sup>		
	4 - Morphological Adaptations	s <sup>1</sup> (Provide sup	portina
-	data in Remarks or on a s		
,	Problematic Hydrophytic Veg	•	n)
-	<u> </u>		,
	<sup>1</sup> Indicators of hydric soil and wetla be present, unless disturbed or pr	and hydrology noblematic.	nust
-	Definitions of Four Vegetation S	Strata:	
	Tree – Woody plants, excluding v more in diameter at breast height height.	ines, 3 in. (7.6 d (DBH), regardle	cm) or ess of
	<b>Sapling/Shrub</b> – Woody plants, ethan 3 in. DBH and greater than om) tall.		
-	<b>Herb</b> – All herbaceous (non-wood of size, and woody plants less that		dless
-	<b>Woody vine</b> – All woody vines gr height.	eater than 3.28	ft in
-			
_			
	Hydrophytic Vegetation Present?  Yes  ✓	No	
_			

Remarks:	(Include photo	numbers here of	or on a separate sheet.)	)
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Vegetation passes dominance test.

Woody Vine Stratum (Plot size: \_

Campsis radicans

Smilax rotundifolia

Sampling Point: wnok002f\_w

Depth	Matrix			x Features	<del>.</del> + 1	1 2	<b>-</b> .		5 .	
(inches)	Color (moist)	- <u>%</u> 75	Color (moist) 7.5YR 4/6	- <u>%</u> 25	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-6	10YR 4/1		7.518 4/6		C	PL	sandy Loam			
6-15	2.5Y 5/1	90	10YR 4/6	10	С	M	sandy Loam			
15-20	2.5Y 5/1	25	5YR 4/6	75	С	М	sandy Loam			
								-		
	-									
Type: C=C	Concentration, D=Dep	letion. RM	=Reduced Matrix. M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: Pl		ng, M=Matrix.	
	Indicators:	,	, , , , , , , , , , , , , , , , , , , ,				Indica	tors for Pr	oblematic Hy	dric Soils <sup>3</sup> :
_ Histoso			Dark Surface	e (S7)					410) <b>(MLRA 1</b>	
	Epipedon (A2)		Polyvalue Be		e (S8) <b>(N</b>	ILRA 147,			Redox (A16)	,
	Histic (A3)		Thin Dark S		. , .		· —	(MLRA 14	, ,	
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (F	<del>-</del> 2)		P	iedmont Flo	oodplain Soils	(F19)
_ Stratifie	ed Layers (A5)		✓ Depleted Ma	atrix (F3)				(MLRA 13	6, 147)	
	luck (A10) <b>(LRR N)</b>		Redox Dark	•	,				/ Dark Surface	
	ed Below Dark Surfac	e (A11)	Depleted Da				_ °	ther (Expla	in in Remarks)	)
	Dark Surface (A12)		Redox Depr	•						
	Mucky Mineral (S1) (I	LRR N,	Iron-Mangar		es (F12) <b>(</b>	LRR N,				
	(A 147, 148)		MLRA 13	-	MI DA 42	e 422\	31 m d	inatara of bu	, dramb, tia, , , a	atation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa						ydrophytic veg logy must be p	
	d Matrix (S6)		Red Parent						ed or problema	
	Layer (if observed):	:				,	1		оч от ресои	
Type: N										
	nches): NA						Hydric Soil	Prosent?	Yes✓	No
							Tiyane oon	1 10301111	163	
lemarks:	or of budgio opile most	Danlatad n	motrice (F2)							
ne indicato	or of hydric soils met:	Depleted r	natrix (F3).							



Wetland data point wnok002f\_w facing East



Wetland data point wnok002f\_w facing West



Wetland data point wnok002f\_w soil sample

Project/Site: Dominion Southeast Reliability Project	City/County: Nottoway Sampling Date: 07/25/2014
Applicant/Owner: Dominion Transmission	State: VA Sampling Point: wnok002_u
Investigator(s): J. Sweitzer, W. Medlin Section, Township, Range: NA	
	ocal relief (concave, convex, none): none Slope (%): 5-10
Subregion (LRP or MLRA). LRR P Lat. 37.27123373	1 Long: 78.214053868 Datum: NAD 1983
Call Mars Unit Names Helena fine sandy loam, eroded rolling phase	Long Datum.
Soil Map Unit Name: Helena fine sandy loam, eroded rolling phase  NWI classification: NA  Are climatic / hydrologic conditions on the site typical for this time of year? Yes   No (If no, explain in Remarks.)	
	y 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 ✓	Is the Sampled Area within a Wetland? Yes No✓
Wetland Hydrology Present? Yes No _ ✓	- within a Wetland? Yes No
Remarks:	
Photos 104-4593 soil, 4594 n, 4595 s (J. Sweitzer Camera)	
Unland plat actablished an billelene in desidueur ferset	
Upland plot established on hillslope in deciduous forest.	
HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) True Aquatic F	
High Water Table (A2)  High Water Table (A2)  Hydrogen Sulf	
	ospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of R	· · · · · · · · · · · · · · · · · · ·
<u> </u>	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Sur	
Algal Mat or Crust (B4) Other (Explain	
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	s):
Saturation Present? Yes No ✓ Depth (inches	s): Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photometric photometric production of the control	os previous inspections) if available:
NA	os, previous inspections), il available.
Remarks:	
No indicators of wetland hydrology.	

Sampling	Point:	wnok002_	_u
Sambiinu	Pom		-~

00 % D	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:30 ft R)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1. Nyssa sylvatica	20	N	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Liriodendron tulipifera	85	<u> </u>	FACU	Total Number of Deminent
3. Liquidambar styraciflua	10	N	FAC	Total Number of Dominant Species Across All Strata:  10 (B)
4. Quercus alba	5	N	FACU	
5. Carya glabra	5	N	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:  50 (A/B)
6 Acer rubrum	15		FAC	That Are OBL, FACW, or FAC: (A/B)
7 Ulmus rubra	5		FAC	Prevalence Index worksheet:
1	145	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 73	$-\!\!-\!\!-\!\!-$	- Total Cove total cover:	29	OBL species x 1 =
	20 /6 01	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 ft R )  Carya glabra	5	N	FACU	FAC species x 3 =
2. Carpinus caroliniana	10	<u> </u>	FAC	FACU species x 4 =
	10	<u> </u>		
3. Quercus rubra			FACU	UPL species x 5 =
4. Juniperus virginiana	10	<u> </u>	FACU	Column Totals: (A) (B)
5. Asimina triloba	15	<u>Y</u>	FAC	Prevalence Index = B/A =
6. Quercus alba	10	<u> </u>	FACU	Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9				2 - Dominance Test is >50%
	60	= Total Cove	-	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:30		total cover:_	12	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5 ft R )				data in Remarks or on a separate sheet)
1 Polystichum acrostichoides	2	Υ	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Dioscorea villosa	2	<u>Y</u>	FAC	
5:1 " " 1 1 "		<u> </u>	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Dichanthelium ciandestinum  A Desmodium nudiflorum		<u> </u>	NI NI	be present, unless disturbed or problematic.
4. Desinodium nuamorum				Definitions of Four Vegetation Strata:
5				
•				Troe Mondy plants evaluding vince 2 in (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
6				more in diameter at breast height (DBH), regardless of height.
6				more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less
6				more in diameter at breast height (DBH), regardless of height.
6				more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
6		= Total Cove		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless
6		= Total Cove	_	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6	$\overline{}$	= Total Cove	_	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	$\overline{}$		_	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6	20% of	total cover:_	2	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	20% of	total cover:_	2	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	20% of 5	total cover:_	2	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	20% of 5	total cover:_	2	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	5 5	total cover:_	2	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5	total cover:_	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6	5 5	Y Y	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5 5	Y Y = Total Cove	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5 5	Y Y = Total Cove	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5 5	Y Y = Total Cove	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5 5	Y Y Total Cover:_	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5 5	Y Y Total Cover:_	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5 5	Y Y Total Cover:_	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5 5	Y Y Total Cover:_	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	5 5	Y Y Total Cover:_	FAC	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation

Sampling Point: wnok002\_u

SOIL

Profile Desc	ription: (Describe t	o the dep	th needed to docur	nent the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix		Redo	x Features	3		
(inches)	Color (moist)	%	Color (moist)	<u> </u>	_Type <sup>1</sup>	_Loc <sup>2</sup>	
0-3	10YR 3/2	100	NA	NA	NA	NA	fine sandy loam w/organic material
3-6	10YR 4/3	75	10YR 6/3	25	С	M	fine sandy loam w/ organic material
6-18	10YR 5/3	40	NA	NA	NA	NA	fine sandy loam w/gravel
	10YR 6/4	60	NA	NA	NA	NA	fine sandy loam w/gravel
						· ——	
			-				
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	e (S7)			2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	/ILRA 147,	
	stic (A3)		Thin Dark Su	ırface (S9)	(MLRA 1	147, 148)	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye				Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			(MLRA 136, 147)
2 cm Mu	uck (A10) (LRR N)		Redox Dark	Surface (F	6)		Very Shallow Dark Surface (TF12)
Deplete	d Below Dark Surface	(A11)	Depleted Da	rk Surface	(F7)		Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre				
	lucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangan	ese Masse	es (F12) <b>(</b>	LRR N,	
MLR	A 147, 148)		MLRA 13	6)			
	Gleyed Matrix (S4)		Umbric Surfa				<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo				
	l Matrix (S6)		Red Parent N	Material (F	21) <b>(MLR</b>	A 127, 147	7) unless disturbed or problematic.
	Layer (if observed):						
Type: NA							
Depth (in	ches): NA						Hydric Soil Present? Yes No
Remarks:							
No indicators	of hydric soils observ	red					
	o, a co c	· · · · · · · · · · · · · · · · · · ·					



Upland data point wnok002\_u facing North



Upland data point wnok002\_u facing South



Upland data point wnok002\_u soil sample

Project/Site: Dominion Southeas	st Reliability Project	City/C	county: Nottoway		Sampling Date: 07/26/2014
Applicant/Owner: Dominion Tran				State: VA	Sampling Point: wnok004e_w
Investigator(s): J. Sweitzer, W. M.		Section	on, Township, Range: N		
Landform (hillslope, terrace, etc.)					Slope (%): 0-5
Subregion (LRR or MLRA): LRR	P Lat:	37.266592438	Long. 78.1	97822942	Datum: NAD 1983
Soil Map Unit Name: Wickham fi	ine sandy loam		Long	NIMI classifi	Battini
Are climatic / hydrologic condition		this time of year? V			<u> </u>
					present? Yes No
Are Vegetation, Soil			•	explain any answ	,
SUMMARY OF FINDING	S – Attach site ma	ap snowing sam	ipling point location	ons, transects	s, important features, etc.
Hydrophytic Vegetation Presen			Is the Sampled Area		
Hydric Soil Present?	Yes <u>√</u>	. No	within a Wetland?	Yes✓	No
Wetland Hydrology Present?	Yes <u> </u>	No			
Remarks:					
Photos 100-0267 to 0270 (W. M.	,	nnoore to hove been	constructed to drain the	adiacont ailvioult	ural areas (lablally pins
This area is a small linear wetland plantation). All 3 criteria are me	, ,	ppears to have been	constructed to drain the	adjacent silvicuit	ural areas (lobiolly pine
plantation). 7 th o ontona are me					
HADBOLOGA					
HYDROLOGY Wetland Hydrology Indicators	e·			Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of		all that annly)		•	I Cracks (B6)
Surface Water (A1)	-	True Aquatic Plants (	R14)	· · · · · · · · · · · · · · · · · · ·	egetated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa	
Saturation (A3)			es on Living Roots (C3)	Moss Trim I	
Water Marks (B1)		Presence of Reduced	= : :		Water Table (C2)
Sediment Deposits (B2)	·		n in Tilled Soils (C6)	✓ Crayfish Bu	, ,
Drift Deposits (B3)	<del></del>	Thin Muck Surface (C			/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer			Stressed Plants (D1)
Iron Deposits (B5)	<del>_</del>		,		Position (D2)
Inundation Visible on Aeria	l Imagery (B7)			Shallow Aqu	
Water-Stained Leaves (B9)	• • • •				raphic Relief (D4)
Aquatic Fauna (B13)	,			✓ FAC-Neutra	
Field Observations:					· ·
	Yes No _ <b>✓</b>	Depth (inches):	<del>)-1</del>		
Water Table Present?	Yes No _ <b>✓</b> _	Depth (inches):1	10		
	Yes ✓ No	Depth (inches):	0 Wetland I	Hydrology Prese	nt? Yes <u>√</u> No
(includes capillary fringe)  Describe Recorded Data (strea	m gauge, monitoring we	ell, aerial photos, pre	vious inspections), if ava	nilable:	
NA					
Remarks:					
Several primary and secondary	hydrology indicators ob	served. Hydrology ci	riteria met.		

Sampling	Point:	wnok004e_	_w
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	Absolute	Dominant I	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30 ft R )	% Cover	Species?		Number of Dominant Species
1. <i>NA</i>				That Are OBL, FACW, or FAC:6 (A)
2.				(,,
				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5	_			That Are OBL, FACW, or FAC:  (A/B)
6				That / No OBE, 1 / No VV, 01 1 / No (/ VB)
7				Prevalence Index worksheet:
I				Total % Cover of: Multiply by:
		= Total Cove		
50% of total cover:	20% of	total cover:_		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft R )				FACW species x 2 =
1. <i>NA</i>				FAC species x 3 =
•				FACU species x 4 =
2				UPL species x 5 =
3	-			
4				Column Totals: (A) (B)
5				Developed Index DA
6				Prevalence Index = B/A =
	-			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cove	r	
50% of total cover:				4 - Morphological Adaptations (Provide supporting
5 # D				data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)  Lutrochium fistulosum	10	Υ	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Juncus effusus	10		FACW	
2. Scirpus atrovirens	10	<u>Y</u>	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
J				be present, unless disturbed or problematic.
4. Juncus coriaceus	5	N	FACW	Definitions of Four Vegetation Strata:
5. Carex Iurida	10	Υ	OBL	Johnson Cri Gui Vogotation Guatai
6. Arisaema triphyllum	2		FACW	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
7 Dichanthelium clandestinum			FAC	more in diameter at breast height (DBH), regardless of
·	2			height.
8. Lycopus americanus		N	OBL	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.
44	-			
11. <u> </u>				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:26	20% of	total cover:_	10	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 Ft R )				height.
1 Lonicera japonica	15	Υ	FAC	inolginii
2 Parthenocissus quinquefolia	10	Y	FAC	
	-			
3	-			
4				Hydrophytic
5.				Vegetation
	25	= Total Cove		Present? Yes Vo No
50% of total cover:13		total cover:_	_	
		total cover		
Remarks: (Include photo numbers here or on a separate	sheet.)			
Vegetation passes dominance test.				

Sampling Point: wnok004e\_w

	Matrix	0/		ox Features		1 2	<b>-</b> .			
(inches)	Color (moist)	<u>%</u> %5	Color (moist) 7.5YR 4/6	_ <u>%</u> 	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-7	10YR 4/2	85 ———	7.51R 4/6			PL	sandy Loam			
7-20	2.5Y 5/2	60	5YR 5/6	40	С	M	sandy Loam			
					-					
			•							
		- ——								
Lvbe. C=C	Concentration, D=Dep	letion RM	I=Reduced Matrix M	S=Masked	Sand Gra	nins	<sup>2</sup> l ocation: P	I =Pore I in	ing, M=Matrix	
	Indicators:	nouon, rav	Troduced Matrix, IV	- Macked	ouria ore		Indica	tors for P	roblematic H	ydric Soils <sup>3</sup> :
Histosol			Dark Surfac	e (S7)					A10) <b>(MLRA</b>	
	pipedon (A2)		Polyvalue B		e (S8) <b>(N</b>	ILRA 147.			e Redox (A16	
	listic (A3)		Thin Dark S					(MLRA 14		,
	en Sulfide (A4)		Loamy Gley				P	iedmont Fl	oodplain Soils	s (F19)
Stratifie	d Layers (A5)		✓ Depleted Ma	atrix (F3)				(MLRA 13	36, 147)	
2 cm Mi	uck (A10) (LRR N)		Redox Dark	Surface (F6	3)			-	v Dark Surfac	
	ed Below Dark Surfac	e (A11)	Depleted Da				<u> </u>	ther (Expla	in in Remark	s)
	ark Surface (A12)		Redox Depr	•	•					
	Mucky Mineral (S1) (	LRR N,	Iron-Mangar		s (F12) (	_RR N,				
	A 147, 148)		MLRA 13	•			3			
	Gleyed Matrix (S4)		Umbric Surf						ydrophytic ve	
	Redox (S5) d Matrix (S6)		Piedmont FI Red Parent						ology must be sed or problen	
	Layer (if observed)		Red Parent	ivialeriai (F2	21) (WILK	A 127, 147	) un	ess distuit	eu or problem	nauc.
coetrictivo	Layer (ii observed)	•								
	Α								,	
Type: N			<del></del>				11	D	V /	
Type: N/Depth (in	A nches): NA						Hydric Soil	Present?	Yes <u>√</u>	No
Type: N/ Depth (in							Hydric Soil	Present?	Yes <u> </u>	NO
Type: N/ Depth (in Remarks:		Depleted r	matrix (F3).				Hydric Soil	Present?	Yes <u>√</u>	NO
Type: N/ Depth (in temarks:	nches): NA	Depleted r	natrix (F3).				Hydric Soil	Present?	Yes <u>√</u>	NO
Type: N/ Depth (in emarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	Yes <u>√</u>	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in temarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	Yes <u>√</u>	NO
Type: N/ Depth (in temarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	Yes <u>√</u>	NO
Type: N/ Depth (in temarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in emarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in emarks:	nches): NA	Depleted r	natrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	natrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	Yes	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	YesV	NO
Type: N/ Depth (in Remarks:	nches): NA	Depleted r	matrix (F3).				Hydric Soil	Present?	Yes	NO



Wetland data point wnok004e\_w facing East



Wetland data point wnok004e\_w facing West



Wetland data point wnok004e\_w soil sample

Project/Site: Dominion Southeast Reliability Project	City/County: Nottoway		Sampling Date: 07/26/2014		
Applicant/Owner: Dominion Transmission		State: VA	_ Sampling Point: wnok004_u		
	Section, Township, Range: NA				
Landform (hillslope, terrace, etc.): hillslope			Slope (%): <sup>0-5</sup>		
Subregion (LRR or MLRA): LRR P Lat: 37.26649	4528 Long: 78.1	97800055	Datum: NAD 1983		
Subregion (LRR or MLRA): LRR P Lat: 37.26649 Soil Map Unit Name: Wickham fine sandy loam		NWI classifica	ntion: NA		
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes ✓ No (	(If no, explain in Re	marks.)		
Are Vegetation, Soil, or Hydrology signific	antly disturbed? Are "Normal	Circumstances" pr	esent? Yes <u>√</u> No		
Are Vegetation, Soil, or Hydrology natura	lly problematic? (If needed, e	explain any answers	s in Remarks.)		
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locatio	ns, transects,	important features, etc.		
Hydrophytic Vegetation Present? Yes✓ No	Is the Sampled Area				
Hydric Soil Present? Yes No	within a Wetland?	Yes	_ No✓		
Wetland Hydrology Present? Yes No	<u>′</u>				
Remarks:					
Photos 104-4612 N, 4613 S, 4614 E, 4615 W, 4616 soils (J. Swe	eitzer Camera)				
Upland plot established hillslope in Pinus taeda plantation.					
HYDROLOGY					
Wetland Hydrology Indicators:		-	ors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that a		Surface Soil C	Cracks (B6)		
	atic Plants (B14)	Sparsely Vegetated Concave Surface (B8)			
	Sulfide Odor (C1)	Drainage Patt			
<u> </u>	Rhizospheres on Living Roots (C3)	Moss Trim Lir			
<u> </u>	of Reduced Iron (C4)	Dry-Season Water Table (C2)			
<u> </u>	on Reduction in Tilled Soils (C6)	Crayfish Burro			
	Surface (C7)		ible on Aerial Imagery (C9)		
<u> </u>	plain in Remarks)		essed Plants (D1)		
Iron Deposits (B5)		Geomorphic F			
Inundation Visible on Aerial Imagery (B7)		Shallow Aquit	` '		
Water-Stained Leaves (B9)			phic Relief (D4)		
Aquatic Fauna (B13)		FAC-Neutral	l est (D5)		
Field Observations:  Surface Water Present?  Yes No✓ Depth (in	ohos):				
Water Table Present? Yes No _ ✓ Depth (in					
Saturation Present? Yes No ✓ Depth (in		lydrology Present	? Yes No_ ✓		
(includes capillary fringe)	wettand n	iyarology Present	: 162 NO		
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if avai	ilable:			
NA .					
Remarks:					
No indicators of wetland hydrology.					

Sampling	Point:	wnok004_	_u

, ,	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30 ft R)		Species?		
1 Pinus taeda	60	Υ	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
''				That Are OBL, FACW, or FAC:4 (A)
2				Total Number of Dominant
3				Species Across All Strata: 7 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)
	-			That Are Obl., FACW, or FAC (A/b)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		
50% of total cover: 30	20% of	total cover:	12	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft R )				FACW species x 2 =
1 Pinus taeda	80	Υ	FAC	FAC species x 3 =
2. Juniperus virginiana	15	N	FACU	FACU species x 4 =
3. Rubus argutus	15		FACU	UPL species x 5 =
4. Liriodendron tulipifera	5	N	FACU	Column Totals: (A) (B)
5				B 1 1 1 8/A
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				1 <del></del>
	115	= Total Cov	er	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:58		total cover:		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
		10101 00101.		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)  Asplenium platyneurons	5	N	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
- 1				
2. Desmodium nudiflorum	5	N	NL	The discretion of the other control of the other terms of the other te
3. Dichanthelium clandestinum	10	Υ	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Rudbeckia hirta	2	N	FACU	
5 Viola sp.			NI	Definitions of Four Vegetation Strata:
·	15	<u> </u>	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Andropogon virginicus		<u> </u>	FACU	more in diameter at breast height (DBH), regardless of
7				height.
8.				
0				Sapling/Shrub – Woody plants, excluding vines, less
ÿ				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
	80	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 40	20% of	total cover:	16	l
Woody Vine Stratum (Plot size: 30 Ft R )	_	•		<b>Woody vine</b> – All woody vines greater than 3.28 ft in
1 Campsis radicans	10	Υ	FAC	height.
Vitia agativalia	25	<u>Y</u>	FACU	
۷				
3. Parthenocissus quinquefolia	10	<u>Y</u>	FACU	
4.				l
5.				Hydrophytic
J	45			Vegetation   Present?
	$\overline{}$	= Total Cov	_	resent: res No
50% of total cover: 23	20% of	total cover:	9	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Vegetation passes dominance test.				
•				

Sampling Point: wnok004\_u

SOIL

Profile Des	cription: (Describe t	to the de	oth needed to docur	ment the i	ndicator	or confir	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-3	10 YR 3/2	50	NA	NA_	NA_	NA	SL	Fine sandy loam
	10YR 4/4	50	NA	NA_	NA	NA_	SL	mixed matrix with organic material
3-18	10YR 4/4	80	NA	NA	NA	NA	SL	some gravel
	2.5Y 7/4	20	NA	NA	NA	NA	loamy Sand	some gravel
	· <del></del>							
					-	·		
1 <sub>Tyma</sub> ; C=C	Concentration D-Dani	ation DM	I=Daduaad Matrix M		L Cand Cr		<sup>2</sup> l coation: Di	L-Dara Lining M-Matrix
	Concentration, D=Depl Indicators:	etion, Riv	I=Reduced Matrix, M	S=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	(97)				cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	NI RA 147		oast Prairie Redox (A16)
	listic (A3)		Thin Dark Su				, 140, 0	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, ,	Р	iedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Ma		– /		_	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		6)		V	ery Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Da					other (Explain in Remarks)
	ark Surface (A12)	` ,	Redox Depre					,
	Mucky Mineral (S1) <b>(L</b>	.RR N,	Iron-Mangan	•		LRR N,		
	A 147, 148)		MLRA 13					
	Gleyed Matrix (S4)		Umbric Surfa	ace (F13) (	MLRA 13	6, 122)	<sup>3</sup> Ind	icators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					tland hydrology must be present,
	d Matrix (S6)		Red Parent I					less disturbed or problematic.
Restrictive	Layer (if observed):							
Type: <u>N</u>	A							
Depth (in	nches): NA						Hydric Soil	Present? Yes No
Remarks:							•	
No indicators	s of hydric soils obser	ved.						



Upland data point wnok004\_u facing North



Upland data point wnok004\_u facing South



Upland data point wnok004\_u soil sample

Project/Site: Dominion Southeast Reliability Project	City/County: Nottoway	Sa	ampling Date: 07/26/2014
Applicant/Owner: Dominion Transmission			Sampling Point: wnok003e_w
	Section, Township, Range: NA		. 0
Landform (hillslope, terrace, etc.): toe-of-slope and floodplain		e): none	Slope (%): <sup>0-5</sup>
Subregion (LRR or MLRA): LRR P Lat: 37.26	55567440 Long. 78.19	6272184	Datum. NAD 1983
Soil Map Unit Name: Mixed Alluvial Land (Mn)	Long.	NWI classification	on. PEM1A
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil, or Hydrology sig			
Are Vegetation, Soil, or Hydrology na SUMMARY OF FINDINGS – Attach site map s		oplain any answers i ns. transects. i	,
		,	
	Is the Sampled Area		
	within a Wetland?	Yes <u>√</u>	No
Wetland Hydrology Present? Yes   ✓ No.  Remarks:	<del></del>		
Photos 100-0250 N, 100-0251 E, 100-0252 S, 100-0253 W,	100 0254 soil (W. Modlin Camora)		
Piedmont floodplain depression that floods frequently for lon	,	ntly planted w/corn.	and wetter areas are not
allowing the corn to grow well. This wetland system continue	_	• •	
HYDROLOGY			
Wetland Hydrology Indicators:	9	Secondary Indicator	s (minimum of two required)
Primary Indicators (minimum of one is required; check all the	at apply)	Surface Soil Cra	acks (B6)
Surface Water (A1) True A	Aquatic Plants (B14)	Sparsely Vegeta	ated Concave Surface (B8)
High Water Table (A2) Hydro	gen Sulfide Odor (C1)	Drainage Patter	ns (B10)
Saturation (A3) Oxidiz	red Rhizospheres on Living Roots (C3)	Moss Trim Line	s (B16)
1 —                                   —	nce of Reduced Iron (C4)	Dry-Season Wa	ater Table (C2)
Sediment Deposits (B2)   ✓ Recei	nt Iron Reduction in Tilled Soils (C6)	Crayfish Burrow	` ,
	Muck Surface (C7)		le on Aerial Imagery (C9)
	(Explain in Remarks)	<del></del>	ssed Plants (D1)
Iron Deposits (B5)	-	✓ Geomorphic Po	` '
Inundation Visible on Aerial Imagery (B7)	-	Shallow Aquitar	` '
Water-Stained Leaves (B9)	-	Microtopograph ✓ FAC-Neutral Te	` ,
Aquatic Fauna (B13)		FAC-Neutral re	St (D5)
Field Observations:  Surface Water Present?  Yes No✓ Dept	h (inches): 0-1		
	l l		
,	<b>.</b>	.dualam. Duaaanto	Vaa 🗸 Na
Saturation Present? Yes No _▼_ Dept (includes capillary fringe)	wetland Hy	drology Present?	Yes ✓ No
Describe Recorded Data (stream gauge, monitoring well, as	erial photos, previous inspections), if avail	able:	
NA Remarks:			
Several primary and secondary hydrology indicators observe	ed Hydrology criteria met		
deveral primary and secondary mydrology indicators observe	a. Hydrology Chena met.		

Sampling	Point:	wnok003e_	_W
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	Absolute	Dominant In		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30 ft R) 1. NA	% Cover	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
500/ 51.1.1	$\overline{}$	= Total Cove		OBL species x 1 =
50% of total cover:	20% of	total cover:_		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 π R )  1 NA				FAC species x 3 =
1				FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4				Column rotals (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% 51.11 13		= Total Cove	r 5	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 13  Horb Stratum (Plot size: 5 ft R	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)  1 Tridens flavis	10	N		Problematic Hydrophytic Vegetation¹ (Explain)
1		N		
Council for a loii	15	<u> </u>	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Carex trankii 4. Symphyotrichum pilosum	15	<u> </u>	FAC	be present, unless disturbed or problematic.
Transpages dubius		N		Definitions of Four Vegetation Strata:
Anabanasia antamaiaifalia	10	N		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Ambrosia artemisirolia 7. Cyperus strigosus		N		more in diameter at breast height (DBH), regardless of
Llumania una mundifla muna	40	<u> </u>	FACW	height.
8. Hypericum nualliorum 9. Rhexia sp	2	N		Sapling/Shrub – Woody plants, excluding vines, less
10. Persicaria pensylvanica		<u>Y</u>	FACW	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
11. Ludwigia alterniflora	2	N		
11. Ladwight diffilmord				Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 60		= Total Cover total cover:_	r 24	of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:30 Ft R)	20 /0 01	total cover		Woody vine – All woody vines greater than 3.28 ft in
1 Campsis radicans	5	Υ	FAC	height.
pomoea lacunosa	5	Y	FACW	
3.				
3				
T				Hydrophytic
<u></u>	10	= Total Cove		Vegetation   Present?
50% of total cover: 5		total cover:_	_	
Remarks: (Include photo numbers here or on a separate sh		total cover		
Vegetation passes dominance test.	icci.)			
vegetation passes dominance test.				

Sampling Point: wnok003e\_w

Depth	Matrix			x Features	<del>.</del> + 1	1 2	<b>-</b> .		5 .	
(inches)	Color (moist)	- <u>%</u> 75	Color (moist) 7.5YR 4/6	- <u>%</u> 25	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-6	10YR 4/1		7.518 4/6		C	PL	sandy Loam			
6-15	2.5Y 5/1	90	10YR 4/6	10	С	M	sandy Loam			
15-20	2.5Y 5/1	25	5YR 4/6	75	С	М	sandy Loam			
								-		
	-									
Type: C=C	Concentration, D=Dep	letion. RM	=Reduced Matrix. M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: Pl		ng, M=Matrix.	
	Indicators:	,	, , , , , , , , , , , , , , , , , , , ,				Indica	tors for Pr	oblematic Hy	dric Soils <sup>3</sup> :
_ Histoso			Dark Surface	e (S7)					410) <b>(MLRA 1</b>	
	Epipedon (A2)		Polyvalue Be		e (S8) <b>(N</b>	ILRA 147,			Redox (A16)	,
	Histic (A3)		Thin Dark S		. , .		· —	(MLRA 14	, ,	
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (F	<del>-</del> 2)		P	iedmont Flo	oodplain Soils	(F19)
_ Stratifie	ed Layers (A5)		✓ Depleted Ma	atrix (F3)				(MLRA 13	6, 147)	
	luck (A10) <b>(LRR N)</b>		Redox Dark	•	,				/ Dark Surface	
	ed Below Dark Surfac	e (A11)	Depleted Da				_ °	ther (Expla	in in Remarks)	)
	Dark Surface (A12)		Redox Depr	•						
	Mucky Mineral (S1) (I	LRR N,	Iron-Mangar		es (F12) <b>(</b>	LRR N,				
	(A 147, 148)		MLRA 13	-	MI DA 42	e 422\	31 m d	inatara of bu	, dramb, tia, , , a	atation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa						ydrophytic veg logy must be p	
	d Matrix (S6)		Red Parent						ed or problema	
	Layer (if observed):	:				,	1		оч от ресои	
Type: N										
	nches): NA						Hydric Soil	Prosent?	Yes✓	No
							Tiyane oon	1 10301111	163	
lemarks:	or of budgio opile most	Danlatad n	motrice (F2)							
ne indicato	or of hydric soils met:	Depleted r	natrix (F3).							



Wetland data point wnok003e\_w facing North



Wetland data point wnok003e\_w facing South



Wetland data point wnok003e\_w soil sample

Project/Site: Dominion Southea	st Reliability Project	City/C	ounty: Nottoway		Sampling Date: 07/26/2014
Applicant/Owner: Dominion Tra					Sampling Point: wnok003f_w
Investigator(s): J. Sweitzer, W.		Section	on, Township, Range: N/		campang r cam
Landform (hillslong torrace etc.	ı. toe-of-slope	L ocal ratio	of (concave, convex, no	no). seep	Slone (%): 0-5
Landform (hillslope, terrace, etc. Subregion (LRR or MLRA): LRF	) R P	Local reli 37 265962792	rei (concave, convex, no	196651125	Slope (%) NAD 1983
Subregion (LRR or MLRA):	vial Land (Mn)	01.200002702	Long:	100001120	Datum: This issue
Soil Map Unit Name: Mixed Allu					
Are climatic / hydrologic condition	ons on the site typical for	this time of year? Y	es No	(If no, explain in R	lemarks.)
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Norma	l Circumstances" p	oresent? Yes <u>√</u> No
Are Vegetation, Soil				explain any answe	
SUMMARY OF FINDING	S – Attach site m	ap showing sam	pling point location	ons, transects	s, important features, etc.
Hydrophytic Vegetation Preser Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes <u>√</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>√</u>	No
Photos 100-0259 to 263 (N,E,S	S.W. Soils)				
This area is a Piedmont floodpl	•	/multiple drainage pat	tterns situated along Ellis	s Creek. All 3 crite	ria met.
HYDROLOGY					
Wetland Hydrology Indicator					ators (minimum of two required)
Primary Indicators (minimum o	•			Surface Soil	
Surface Water (A1)		True Aquatic Plants (			getated Concave Surface (B8)
High Water Table (A2) Saturation (A3)		Hydrogen Sulfide Od	or (C1) es on Living Roots (C3)	✓ Drainage Pa  Moss Trim L	, ,
Water Marks (B1)		Presence of Reduced	=		Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio	, ,	Crayfish Bur	
✓ Drift Deposits (B3)	<del></del>	Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer			tressed Plants (D1)
Iron Deposits (B5)				✓ Geomorphic	
Inundation Visible on Aeria	al Imagery (B7)			Shallow Aqu	itard (D3)
✓ Water-Stained Leaves (B9	3)				aphic Relief (D4)
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)
Field Observations:					
Surface Water Present?	Yes No		<del>-1</del>		
Water Table Present?	Yes No	Deput (inches)	10		
Saturation Present?	Yes No	Depth (inches):	0 Wetland I	Hydrology Preser	nt? Yes No
(includes capillary fringe)  Describe Recorded Data (streat	 am gauge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ailable:	
NA					
Remarks:					
Several primary and secondary	nydrology indicators of	served. Hydrology ci	riteria met.		

Sam	plina	Point:	wnok003f	W
Odill	PIIII	I OIIIL.	***********	٧,

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:30 ft R)	% Cover		Status	Number of Dominant Species	
1 Betula nigra	55	Y	FACW	That Are OBL, FACW, or FAC: 5	(A)
2. Ulmus americana	50		FACW	That Ale OBE, I AOW, OI I AO.	(/1)
3 Juglans nigra	30		FACU	Total Number of Dominant	
		N		Species Across All Strata:	(B)
4. Juniperus virginiana	25	N	FACU	Percent of Dominant Species	
5				That Are OBL, FACW, or FAC:	(A/B)
6					(,,,,,
7				Prevalence Index worksheet:	
1	160	<del></del>		Total % Cover of: Multiply by:	
500/ 51 1 1 90		= Total Cov		OBL species x 1 =	
50% of total cover: <u>80</u>	20% of	total cover:	32		
Sapling/Shrub Stratum (Plot size: 15 ft R				FACW species x 2 =	
1. Asimina triloba	80	Y	FACU	FAC species x 3 =	.
2. Carpinus caroliniana	30	Υ	FAC	FACU species x 4 =	.
3 Acer negundo	15	N	FAC	UPL species x 5 =	.
				Column Totals: (A)	(B)
4				Column   C	- (5)
5				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	
7					
8				1 - Rapid Test for Hydrophytic Vegetation	
0				✓ 2 - Dominance Test is >50%	
9	105			3 - Prevalence Index is ≤3.0 <sup>1</sup>	
22		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supp	ortina
50% of total cover: 63	20% of	total cover:	25	data in Remarks or on a separate sheet)	
Herb Stratum (Plot size: 5 ft R )				' '	,
1. Chasmanthium sessiliflorum	30	Υ	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain	ן (ו
2 Microstegium vimineum	25	Y	FAC		
3 Lindera benzoin	10		FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology m	ust
3				be present, unless disturbed or problematic.	
4				Definitions of Four Vegetation Strata:	
5					
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 c	
7				more in diameter at breast height (DBH), regardle height.	ess of
0				Tioight.	
0				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, regard	dless
	65	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.	
50% of total cover:33		total cover:			
Woody Vine Stratum (Plot size: 30 Ft R )	== /0 31			<b>Woody vine</b> – All woody vines greater than 3.28	ft in
Vitis rotundifolia	20	Υ	FAC	height.	
l	15	<u> </u>	FAC		
2. Smilax rotundifolia			——		
3					
4.					
5				Hydrophytic Vegetation	
·	35	T-4-1 0		Present? Yes No	
500/ - 54-4-1 - · · · · · · 18		= Total Cov			
50% of total cover:18_		total cover:			
Remarks: (Include photo numbers here or on a separate sl	neet.)				]
Vegetation passes dominance test.					

Sampling Point: wnok003f\_w

(! I \	<u>Matrix</u>	0/		x Features		12	T 4	Demonde
inches) 0-2	Color (moist) 10YR 3/1	100	Color (moist) NA	- <u>%</u> NA	Type <sup>1</sup> NA	Loc <sup>2</sup>	Texture silt Loam	Remarks some organic content
	·							
2-14	2.5Y 5/2	85	7.5YR 5/8	15	C	PL	silty clay l	NA
14-20	2.5Y 5/2	65	7.5YR 5/8	35	С	PL/M	clay Loam	NA
								-
Type: C=C	Concentration, D=De	pletion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
	Indicators:	,	,				Indica	ators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol	l (A1)		Dark Surface	e (S7)			2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	ILRA 147,		oast Prairie Redox (A16)
Black H	listic (A3)		Thin Dark S					(MLRA 147, 148)
_ Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix (l	F2)		P	iedmont Floodplain Soils (F19)
	ed Layers (A5)		✓ Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark	•	,			ery Shallow Dark Surface (TF12)
	ed Below Dark Surfac	ce (A11)	Depleted Da				<u> </u>	ther (Explain in Remarks)
	ark Surface (A12)		Redox Depr	•	•			
	Mucky Mineral (S1) (	LRR N,	Iron-Mangar		es (F12) (	LRR N,		
	A 147, 148)		MLRA 13	•	MI DA 42	6 422\	3 <sub>1 m o</sub> d	inators of hydrophytic variation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa					icators of hydrophytic vegetation and tland hydrology must be present,
	d Matrix (S6)		Red Parent					less disturbed or problematic.
			rear arent	iviatoriai (i /	e i / (ivieit	A 127, 147	, an	icos distarbed of problematic.
estrictive	Laver (if observed)	):					1	
	Layer (if observed) A	):						
Type: NA	A	):					Hydric Soil	Procent? Voc √ No
Type: NA		):					Hydric Soil	Present? Yes <u>√</u> No
Type: NA	A	):	<u> </u>				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in emarks:	A		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in emarks:	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in emarks:	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in emarks:	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in emarks:	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in emarks:	Anches): NA		matrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in emarks:	Anches): NA		matrix (F3).				Hydric Soil	Present? Yes ✓ No
Type: NA Depth (in emarks:	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes ✓ No
Type: NA Depth (in emarks:	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes ✓ No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes <u>√</u> No
Type: NA Depth (in	Anches): NA		natrix (F3).				Hydric Soil	Present? Yes ✓ No
Type: NA Depth (in	Anches): NA		matrix (F3).				Hydric Soil	Present? Yes ✓ No
Type: NA Depth (in	Anches): NA		matrix (F3).				Hydric Soil	Present? Yes ✓ No
Type: NA Depth (in emarks:	Anches): NA		matrix (F3).				Hydric Soil	Present? Yes ✓ No



Wetland data point wnok003f\_w facing North



Wetland data point wnok003f\_w facing South



Wetland data point wnok003f\_w soil sample

Project/Site: Dominion Southeast Reliability Project	City/Co	unty: Nottoway		Sampling Date: 07/26/2014
Applicant/Owner: Dominion Transmission				Sampling Point: wnok003_u
		ı, Township, Range: NA		
Landform (hillslope, terrace, etc.): floodplain terrace				Slone (%): 0-5
Subregion (LRR or MLRA): LRR P Lat:	37.265843993	1 (concave, convex, nor	96838796	Olope (70) Datum, NAD 1983
Soil Map Unit Name: Mixed Alluvial Land (Mn)		Long:		NA
			NWI classific	cation: 177
Are climatic / hydrologic conditions on the site typical fo				
Are Vegetation, Soil, or Hydrology	significantly disturbe	ed? Are "Normal	Circumstances" p	oresent? Yes No
Are Vegetation, Soil, or Hydrology	naturally problemat	ic? (If needed, e	xplain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	ap showing samp	oling point locatio	ns, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes✓	_ No			
	No. /	Is the Sampled Area		/
	No_✓	within a Wetland?	Yes	No
Remarks:				
Photos 104-4599 soil, 4599 n, 4600 s (J. Sweitzer Car	mera)			
Upland plot established on floodplain terrace in broadle	eat deciduous forest.			
HYDROLOGY				
Wetland Hydrology Indicators:				ators (minimum of two required)
Primary Indicators (minimum of one is required; check			Surface Soil	` '
	True Aquatic Plants (B			getated Concave Surface (B8)
	Hydrogen Sulfide Odor Oxidized Rhizospheres		Drainage Pa _ Moss Trim L	
	Presence of Reduced			Water Table (C2)
	Recent Iron Reduction		Crayfish Bur	
	Thin Muck Surface (C7			isible on Aerial Imagery (C9)
	Other (Explain in Rema			tressed Plants (D1)
Iron Deposits (B5)				Position (D2)
Inundation Visible on Aerial Imagery (B7)			Shallow Aqu	
Water-Stained Leaves (B9)				aphic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral	. , ,
Field Observations:				
Surface Water Present? Yes No✓	Depth (inches):			
	Depth (inches):			
	Depth (inches):		lydrology Preser	nt? Yes No✓
(includes capillary fringe)	الما	in an anting a life and	labla.	
Describe Recorded Data (stream gauge, monitoring w NA	veii, aeriai priotos, previ	ious inspections), if avai	liable:	
Remarks:				
No indicators of wetland hydrology.				
, ,,				

Sampling	Point:	wnok003_	U
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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30 ft R )	% Cover			Number of Dominant Species
1. Juglans nigra	10	N	FAC	That Are OBL, FACW, or FAC: 4 (A)
2. Liriodendron tulipifera	20		FACU	(*, ', ', ', ', ', ', ', ', ', ', ', ', ',
3 Juniperus virginiana	10		FACU	Total Number of Dominant
4. Quercus alba	10		FACU	Species Across All Strata: (B)
0-16			FACU	Percent of Dominant Species
5. Celtis occidentalis	30			That Are OBL, FACW, or FAC: 67 (A/B)
6. Platanus occidentalis	30	<u>Y</u>	FACW	Book and the state of the state
7. Quercus rubra	10	N	FACU	Prevalence Index worksheet:
	120	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 60	20% of	total cover:	24	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft R )				FACW species x 2 =
Asimina triloba	40	Υ	FAC	FAC species x 3 =
2 Ulmus rubra	10		FAC	FACU species x 4 =
2. Ormus rubra 3. Cercis canadensis	10	N	FACU	UPL species x 5 =
4. Lindera benzoin	60	Y	FAC	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	400			3 - Prevalence Index is ≤3.0¹
		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 60	20% of	total cover:	24	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft R )				
1. Microstegium vimineum	70	Y	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
Carex sp. (no fruiting bodies)	10	N	NI	
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				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				
9				Sapling/Shrub – Woody plants, excluding vines, less
10				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>40</u>	20% of	total cover:	16	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 Ft R )				height.
1. Parthenocissus quinquefolia	10	Y	FACU	_
2. Vitis rotundifolia	5	Υ	FAC	
3.				
,				
4				Hydrophytic
5				Vegetation No. No.
_		= Total Cov	_	Present? Yes No
50% of total cover:8	20% of	total cover:	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Vegetation passes dominance test. Typical well drained pie	edmont floo	dplain vege	tation.	

Sampling Point: wnok003\_u

SOIL

Profile Des	cription: (Describe t	o the dep	th needed to docun	nent the i	ndicator	or confirm	the absence o	f indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches) 0-5	Color (moist) 10YR 4/4	% 50	Color (moist) NA	% NA	Type <sup>1</sup> NA	Loc <sup>2</sup> NA	<u>Texture</u> sandy Loarr	Remarks
	10YR 4/3	50	NA	NA	NA	NA NA	sandy Loan	
5-16	10YR 4/4	100	NA	NA	NA	NA	loamy Sand	
16-18+	2.5Y 7/2	90	10YR 5/6	10	С		loamy Sand	
						. ——		
<sup>1</sup> Type: C=C	concentration, D=Depl	etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicate	ors for Problematic Hydric Soils <sup>3</sup> :
Histosol	I (A1)		Dark Surface	(S7)			2 c	m Muck (A10) <b>(MLRA 147)</b>
Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (N	ILRA 147,	<b>148)</b> Co:	ast Prairie Redox (A16)
Black H	istic (A3)		Thin Dark Su	rface (S9)	(MLRA	47, 148)	(	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (	F2)		Pie	edmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mar		,			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		6)			ry Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar					ner (Explain in Remarks)
_	ark Surface (A12)	` ,	Redox Depre					,
	Mucky Mineral (S1) (L	RR N.	Iron-Mangan	•	,	LRR N,		
	A 147, 148)	,	MLRA 13		, ,	,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MLRA 13	6. 122)	<sup>3</sup> Indic	ators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					and hydrology must be present,
	d Matrix (S6)		Red Parent N					ess disturbed or problematic.
	Layer (if observed):		red r archi n	naterial (i	Z I ) (IVILIV	A 121, 141	T unic	as disturbed of problematic.
Type: N/								
	iches): NA						Hydric Soil P	Present? Yes No
Remarks:								
	s of hydric soils observ	red.						
	•							



Upland data point wnok003\_u facing North



Upland data point wnok003\_u facing South



Upland data point wnok003\_u soil sample

Project/Site: Dominion Southeast Reliability Project	City/County: Nottoway	Sa	ampling Date: 07/26/2014
Applicant/Owner: Dominion Transmission			Sampling Point: wnok003e_w
	Section, Township, Range: NA		. •
Landform (hillslope, terrace, etc.): toe-of-slope and floodplain		e): none	Slope (%): <sup>0-5</sup>
Subregion (LRR or MLRA): LRR P Lat: 37.26	55567440 Long. 78.19	6272184	Datum. NAD 1983
Soil Map Unit Name: Mixed Alluvial Land (Mn)	Long.	NWI classification	on. PEM1A
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil, or Hydrology sig			
Are Vegetation, Soil, or Hydrology na SUMMARY OF FINDINGS – Attach site map s		oplain any answers i ns. transects. i	,
		,	
	Is the Sampled Area		
	within a Wetland?	Yes <u>√</u>	No
Wetland Hydrology Present? Yes   ✓ No.  Remarks:	<del></del>		
Photos 100-0250 N, 100-0251 E, 100-0252 S, 100-0253 W,	100 0254 soil (W. Modlin Camora)		
Piedmont floodplain depression that floods frequently for lon	,	ntly planted w/corn.	and wetter areas are not
allowing the corn to grow well. This wetland system continue	_	• •	
HYDROLOGY			
Wetland Hydrology Indicators:	9	Secondary Indicator	s (minimum of two required)
Primary Indicators (minimum of one is required; check all the	at apply)	Surface Soil Cra	acks (B6)
Surface Water (A1) True A	Aquatic Plants (B14)	Sparsely Vegeta	ated Concave Surface (B8)
High Water Table (A2) Hydro	gen Sulfide Odor (C1)	Drainage Patter	ns (B10)
Saturation (A3) Oxidiz	red Rhizospheres on Living Roots (C3)	Moss Trim Line	s (B16)
1 —                                   —	nce of Reduced Iron (C4)	Dry-Season Wa	ater Table (C2)
Sediment Deposits (B2)   ✓ Recei	nt Iron Reduction in Tilled Soils (C6)	Crayfish Burrow	` ,
	Muck Surface (C7)		le on Aerial Imagery (C9)
	(Explain in Remarks)	<del></del>	ssed Plants (D1)
Iron Deposits (B5)	-	✓ Geomorphic Po	` '
Inundation Visible on Aerial Imagery (B7)	-	Shallow Aquitar	` '
Water-Stained Leaves (B9)	-	Microtopograph ✓ FAC-Neutral Te	` ,
Aquatic Fauna (B13)		FAC-Neutral re	St (D5)
Field Observations:  Surface Water Present?  Yes No✓ Dept	h (inches): 0-1		
	l l		
,	<b>.</b>	.dualam. Duaaanto	Vaa 🗸 Na
Saturation Present? Yes No _▼_ Dept (includes capillary fringe)	wetland Hy	drology Present?	Yes ✓ No
Describe Recorded Data (stream gauge, monitoring well, as	erial photos, previous inspections), if avail	able:	
NA Remarks:			
Several primary and secondary hydrology indicators observe	ed Hydrology criteria met		
deveral primary and secondary mydrology indicators observe	a. Hydrology chicha met.		

Sampling	Point:	wnok003e_	_W
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	Absolute	Dominant In		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30 ft R) 1. NA	% Cover	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
7				
		= Total Cove		
50% of total cover:	20% of	total cover:_		
Sapling/Shrub Stratum (Plot size: 15 ft R )				FACW species x 2 = FAC species x 3 =
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
42		= Total Cove	_	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 13  Hoth Stratum (Plot size: 5 ft R	20% of	total cover:_	5	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)  1 Tridens flavis	10	NI.		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
I.		N		
2. Juncus effusus	 15		OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Carex frankii		<u> </u>		be present, unless disturbed or problematic.
4. Symphyotrichum pilosum	15 		FAC_	Definitions of Four Vegetation Strata:
5. Tragopogon dubius		N		Tree Woody plants evaluding vines 2 in (7.6 cm) or
6. Ambrosia artemisifolia	10	N		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7. Cyperus strigosus	2	N		height.
8. Hypericum nudiflorum	40	<u>Y</u>	FACW	Sapling/Shrub – Woody plants, excluding vines, less
9. Rhexia sp	2	<u>N</u>		than 3 in. DBH and greater than or equal to 3.28 ft (1
10. Persicaria pensylvanica	15	Y	FACW	m) tall.
11. Ludwigia alterniflora	2	N		Herb – All herbaceous (non-woody) plants, regardless
22		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 60	20% of	total cover:_	24	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 Ft R )  Campsis radicans	5	Υ	FAC	height.
· <u> </u>	<u>5</u>	<u> </u>	FACW	
2. Ipomoea lacunosa			FACV	
3				
4				Hydrophytic
5				Vegetation
_		= Total Cove	_	Present? Yes No
50% of total cover:5		total cover:_		
Remarks: (Include photo numbers here or on a separate sh	neet.)			
Vegetation passes dominance test.				
				· ·

Sampling Point: wnok003e\_w

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) Sandy Redox (S5)  Dark Surface (S7) Polyvalue Below Surface (S8) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Piedmont  ✓ Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148)  ✓ MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148)  wetland by	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   ^2Location: PL=Pore L Pydric Soil Indicators:   Indicators for	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    A	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
Histosol (A1)	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
Indicators forIndicators for_ Histosol (A1) Dark Surface (S7) 2 cm Mucc_ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Pra_ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Piedmont_ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont_ Stratified Layers (A5) Depleted Matrix (F3) Very Shal_ 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shal_ Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain Surface (F7)_ Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain Surface (F12) (LRR N, MLRA 136)_ Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) 3Indicators of the wetland hydrony stripped Matrix (S6)_ Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrony stripped Matrix (S6)_ Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless distribute Layer (if observed):_ Type: NA	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
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) _ Sandy Redox (S5) _ Sandy Redox (S5) _ Stripped Matrix (S4) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Maked Surface (S7) _ Polyvalue Below Surface (S8) (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 127, 147) _ Piedmont (MLRA 147, 148) _ Depleted Matrix (F3) _ Redox Depressions (F6) _ Loamy Gleyed Matrix (F3) _ Piedmont Surface (F6) _ Urbric Surface (F7) _ Other (Explored Matrix (S4)) _ Sandy Redox (S5) _ Piedmont Floodplain Soils (F19) (MLRA 148) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ unless districtive Layer (if observed): _ Type: NA	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
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) _ Sandy Redox (S5) _ Sandy Redox (S5) _ Stripped Matrix (S4) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Maked Surface (S7) _ Polyvalue Below Surface (S8) (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 127, 147) _ Piedmont (MLRA 147, 148) _ Depleted Matrix (F3) _ Redox Depressions (F6) _ Loamy Gleyed Matrix (F3) _ Piedmont Surface (F6) _ Urbric Surface (F7) _ Other (Explored Matrix (S4)) _ Sandy Redox (S5) _ Piedmont Floodplain Soils (F19) (MLRA 148) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ unless districtive Layer (if observed): _ Type: NA	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
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) _ Sandy Redox (S5) _ Sandy Redox (S5) _ Stripped Matrix (S4) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Maked Surface (S7) _ Polyvalue Below Surface (S8) (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 127, 147) _ Piedmont (MLRA 147, 148) _ Depleted Matrix (F3) _ Redox Depressions (F6) _ Loamy Gleyed Matrix (F3) _ Piedmont Surface (F6) _ Urbric Surface (F7) _ Other (Explored Matrix (S4)) _ Sandy Redox (S5) _ Piedmont Floodplain Soils (F19) (MLRA 148) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ unless districtive Layer (if observed): _ Type: NA	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
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) _ Sandy Redox (S5) _ Sandy Redox (S5) _ Stripped Matrix (S4) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Maked Surface (S7) _ Polyvalue Below Surface (S8) (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 127, 147) _ Piedmont (MLRA 147, 148) _ Depleted Matrix (F3) _ Redox Depressions (F6) _ Loamy Gleyed Matrix (F3) _ Piedmont Surface (F6) _ Urbric Surface (F7) _ Other (Explored Matrix (S4)) _ Sandy Redox (S5) _ Piedmont Floodplain Soils (F19) (MLRA 148) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ unless districtive Layer (if observed): _ Type: NA	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
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) _ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Sandy Redox (S5) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ Histosol (A1) _ Dark Surface (S7) _ Polyvalue Below Surface (S8) (MLRA 147, 148) _ Coast Pra _	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
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) _ Sandy Redox (S5) _ Sandy Redox (S5) _ Stripped Matrix (S4) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Maked Surface (S7) _ Polyvalue Below Surface (S8) (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 127, 147) _ Piedmont (MLRA 147, 148) _ Depleted Matrix (F3) _ Redox Depressions (F6) _ Loamy Gleyed Matrix (F3) _ Piedmont Surface (F6) _ Urbric Surface (F7) _ Other (Explored Matrix (S4)) _ Sandy Redox (S5) _ Piedmont Floodplain Soils (F19) (MLRA 148) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ unless districtive Layer (if observed): _ Type: NA	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
Histosol (A1)	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
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) _ Sandy Redox (S5) _ Sandy Redox (S5) _ Stripped Matrix (S4) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Maked Surface (S7) _ Polyvalue Below Surface (S8) (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 127, 147) _ Piedmont (MLRA 147, 148) _ Depleted Matrix (F3) _ Redox Depressions (F6) _ Loamy Gleyed Matrix (F3) _ Piedmont Surface (F6) _ Urbric Surface (F7) _ Other (Explored Matrix (S4)) _ Sandy Redox (S5) _ Piedmont Floodplain Soils (F19) (MLRA 148) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ unless districtive Layer (if observed): _ Type: NA	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
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) _ Sandy Redox (S5) _ Sandy Redox (S5) _ Stripped Matrix (S4) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Stripped Matrix (S6) _ Maked Surface (S7) _ Polyvalue Below Surface (S8) (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 147, 148) _ Loamy Gleyed Matrix (F2) _ Piedmont (MLRA 127, 147) _ Piedmont (MLRA 147, 148) _ Depleted Matrix (F3) _ Redox Depressions (F6) _ Loamy Gleyed Matrix (F3) _ Piedmont Surface (F6) _ Urbric Surface (F7) _ Other (Explored Matrix (S4)) _ Sandy Redox (S5) _ Piedmont Floodplain Soils (F19) (MLRA 148) _ Stripped Matrix (S6) _ Red Parent Material (F21) (MLRA 127, 147) _ unless districtive Layer (if observed): _ Type: NA	Problematic Hydric Soils <sup>3</sup> (A10) (MLRA 147) irie Redox (A16) 147, 148) Floodplain Soils (F19)
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) NLRA 147, 148) Depleted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Umbric Surface (F12) (LRR N, MLRA 136, 122) Sindicators of Wetland hydroxide (F13) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)  Wetland hydroxides (F12) (MLRA 127, 147)  Red Parent Material (F21) (MLRA 127, 147)  Wetland hydroxides (F12) (MLRA 127, 147)	irie Redox (A16) <b>147, 148)</b> Floodplain Soils (F19)
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) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)  Below Below Surface (S9) (MLRA 147, 148) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Depleted Matrix (S4) Sandy Redox (S5) Setripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)  Redox Depressions (F8) Red Parent Material (F21) (MLRA 127, 147)  Wetland hydrogen Sulfide (S8) (MLRA 147, 148)  Piedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrogen Sulfide (S8) (MLRA 127, 147)  Piedmont Floodplain Soils (F19) (MLRA 127, 147)  Wetland hydrogen Sulfide (S8) (MLRA 127, 147)  Piedmont Floodplain Soils (F19) (MLRA 127, 147)  Red Parent Material (F21) (MLRA 127, 147)  Piedmont Floodplain Soils (F19) (MLRA 127, 147)	irie Redox (A16) <b>147, 148)</b> Floodplain Soils (F19)
Loamy Gleyed Matrix (F2) Piedmont Stratified Layers (A5) ✓ Depleted Matrix (F3) (MLRA  2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shal Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Ex Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hyd Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbles  Type: NA	Floodplain Soils (F19)
Stratified Layers (A5)  2 cm Muck (A10) (LRR N)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N,  MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Type: NA  MLRA 147, 147)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Very Shal  Depleted Dark Surface (F7)  Thick Dark Surface (A12)  Redox Depressions (F8)  Iron-Manganese Masses (F12) (LRR N,  MLRA 136)  Umbric Surface (F13) (MLRA 136, 122)  Piedmont Floodplain Soils (F19) (MLRA 148)  Wetland hyder unless districtive Layer (if observed):  Type: NA	
2 cm Muck (A10) (LRR N)	136 147)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Expense) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland by Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless districtive Layer (if observed):  Type: NA Other (Expense)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 127, 147)  Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147)  unless districtive Layer (if observed): Type: NA	ow Dark Surface (TF12)
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Strippes: NA Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) unless districtive Layer (if observed): Type: NA	olain in Remarks)
MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 127, 147)  Restrictive Layer (if observed):  Type: NA	
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122)   Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrogeneous wetland hydrogeneous wetland hydrogeneous constraints (F21) (MLRA 127, 147) with soils (F21) (MLRA 127, 147)   [Restrictive Layer (if observed):  Type: NA	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hyd stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless districtive Layer (if observed):  Type: NA	f budranbutia vagatatian and
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless districtive Layer (if observed):  Type: NA	f hydrophytic vegetation and drology must be present,
Restrictive Layer (if observed):  Type: NA	urbed or problematic.
Type: NA	
Deput (illenes).	? Yes <u>√</u> No
	10310
emarks: ne indicator of hydric soils met: Depleted matrix (F3).	
ie indicator of hydric soils met. Depleted matrix (1.3).	



Wetland data point wnok003e\_w facing North



Wetland data point wnok003e\_w facing South



Wetland data point wnok003e\_w soil sample

Project/Site: Dominion Southea	st Reliability Project	City/C	county: Nottoway		Sampling Date: 07/26/2014
Applicant/Owner: Dominion Tra					Sampling Point: wnok003f_w
Investigator(s): J. Sweitzer, W.		Section	on, Township, Range: N/		campang r cam
Landform (hillsland torrace atc	, toe-of-slope	L ocal ratio	iof (concave, convex, no	no). seep	Slone (%): 0-5
Landform (hillslope, terrace, etc. Subregion (LRR or MLRA): LRf	.) R.P.	37 265962792	iei (concave, convex, no	196651125	Slope (%) NAD 1983
Subregion (LRR or MLRA):	vial Land (Mn)		Long:	100001120	Datum: This issue
Soil Map Unit Name: Mixed Allu					
Are climatic / hydrologic condition	ons on the site typical for	r this time of year? Y	es No	(If no, explain in R	lemarks.)
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Norma	l Circumstances" p	oresent? Yes <u>√</u> No
Are Vegetation, Soil				explain any answe	
SUMMARY OF FINDING	S – Attach site m	ap showing sam	npling point location	ons, transects	s, important features, etc.
Hydrophytic Vegetation Preser Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes <u>√</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>√</u>	No
Photos 100-0259 to 263 (N,E,S	S.W. Soils)				
This area is a Piedmont floodpl	,	/multiple drainage pat	tterns situated along Ellis	s Creek. All 3 crite	ria met.
HYDROLOGY					
Wetland Hydrology Indicator					ators (minimum of two required)
Primary Indicators (minimum o	•			Surface Soil	
Surface Water (A1)		True Aquatic Plants (			getated Concave Surface (B8)
High Water Table (A2) Saturation (A3)		Hydrogen Sulfide Od	or (C1) es on Living Roots (C3)	✓ Drainage Pa  Moss Trim L	, ,
Water Marks (B1)		Presence of Reduced	=		Water Table (C2)
Sediment Deposits (B2)	·	Recent Iron Reductio	, ,	Crayfish Bur	
✓ Drift Deposits (B3)	<del></del>	Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer			tressed Plants (D1)
Iron Deposits (B5)	_			✓ Geomorphic	
Inundation Visible on Aeric	al Imagery (B7)			Shallow Aqu	itard (D3)
✓ Water-Stained Leaves (B9	∍)				aphic Relief (D4)
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)
Field Observations:	_	_			
Surface Water Present?	Yes No		<del>-1</del>		
Water Table Present?	Yes No	Deptil (iliches)	10		
Saturation Present?	Yes <u> </u>	Depth (inches):	0 Wetland I	Hydrology Preser	nt? Yes No
(includes capillary fringe)  Describe Recorded Data (stream)	am gauge, monitoring w	rell, aerial photos, pre	vious inspections), if ava	ailable:	
NA					
Remarks:					
Several primary and secondary	hydrology indicators of	oserved. Hydrology ci	riteria met.		

Sam	plina	Point:	wnok003f	W
Odill	PIIII	I OIIIL.	***********	٧,

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:30 ft R)	% Cover		Status	Number of Dominant Species	
1 Betula nigra	55	Y	FACW	That Are OBL, FACW, or FAC: 5	(A)
2. Ulmus americana	50		FACW	That Ale OBE, I AOW, OF I AO.	(^)
3 Juglans nigra	30		FACU	Total Number of Dominant	
		N		Species Across All Strata:	(B)
4. Juniperus virginiana	25	N	FACU	Percent of Dominant Species	
5				That Are OBL, FACW, or FAC:	(A/B)
6					(,,,,,
7				Prevalence Index worksheet:	
1	160	<del></del>		Total % Cover of: Multiply by:	
500/ 51 1 1 90		= Total Cov		OBL species x 1 =	
50% of total cover: <u>80</u>	20% of	total cover:	32		
Sapling/Shrub Stratum (Plot size: 15 ft R				FACW species x 2 =	
1. Asimina triloba	80	Y	FACU	FAC species x 3 =	-
2. Carpinus caroliniana	30	Υ	FAC	FACU species x 4 =	.
3 Acer negundo	15	N	FAC	UPL species x 5 =	_
·				Column Totals: (A)	(B)
4				Column   C	- (5)
5				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	-
7					
8				1 - Rapid Test for Hydrophytic Vegetation	
0				✓ 2 - Dominance Test is >50%	
9	105			3 - Prevalence Index is ≤3.0 <sup>1</sup>	
22		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supp	ortina
50% of total cover: 63	20% of	total cover:	25	data in Remarks or on a separate sheet)	
Herb Stratum (Plot size: 5 ft R )				' '	,
1. Chasmanthium sessiliflorum	30	Υ	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain	<sup>1)</sup>
2 Microstegium vimineum	25	Y	FAC		
3 Lindera benzoin	10		FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology m	nust
3				be present, unless disturbed or problematic.	
4				Definitions of Four Vegetation Strata:	
5					
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 c	
7				more in diameter at breast height (DBH), regardle height.	ess of
0				Tioight.	
0				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, regar	dless
	65	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.	
50% of total cover:33		total cover:			
Woody Vine Stratum (Plot size: 30 Ft R )	== /0 31			<b>Woody vine</b> – All woody vines greater than 3.28	ft in
Vitis rotundifolia	20	Υ	FAC	height.	
l	15	Y			
2. Smilax rotundifolia			FAC		
3					
4.					
5				Hydrophytic Vegetation	
·	35	<del></del>		Present? Yes No	
500/ 5/ / 18		= Total Cov		100	
50% of total cover: 18		total cover:			
Remarks: (Include photo numbers here or on a separate sl	neet.)				
Vegetation passes dominance test.					

Sampling Point: wnok003f\_w

Depth	Matrix			x Features		. 3		
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-2	10YR 3/1	100	NA	NA_	NA	NA ———	silt Loam	some organic content
2-14	2.5Y 5/2	85	7.5YR 5/8	15	С	PL	silty clay l	NA
14-20	2.5Y 5/2	65	7.5YR 5/8	35	С	PL/M	clay Loam	NA
	-							
	-					. ——		
Type: C=C	oncentration D=Der	oletion RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
	Indicators:	<u> </u>	Troduced Matrix, III	<u>. mackoa</u>	Curia Ci	uo.		ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	e (S7)				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	/ILRA 147.		Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			. ,	P	Piedmont Floodplain Soils (F19)
Stratifie	d Layers (A5)		✓ Depleted Ma	trix (F3)				(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark	•	,			ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	ce (A11)	Depleted Da				<u> </u>	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre	•				
	Mucky Mineral (S1) (	LRR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 13	•			3	
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5) d Matrix (S6)		Piedmont Flo Red Parent I					etland hydrology must be present, less disturbed or problematic.
	Layer (if observed)		Red Parent i	viateriai (F.	21) (IVILIA	A 127, 147	r) un	less disturbed of problematic.
Type: N		•						
			<del></del>					5 40 V 1
	ches): NA		<del></del>				Hydric Soil	Present? Yes No
lemarks:								
ne indicato	r of hydric soils met:	Depleted n	natrix (F3).					



Wetland data point wnok003f\_w facing North



Wetland data point wnok003f\_w facing South



Wetland data point wnok003f\_w soil sample

Project/Site: Dominion Southeast Reliability Project	City/Co	unty: Nottoway		Sampling Date: 07/26/2014			
Applicant/Owner: Dominion Transmission				Sampling Point: wnok003_u			
		ı, Township, Range: NA					
Landform (hillslope, terrace, etc.): floodplain terrace				Slone (%): 0-5			
Subregion (LRR or MLRA): LRR P Lat:	37.265843993	1 (concave, convex, nor	96838796	Olope (70) Datum, NAD 1983			
Soil Map Unit Name: Mixed Alluvial Land (Mn)		Long:		NA			
			NWI classific	cation: 177			
Are climatic / hydrologic conditions on the site typical fo							
Are Vegetation, Soil, or Hydrology	significantly disturbe	ed? Are "Normal	Circumstances" p	oresent? Yes No			
Are Vegetation, Soil, or Hydrology	naturally problemat	ic? (If needed, e	xplain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS – Attach site m	ap showing samp	oling point locatio	ns, transects	s, important features, etc.			
Hydrophytic Vegetation Present? Yes✓	_ No						
	No. /	Is the Sampled Area		/			
	No_✓	within a Wetland?	Yes	No			
Remarks:							
Photos 104-4599 soil, 4599 n, 4600 s (J. Sweitzer Car	mera)						
Upland plot established on floodplain terrace in broadle	eat deciduous forest.						
HYDROLOGY							
Wetland Hydrology Indicators:				ators (minimum of two required)			
Primary Indicators (minimum of one is required; check			Surface Soil	` '			
	True Aquatic Plants (B			getated Concave Surface (B8)			
	Hydrogen Sulfide Odor Oxidized Rhizospheres		Drainage Pa _ Moss Trim L				
	Presence of Reduced			Water Table (C2)			
	Recent Iron Reduction		Crayfish Bur				
	Thin Muck Surface (C7			isible on Aerial Imagery (C9)			
	Other (Explain in Rema			tressed Plants (D1)			
Iron Deposits (B5)				Position (D2)			
Inundation Visible on Aerial Imagery (B7)							
Water-Stained Leaves (B9)			Shallow Aquitard (D3) Microtopographic Relief (D4)				
Aquatic Fauna (B13)			FAC-Neutral	. , ,			
Field Observations:							
Surface Water Present? Yes No✓	Depth (inches):						
	Depth (inches):						
	Depth (inches):		lydrology Preser	nt? Yes No✓			
(includes capillary fringe)	الما	in an anting a life and	labla.				
Describe Recorded Data (stream gauge, monitoring w NA	veii, aeriai priotos, previ	ious inspections), if avai	liable:				
Remarks:							
No indicators of wetland hydrology.							
, ,,							

Sampling	Point:	wnok003_	U
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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30 ft R )	% Cover			Number of Dominant Species
1. Juglans nigra	10	N	FAC	That Are OBL, FACW, or FAC: 4 (A)
2. Liriodendron tulipifera	20		FACU	(*, ', ', ', ', ', ', ', ', ', ', ', ', ',
3 Juniperus virginiana	10		FACU	Total Number of Dominant
4. Quercus alba	10		FACU	Species Across All Strata: (B)
0-16			FACU	Percent of Dominant Species
5. Celtis occidentalis	30			That Are OBL, FACW, or FAC: 67 (A/B)
6. Platanus occidentalis	30	Y	FACW	Book and the state of the state
7. Quercus rubra	10	N	FACU	Prevalence Index worksheet:
	120	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 60	20% of	total cover:	24	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft R )				FACW species x 2 =
Asimina triloba	40	Υ	FAC	FAC species x 3 =
2 Ulmus rubra	10		FAC	FACU species x 4 =
2. Ormus rubra 3. Cercis canadensis	10	N	FACU	UPL species x 5 =
4. Lindera benzoin	60	Y	FAC	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	400			3 - Prevalence Index is ≤3.0¹
		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 60	20% of	total cover:	24	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft R )				
1. Microstegium vimineum	70	Y	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
Carex sp. (no fruiting bodies)	10	N	NI	
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				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				
9				Sapling/Shrub – Woody plants, excluding vines, less
10				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>40</u>	20% of	total cover:	16	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 Ft R )				height.
1. Parthenocissus quinquefolia	10	Y	FACU	_
2. Vitis rotundifolia	5	Υ	FAC	
3.				
,				
4				Hydrophytic
5				Vegetation No. No.
_		= Total Cov	_	Present? Yes No
50% of total cover:8	20% of	total cover:	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Vegetation passes dominance test. Typical well drained pie	edmont floo	dplain vege	tation.	

Sampling Point: wnok003\_u

SOIL

Profile Des	cription: (Describe t	o the dep	th needed to docun	nent the i	ndicator	or confirm	the absence o	f indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches) 0-5	Color (moist) 10YR 4/4	% 50	Color (moist) NA	% NA	Type <sup>1</sup> NA	Loc <sup>2</sup> NA	<u>Texture</u> sandy Loarr	Remarks
	10YR 4/3	50	NA	NA	NA	NA NA	sandy Loan	
5-16	10YR 4/4	100	NA	NA	NA	NA	loamy Sand	
16-18+	2.5Y 7/2	90	10YR 5/6	10	С		loamy Sand	
<sup>1</sup> Type: C=C	concentration, D=Depl	etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicate	ors for Problematic Hydric Soils <sup>3</sup> :
Histosol	I (A1)		Dark Surface	(S7)			2 c	m Muck (A10) <b>(MLRA 147)</b>
Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (N	ILRA 147,	<b>148)</b> Co:	ast Prairie Redox (A16)
Black H	istic (A3)		Thin Dark Su	rface (S9)	(MLRA	47, 148)	(	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (	F2)		Pie	edmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mar		,			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		6)			ry Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar					ner (Explain in Remarks)
_	ark Surface (A12)	` ,	Redox Depre					,
	Mucky Mineral (S1) (L	RR N.	Iron-Mangan	•	,	LRR N,		
	A 147, 148)	,	MLRA 13		, ,	,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MLRA 13	6. 122)	<sup>3</sup> Indic	ators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					and hydrology must be present,
	d Matrix (S6)		Red Parent N					ess disturbed or problematic.
	Layer (if observed):		red r archi i	naterial (i	Z I ) (IVILIV	A 121, 141	T unic	as disturbed of problematic.
Type: N/								
	iches): NA						Hydric Soil P	Present? Yes No
Remarks:								
	s of hydric soils observ	red.						
	•							



Upland data point wnok003\_u facing North



Upland data point wnok003\_u facing South



Upland data point wnok003\_u soil sample

Project/Site: Southeast Reliability Project	City/County: Notte	oway	Sampling Date: 07/28/2014
Applicant/Owner: Dominion Transmission		State: VA	Sampling Point: wnok005f_w
	Section, Township		
Landform (hillslope, torrace, etc.): convergent slopes	Local relief (concave	convox none), none	Slope (%): 0-5
Subregion (LRR or MLRA): LRR P Lat: 3	7.261839362	Long: 78.189293012	Datum: NAD 1983
Soil Map Unit Name: Mixed Alluvial Land (Mn)		NWI classific	ation: PFO1A
Are climatic / hydrologic conditions on the site typical for t			
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" p	resent? Yes ✓ No
Are Vegetation, Soil, or Hydrology		(If needed, explain any answer	
SUMMARY OF FINDINGS – Attach site map			·
Hydrophytic Vegetation Present? Yes <u>√</u>	No		
Hydrophytic Vegetation Present? Yes   Hydric Soil Present? Yes   ✓  Yes	ls the Sam	pled Area	
Wetland Hydrology Present? Yes   ✓	— I WILIIII A VV	etland? Yes	No
Remarks:	····		
Photos 104-4618 to 4622 (Soils N, S, E, W)			
		:··	
This wetland forms at the convergence of two slopes and	is the headwaters of an interm	ittent stream (snok006). All 3 c	criteria met. Area is a wetland.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check a	II that apply)	Surface Soil	
Surface Water (A1) Tr	ue Aquatic Plants (B14)		getated Concave Surface (B8)
1 — · · · · — ·	ydrogen Sulfide Odor (C1)	✓ Drainage Pat	
— · · · · — — — — — — — — — — — — — —	xidized Rhizospheres on Living	· · · —	
<u>                                     </u>	resence of Reduced Iron (C4)	<del></del>	Water Table (C2)
1 <del></del>	ecent Iron Reduction in Tilled Sc	· · · —	
<u> </u>	nin Muck Surface (C7)		sible on Aerial Imagery (C9)
	ther (Explain in Remarks)		tressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		✓ Geomorphic — Shallow Aqui	
Water-Stained Leaves (B9)			phic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	
Field Observations:			
Surface Water Present? Yes No C	Depth (inches):		
Water Table Present? Yes No ✓ □			
Saturation Present? Yes No ✓ □	· · · · · · · · · · · · · · · · · · ·	Wetland Hydrology Presen	t? Yes ✓ No
(includes capillary fringe)			100
Describe Recorded Data (stream gauge, monitoring well NA	I, aerial photos, previous inspec	tions), if available:	
Remarks:			
Several primary and secondary hydrology indicators obs	erved. Hydrology criteria met.		
, , , , , , , , , , , , , , , , , , , ,			

20.4.D	Absolute	Dominant In	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30 ft R)		Species?		Number of Dominant Species
1. Pinus taeda	30	Y	FAC	That Are OBL, FACW, or FAC: 9 (A)
2. Acer rubrum	20	Y	FAC	T
3. Liquidambar styraciflua	5	N	FAC	Total Number of Dominant Species Across All Strata: 11 (B)
Cercis canadensis	5	N	FACU	(E)
5. Liriodendron tulipifera	10		FAC	Percent of Dominant Species  That Are ORL FACW or FAC:  82  (A/R)
6 Platanus occidentalis	10		FACW	That Are OBL, FACW, or FAC: (A/B)
0		<u> </u>	FACW	Prevalence Index worksheet:
7. Fraxinus Pennsylvanica	20	<u> </u>	FACW	
		= Total Cove		
50% of total cover:50	20% of	total cover:_	20	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft R )				FACW species x 2 =
<sub>1.</sub> Liquidambar styraciflua	40	Υ	FAC	FAC species x 3 =
2. Cercis canadensis	20	<u> Y</u>	FACU	FACU species x 4 =
3. Acer rubrum	20		FAC	UPL species x 5 =
3 4. Ulmus alata	20		FACU	Column Totals: (A) (B)
	10	<del></del> _	FACU	Column Totals (F)
5. Viburnum prunifolium		N	FACU	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9				✓ 2 - Dominance Test is >50%
5	110	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 55		= Total Cover total cover:_	22	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
F. 4. D	20% 01	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size)	2	V	EACIM	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Persicaria pensylvanica	2	<u>Y</u>	FACW	<u> </u>
2. Polystichum acrostichoides	2	<u> </u>	FACU	The disease of budgle call and well and budgeton, much
3. Viola sp.	2	<u> </u>	NI	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. grass	5	Υ	NI	· · · · ·
5				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8		<del></del>		Sapling/Shrub – Woody plants, excluding vines, less
9		. <u></u>		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
	11	= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:6		total cover:_		<u></u> -,
Woody Vine Stratum (Plot size: 30 Ft R )				Woody vine – All woody vines greater than 3.28 ft in
1 Vitis rotundifolia	10	Υ	FAC	height.
Compoie radioons	20	<u> </u>	FAC	
<b>2</b> . '		<u>'</u>		
3. Parthenocissus quinquefolia	10	· <u> </u>	FAC_	
4				Hydrophytic
5				Vegetation
	40	= Total Cove		Present? Yes No
50% of total cover: 20		total cover:_	_	
Remarks: (Include photo numbers here or on a separate s	sneet.)			
Vegetation passes dominance test.				

Sampling Point: wnok005f\_w

SOIL

Profile Des	cription: (Describe	to the dep	th needed to docun	nent the i	indicator	or confirm	the absence	of indica	ators.)
Depth	Matrix			x Feature	s				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0-2	10YR 4/1	95	10YR 3/6	5		M/PL	silt Loam	NA	
2-15	2.5Y 5/3	50	10YR 4/4	50		M/PL	sand Loam	NA	
15-18	10YR 8/1	40	NA	NA_	NA_	NA_	sand Loam	NA	
	7.5YR 2/2	30	NA	NA_	NA_	NA	sand Loam	NA	
	5YR 3/3	30	NA	NA_	NA	NA	sand Loam	NA	
	-								
<sup>1</sup> Type: C=0	Concentration, D=Dep	letion, RM	=Reduced Matrix, MS	= S=Masked	d Sand Gra	ains.	<sup>2</sup> Location: P	L=Pore L	ining, M=Matrix.
	Indicators:	·							Problematic Hydric Soils <sup>3</sup> :
Histoso	l (A1)		Dark Surface						(A10) <b>(MLRA 147)</b>
_	pipedon (A2)		Polyvalue Be				148) (		rie Redox (A16)
·	listic (A3)		Thin Dark Su Loamy Gleye			47, 148)	-		<b>147, 148)</b> Floodplain Soils (F19)
	en Sulfide (A4) ed Layers (A5)		✓ Depleted Mat		(F2)		<u> </u>		136, 147)
	uck (A10) (LRR N)		Redox Dark S		<del>-</del> 6)		\	•	ow Dark Surface (TF12)
Deplete	ed Below Dark Surface	e (A11)	Depleted Dar		. ,		_ 0	Other (Exp	olain in Remarks)
	Park Surface (A12)		Redox Depre						
	Mucky Mineral (S1) <b>(L</b> <b>A 147, 148)</b>	.RR N,	Iron-Mangane MLRA 136		es (F12) <b>(I</b>	_RR N,			
	Gleyed Matrix (S4)		Umbric Surfa	•	(MLRA 13	6. 122)	<sup>3</sup> Inc	licators of	hydrophytic vegetation and
	Redox (S5)		Piedmont Flo						Irology must be present,
	d Matrix (S6)		Red Parent M	/laterial (F	21) <b>(MLR</b>	A 127, 147	<b>'</b> ) un	less distu	rbed or problematic.
	Layer (if observed):								
Type: N									
	nches): NA						Hydric Soil	Present	? Yes <u>√</u> No
Remarks:									
One indicato	or of hydric soils met: I	Depleted n	natrix (F3).						
I									



Wetland data point wnok005f\_w facing North



Wetland data point wnok005f\_w facing South

Project/Site: Southeast Reliability Project	City/County: NA/Nottoway Sampling Date: 07/28/14
Applicant/Owner: Dominion	State: VA Sampling Point: wnok005_u
Investigator(s): W. Medlin, J. Sweitzer	Section, Township, Range: NA
	ocal relief (concave, convex, none): <u>convex</u> Slope (%): <u>5-10</u>
Subregion (LRR or MLRA): LRR P Lat: 37.261693	
Soil Map Unit Name: Mixed alluvial land (Mn)	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of ye	
	y disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	- Is the Sampled Area
Hydric Soil Present? Yes No ✓	within a Wetland? Yes No
Wetland Hydrology Present? Yes	
Remarks:	
This area is an upland hillslope adjacent to a small hear	dwater drainage. All three criteria not met. Area is not a wetland.
, , , , , , , , , , , , , , , , , ,	
*Photos 100-0271 to 0275 (WLM camera)	J
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) True Aquatic F	
High Water Table (A2) Hydrogen Sulf	<u> </u>
1 <b>=</b> '	ospheres on Living Roots (C3) Moss Trim Lines (B16)
<b>└─</b> ─ <del>─</del>	leduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	rface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
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	Δ.
Trate: Table Freedom:	
Saturation Present? Yes No Depth (inches (includes capillary fringe)	S): Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
NA	
Remarks:	
Hydrology criteria is not met.	

20 # madius			nt Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft radius			? Status	Number of Dominant Species
1. Pinus taeda	60	<u> Y</u>	<u>FAC</u>	That Are OBL, FACW, or FAC: $3$ (A)
2				Total Number of Dominant
3				Species Across All Strata: 7 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 43 (A/B)
6.	-			That Are OBL, FACW, or FAC: 43 (A/B)
0. <u>-</u>	60	= Total Co		Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	20% o	f total cove	er: 12	OBL species x 1 =
Sapling Stratum (Plot size: 15 ft radius				FACW species x 2 =
1. Liquidambar styraciflua	10		FAC	FAC species x 3 =
2. Cercis canadensis	30	Υ	FACU	
3. Quercus alba	15		FACU	FACU species x 4 =
4. Nyssa sylvatica	20	Y	FAC	UPL species x 5 =
5 Acer rubrum	5		FAC	Column Totals: (A) (B)
5. 7 tool Tublani	<del>- – – – – – – – – – – – – – – – – – – –</del>			
6				Prevalence Index = B/A =
	80	= Total Co	over	Hydrophytic Vegetation Indicators:
50% of total cover: 40	20% o	f total cove	er: 16	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15 ft radius				2 - Dominance Test is >50%
1 Ulmus alata	20	Υ	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2 Cercis canadensis	40	Y	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	· <del></del>	· <del>· · · · · · · · · · · · · · · · · · </del>		data in Remarks or on a separate sheet)
3				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
	60			l '
	00	= Total Co	over	Definitions of Five Vegetation Strata:
50% of total cover: 30		= Total Co		Definitions of Five Vegetation Strata:
50% of total cover: 30				Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius	20% o	f total cove	er: <u>12</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides	20% o		FACU	Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus	20% o	f total cove	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia	20% o	f total cove	FACU FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus	20% o	f total cove	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia	20% o	f total cove	FACU FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus	20% o	f total cove	FACU FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5	20% o	f total cove	FACU FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5. 6. 7	20% o	f total cove	FACU FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5	20% o	f total cove	FACU FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5	20% o	f total cove	FACU FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5	20% o	f total cove	FACU FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5	20% o	Y Y	FACU FAC FAC FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 10 ft radius 1. Polystichum acrostichoides 2. Euonymus americanus 3. Viola sororia 4. Botrypus virginianus 5. 6. 7. 8. 9. 10	20% o	f total cove	FACU FAC FAC FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius 1. Polystichum acrostichoides 2. Euonymus americanus 3. Viola sororia 4. Botrypus virginianus 5. 6. 7. 8. 9. 10. 11.	20% o	Y = Total Co	FACU FACU FACU FACU FACU FACU FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5. 6. 7. 8. 9. 10. 11. 50% of total cover: 28.5	20% o	Y = Total Co	FACU FACU FACU FACU FACU FACU FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
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Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5	20% o  45 5 2 5  5  27 20% o	Y  = Total Cove	FACU FACU FACU FACU FACU FACU FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5. 6. 7. 8. 9. 10. 11. 50% of total cover: 28.5  Woody Vine Stratum (Plot size: 15 ft radius )  1. Campsis radicans  2. Lonicera japonica	20% o	Y = Total Co	FACU FAC FACU FAC FACU FACI FACU FACU FACU FACU FACU FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5	20% o	Y  = Total Cove	FACU FACU FACU FACU FACU FACU FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
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Herb Stratum (Plot size: 10 ft radius )  1. Polystichum acrostichoides  2. Euonymus americanus  3. Viola sororia  4. Botrypus virginianus  5	20% o	= Total Cove	FACU FACU FACU FACU FACU FACU FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.

Sampling Point: wnok005\_u

Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			<u>Features</u>		2	<b>-</b>	S. do-
(inches) 0-3	Color (moist) 10YR 3/2	100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SL	Remarks SL - sandy loam
3-9	10YR 4/3	40					SCL	SCL - sandy clay loam; MM
<del></del>	7.5YR 4/4	60					SCL	MM - mixed matrix
9-13	10YR 3/2	50					clay loam	mixed matrix
3-13	7.5YR 4/4	50					clay loam	mixed matrix
13-20	7.5YR 5/4	30	7.5YR 5/8	70	<u>C</u>	<u>M</u>	clay	THIXEU HIATHX
13-20	7.511 3/4	- 30	7.31K 3/6	10		IVI	Clay	
	_							
	-							
1- 0.0				<del></del> -			2	
'Type: C=Co		oletion, RM:	Reduced Matrix, MS	=Masked	Sand Gra	ins.		L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			■ Dark Surface	(S7)			_	cm Muck (A10) (MLRA 147)
ı <b>=</b>	oipedon (A2)		Polyvalue Bel		ce (S8) <b>(N</b>	ILRA 147,		Coast Prairie Redox (A16)
Black Hi			Thin Dark Sur				_	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		F2)		<b></b> P	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		c)			(MLRA 136, 147) Tery Shallow Dark Surface (TF12)
	ick (A10) <b>(LRR N)</b> d Below Dark Surfac	·	Depleted Dark	•	•			other (Explain in Remarks)
ı = '	ark Surface (A12)	.c (////)	Redox Depre		` '		~	valor (Explair in Ternanc)
Sandy N	lucky Mineral (S1) <b>(</b>	LRR N,	Iron-Mangane		es (F12) <b>(I</b>	_RR N,		
	A 147, 148)		MLRA 136				2	
	Gleyed Matrix (S4)		Umbric Surfac					licators of hydrophytic vegetation and
	Redox (S5) Matrix (S6)		☐ Piedmont Flo					etland hydrology must be present, less disturbed or problematic.
	_ayer (if observed)	:		iatoriai (i			, <u>u</u>	ioso dictarged of progressionation
Type: NA								
	ches): NA						Hydric Soil	Present? Yes No V
Remarks:	ydric soils criteri	a is not n	net.					
-	,							



Upland data point wnok005\_u facing North



Upland data point wnok005\_u facing South



Wetland data point wnok005f\_w soil sample



Upland data point wnok005\_u soil sample

Project/Site: Southeast Reliability Project	City/County: Nottoway		Sampling Date: 07/28/2014
Applicant/Owner: Dominion Transmission		State: VA	Sampling Point: wnok006e_w
	Section, Township, Range		
	Local relief (concave, convex	k, none): none	Slope (%): 0-5
Subregion (LRR or MLRA): LRR P			Datum: NAD 1983
Soil Map Unit Name: Mixed alluvial land (Mn)		NWI class	
Are climatic / hydrologic conditions on the site typic			
Are Vegetation, Soil, or Hydrology _			
Are Vegetation, Soil, or Hydrology _		led, explain any ans	
SUMMARY OF FINDINGS – Attach site			•
	,		,р
Hydrophytic Vegetation Present? Yes	Is the Sampled Al	rea	,
Hydric Soil Present? Yes  Wetland Hydrology Present? Yes		? Yes <u> </u>	No
Wetland Hydrology Present? Yes	<u> </u>		
Photos 104-4631 to 4635 (Soil, N, S, E, W)			
Wetland located at toe of slope and in floodplain o	f flat creek. All 3 criteria are met. Area is a w	vetland.	
, , , , , , , , , , , , , , , , , , , ,			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Ind	icators (minimum of two required)
Primary Indicators (minimum of one is required; cl	neck all that apply)	Surface Se	oil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely \	/egetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)		Patterns (B10)
` '	✓ Oxidized Rhizospheres on Living Roots (	C3) Moss Trim	Lines (B16)
` '	✓ Presence of Reduced Iron (C4)		on Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)		surrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)		Stressed Plants (D1)
Iron Deposits (B5)			nic Position (D2) quitard (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)			graphic Relief (D4)
Aquatic Fauna (B13)		✓ FAC-Neut	
Field Observations:			
	✓ Depth (inches): NA		
	✓ Depth (inches): NA		
Saturation Present? Yes No	✓ Depth (inches): NA Wetla	and Hydrology Pres	ent? Yes <u>√</u> No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ng well parial photos, provious inspections) i	f available:	
NA	ig well, aerial priotos, previous inspections), i	i avaliable.	
Remarks:			
Several primary and secondary hydrology indicato	rs observed. Hydrology criteria met.		

EGETATION (Four Strata) –	Use scientific na	ames of	plants.		Sampling Point	: <u>wnok000</u>	<u>oe w</u>
Tree Streeture (Plat size) 30 ft R	`	Absolute	Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size:30 it K 1. <u>NA</u>	)	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	5	(A)
2					Total Number of Dominant		
3					Species Across All Strata:	6	(B)
4					Devent of Deminent Charles		
5					Percent of Dominant Species That Are OBL, FACW, or FAC:	83	(A/B)
6							(, , , )
7					Prevalence Index worksheet:		
			= Total Cove	 er	, · · · · · · · · · · · · · · · · · · ·	Multiply by:	
50%	of total cover:				OBL species x 1 =	<u> </u>	_
Sapling/Shrub Stratum (Plot size:	15 ft R	_			FACW species x 2 =	=	_
Fraxinus pennsylvanica		2	Υ	FACW	FAC species x 3 =	<u> </u>	_
Platanus occidentalis		2	Y	FACW	FACU species x 4 =	=	_
3 Ulmus alata		2	Y	FACU	UPL species x 5 =		
					Column Totals: (A)		
4					(*,		_ (-)
5					Prevalence Index = B/A =		_
5					Hydrophytic Vegetation Indicator	rs:	
7					1 - Rapid Test for Hydrophytic	Vegetation	
3					✓ 2 - Dominance Test is >50%	J	
9					3 - Prevalence Index is ≤3.0 <sup>1</sup>		
		6	= Total Cove	er	4 - Morphological Adaptations <sup>1</sup>	(Provide sun	nortino
	of total cover: 3	20% of	ftotal cover:_		data in Remarks or on a seg	-	porting
Herb Stratum (Plot size: 5 ft R	)				1		: \
1. Persicaria hydropiper		30	Y	OBL	Problematic Hydrophytic Veget	ation (Explai	n)
2 <sub>.</sub> Juncus effusus		70	Υ	FACW			
3. Scirpus cyperinus		10	N	FACW	<sup>1</sup> Indicators of hydric soil and wetlan be present, unless disturbed or pro		nust
Carex canescens		10	N	OBL	• •		
5					Definitions of Four Vegetation St	rata:	
6					Tree – Woody plants, excluding vin		
					more in diameter at breast height (I	DBH), regardle	ess of
7			. ——		height.		
B			· ——		Sapling/Shrub - Woody plants, ex		
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, rega	rdless
			= Total Cove		of size, and woody plants less than	3.28 ft tall.	
50%	of total cover: 60	20% of	total cover:_	24	Woody vine – All woody vines grea	ater than 3.28	ft in
<u>Woody Vine Stratum</u> (Plot size:	30 Ft R )	_		E40	height.		
L. Lonicera japonica		5	. <u> </u>	FAC			
2							
3							
4					I budaa a budia		
5.					Hydrophytic Vegetation		
		5	= Total Cove		Present? Yes	No	
50%	of total cover:3	$\overline{}$	total cover:				
Remarks: (Include photo numbers he	<u> </u>						
·	re or on a separate si	ieet.)					
/egetation passes dominance test.							

Sampling Point: wnok006e\_w

Profile Desc	ription: (Describe t	o the dep	th needed to docur	ment the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Features	3			
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-10	10YR 5/2	70	7.5YR 4/6	30	С	PL?M	sandy Loam	
10-18	10YR 4/2	60	NA	NA	NA	NA	sandy Loam	Mixed matrix
	2.5Y 7/4	20	NA	NA	NA	NA	sandy Loam	Mixed matrix
	7.5YR 5/6	20	NA	NA	NA	NA	sandy Loam	Mixed matrix
					-			
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ins.	<sup>2</sup> Location: Pl	L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indica	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	e (S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	ipedon (A2)		Polyvalue Be				<b>148)</b> C	oast Prairie Redox (A16)
Black His	stic (A3)		Thin Dark Su	ırface (S9)	(MLRA 1	47, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)		P	iedmont Floodplain Soils (F19)
Stratified	l Layers (A5)		✓ Depleted Ma	trix (F3)				(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark	Surface (F	6)		∨	ery Shallow Dark Surface (TF12)
Depleted	l Below Dark Surface	(A11)	Depleted Da	rk Surface	(F7)		_ 0	ther (Explain in Remarks)
Thick Da	ırk Surface (A12)		Redox Depre					
Sandy M	lucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangan	ese Masse	es (F12) <b>(</b> I	_RR N,		
	147, 148)		MLRA 13					
Sandy G	leyed Matrix (S4)		Umbric Surfa	ace (F13) (	MLRA 13	6, 122)	<sup>3</sup> Ind	icators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	<b>8</b> ) we	tland hydrology must be present,
Stripped	Matrix (S6)		Red Parent I	Material (F	21) <b>(MLR</b>	A 127, 147	') unl	less disturbed or problematic.
Restrictive L	ayer (if observed):							
Type: NA	1							
Depth (inc	ches): NA						Hydric Soil	Present? Yes No
Remarks:							ı	
One indicator	of hydric soils met: D	epleted n	natrix (F3)					
one maleater	or riyano cono mon	opiotod ii	idanx (i o).					



Wetland data point wnok006e\_w facing North



Wetland data point wnok006e\_w facing South

Project/Site: Southeast Reliability Project	City/County: NA/Nottoway Sampling Date: 07/28/14
Applicant/Owner: Dominion Transmission	State: VA Sampling Point: wnok006_u
Investigator(s): W. Medlin, J. Sweitzer	Section, Township, Range: NA
• · · · ·	ocal relief (concave, convex, none): <u>convex</u> Slope (%): <u>NA</u>
Subregion (LRR or MLRA): LRR P Lat: 37.259061	592 Long: -78.182323857 Datum: NAD 1983
Soil Map Unit Name: Mixed alluvial land (Mn)	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of y	
	y disturbed? Are "Normal Circumstances" present? Yes V
Are Vegetation Soil , or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes  No No	In the Counted Area
Hydric Soil Present? Yes No ✓	- Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No. ✓	- L
Remarks:	
This area is an upland natural levee along Flat Creek,	a large perennial stream. The adjacent floodplain wetland has
	still forested. Vegetation criteria met, but hydric soil and wetland
hydrology criteria not met. Area is not a wetland.	
*Photos 100-0284 to 0288 (WLM camera)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) True Aquatic I	
	fide Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhiz	ospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of R	Reduced Iron (C4) Dry-Season Water Table (C2)
	eduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4)	
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) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inche	s)·
Water Table Present?  Yes No Depth (inche	
Saturation Present? Yes No Depth (inche	
(includes capillary fringe)	wedand flydrology Fresent: Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	los, previous inspections), if available:
NA	
Remarks:	
Hydrology criteria is not met.	

# VEGETATION (Five Strata) – Use scientific names of plants.

Time   Stratum   (Plot size; 30 ft Tradius   40	20 ft div	Absolute	Dominant		Dominance Test worksheet:	
2 Pinus taeda 3 Ulmus rubra 15 Y FAC 3 Ulmus rubra 15 Y FAC 4 Prevalence Index workshot:  50% of total cover: 37.5 20% of total cover: 15 Sagling Stratum (Plot size: 15 ft radius) 1 Asimina triloba 10 Y FAC 10 FAC Species 50 x 2 - 100 FAC Specie	Tree Stratum (Plot size: 30 ft radius )					
3   Ulmus rubra   15   Y   FAC     FAC					That Are OBL, FACW, or FAC: 10 (	(A)
Species Across Al Strate   11					Total Number of Dominant	
5.	3. Ulmus rubra	15	<u>Y</u>	FAC	1	(B)
5.	4					
						(A/D)
Total & Cover of   Total & Cov	6				That Are Obl., I ACW, of I AC.	(A/D)
Solid total cover   37.5   20% of total cover   15   Tradius   1   1   1   1   1   1   1   1   1	<u> </u>	75	– Total Cov		Prevalence Index worksheet:	
Santing (Plot size: 15 ft radius   10	27.5				Total % Cover of: Multiply by:	
Asimina triloba   10		20% of	total cover:	15	OBL species $5$ $x 1 = 5$	
AC species   20	Sapling Stratum (Plot size: 15 ft radius					
FACU species   45	1. Asimina triloba	10	<u>Y</u>	FAC	1	-
UPL species   0 x 5   0   0   0   0   0   0   0   0   0	2				' <del> </del>	-
Shrub Stratum (Plot size: 15 ft radius   25	3					-
5						<b>-</b>
Percelance Index					Column Totals: 300 (A) 300	(B)
Mydrophytic Vegetation Indicators:   1 - Rapid Test for Hydrophytic Vegetation   1 - Rapid Test for Hydrophytic Vegetation   2 - Daminance Test is 5-50%		-			Prevalence Index = B/A = 2.95	
Sow of total cover: 40 20% of total cover: 16 22 Y FAC  1. Asimina triloba 25 Y FAC  2. Lindera benzoin 15 Y FAC  2. Lindera benzoin 15 Y FAC  3. 4	<u> </u>	10	- Total Cov			•
Shrub Stratum (Plot size: 15 ft radius 1, Asimia triloba 25 Y FAC 2, Lindera benzoin 15 Y FAC 2, Lindera benzoin 15 Y FAC 3 - Prevalence Index is \$3.0" 3 -	40				1	
Assimina filoba  25  Y FAC  Lindera benzoin  15  Y FAC  Lindera benzoin  16  Lindera benzoin  17  Lindera benzoin  18  Lindera benzoin  19  Lindera benzoin  10  Lindera benzoin  11  Lindera benzoin  12  Lindera benzoin  130  Y FAC  20  Lindera benzoin  140  Lindera benzoin  15  Lindera benzoin  16  Lindera benzoin  17  Lindera benzoin  18  Lindera benzoin  19  Lindera benzoin  10  Lindera benzoin  11  Lindera benzoin  11  Lindera benzoin  12  Lindera benzoin  13  - Protal Cover  20  Lindera benzoin  140  Lindera benzo		20% of	total cover:	16		
2 Lindera benzoin  3	Shrub Stratum (Plot size: 15 ft radius				1 =	
data in Remarks or on a separate sheet)    Comparison of total cover   20   20% of total cover   8	·					
3.	2. Lindera benzoin	15	Y	FAC	4 - Morphological Adaptations' (Provide suppo	orting
4	3				· —	
5					Problematic Hydrophytic Vegetation* (Explain)	)
6						
Definitions of Five Vegetation Strata:    Herb Stratum (Plot size: 10 ft radius   1   1   1   1   1   1   1   1   1	6					ıst
Definitions of Five Vegetation Strata:	<u> </u>	40	– Total Cov		· · · · · · · · · · · · · · · · · · ·	
Herb Stratum (Plot size: 10 ft radius   1. Dichanthelium clandestinum   30	20				Definitions of Five Vegetation Strata:	
Dichanthelium clandestinum   30		20% of	total cover:	8	Tree – Woody plants, excluding woody vines,	
2 Phytolacca americana 3 Verbesnia alterniflora 4 Oxalis stricta 5 Microstegium vimineum 5 Microstegium vimineum 6 Carex frankii 7 Elymus virginicus 8					approximately 20 ft (6 m) or more in height and 3 in	n.
3 Verbesnia alterniflora 4 Oxalis stricta 5 Microstegium vimineum 5 Microstegium vimineum 6 Carex frankii 7 Elymus virginicus 10 FACW 10 FACW 11 FACW 11 FACW 12 FACW 13 FACW 145 FACW 15 FACW 16 Carex frankii 7 Elymus virginicus 10 FACW 10 FACW 11 FACW 11 FACW 12 FACW 13 FACW 145 FACW 145 FACW 15 FACW 16 FACW 17 FACW 18 FACW 19 FACW 10 FACW 10 FACW 10 FACW 11 FACW 11 FACW 12 FACW 13 FACW 145 FACW 145 FACW 145 FACW 15 FACW 16 FACW 17 FACW 18 FACW 19 FACW 10 FACW 10 FACW 10 FACW 10 FACW 10 FACW 11 FACW 11 FACW 12 FACW 13 FACW 145 FACW 145 FACW 15 FACW 16 FACW 17 FACW 18 FACW 19 FACW 19 FACW 19 FACW 19 FACW 19 FACW 19 FACW 10					(7.6 cm) or larger in diameter at breast height (DBI	H).
3. Verbesnia alterniflora 4. Oxalis stricta 5. Microstegium vimineum 6. Carex frankii 7. Elymus virginicus 8.		30	<u>Y</u>		Sapling – Woody plants, excluding woody vines,	
Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody Vine Stratum (Plot size: 15 ft radius )  Campsis radicans 25 Y FAC 2 Vitis rotundifolia 10 Y FAC 3.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.  Woody vine – All woody vines, regardless of height.  Hydrophytic Vegetation Present?  Yes V No No	3. Verbesnia alterniflora	20		FAC	approximately 20 ft (6 m) or more in height and les	S
6 Carex frankii 5 OBL 7 Elymus virginicus 10 FACW 8.99	4. Oxalis stricta	15		FACU	than 3 in. (7.6 cm) DBH.	
6 Carex frankii 7 Elymus virginicus 10 FACW 8. 9. 10. 11. 11. 12. 13. 14.5 = Total Cover 20% of total cover: 72.5 20% of total cover: 29  Woody Vine Stratum (Plot size: 15 ft radius 2. Vitis rotundifolia 3. Vitis rotundifolia 4. Vitis rotundifolia 4. Vitis rotundifolia 5.0% of total cover: 17.5 2.0% of total cover: 7. Ves Vitis No Vitis rotundifolia 4. Vitis rotundifolia 4. Vitis rotundifolia 5.0% of total cover: 17.5 2.0% of total cover: 7. Ves Vitis No Vitis rotundifolia 5.0% of total cover: 17.5 2.0% of total cover: 7. Ves Vitis No Vitis rotundifolia 5.0% of total cover: 17.5 2.0% of total cover: 7.	5. Microstegium vimineum	35	Υ	FAC	Shrub – Woody plants, excluding woody vines,	
7. Elymus virginicus  8.	6 Carex frankii	5		OBL		
8		10		FACW	Harb All harbassaus (non woody) plants includi	na
9						iig
10					plants, except woody vines, less than approximate	ly 3
11					ft (1 m) in height.	
145					Woody vine – All woody vines, regardless of heigh	ht.
So% of total cover: 72.5 20% of total cover: 29  Woody Vine Stratum (Plot size: 15 ft radius )  1. Campsis radicans 25 Y FAC  2. Vitis rotundifolia 10 Y FAC  3	11	115			, , , , ,	
Woody Vine Stratum (Plot size: 15 ft radius )  1. Campsis radicans 25 Y FAC  2. Vitis rotundifolia 10 Y FAC  3.		145	= Total Cov	er		
1. Campsis radicans 2. Vitis rotundifolia 3.	50% of total cover: <u>72.5</u>	20% of	total cover:	29		
1. Campsis radicans 2. Vitis rotundifolia 3.	Woody Vine Stratum (Plot size: 15 ft radius					
2. Vitis rotundifolia  3	1. Campsis radicans	25	Υ	FAC		
3		10	Y	FAC		
4	3					
Remarks: (Include photo numbers here or on a separate sheet.)  Vegetation Present?  Vegetation Present?  Vegetation Present?  Vegetation Present?	J	-				
Remarks: (Include photo numbers here or on a separate sheet.)  Vegetation Present?  Vegetation Present?  Vegetation Present?  Vegetation Present?	4					
The state of the	0	35				
Remarks: (Include photo numbers here or on a separate sheet.)					Vegetation Variable V	
	50% of total cover: 17.5	20% of	total cover:	7	Present? Yes V NO	
Hydrophytic vegetation criteria is met.	Remarks: (Include photo numbers here or on a separate s	heet.)			1	
	Hydrophytic vegetation criteria is met.					

Sampling Point: wnok006\_u

Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks  0-4 10YR 3/3 100 FSL FSL - fine sandy local fractions of the first sandy local fractions of th	
0-4 10YR 3/3 100 FSL FSL - fine sandy loa	
	<u>m</u>
4-20 10YR 4/4 100 FSL	
	-
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: Indicators for Problematic Hydrox	
Histosol (A1)  Dark Surface (S7)  2 cm Muck (A10) (MLRA 14)	7)
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)	
Black Histic (A3)	
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2) ☐ Piedmont Floodplain Soils (	<del>-</del> 19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147)	
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface	(TF12)
Depleted Below Dark Surface (A11)  Depleted Dark Surface (F7)  Other (Explain in Remarks)	
Thick Dark Surface (A12)  Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148) MLRA 136)	tation and
Sandy Gleyed Matrix (S4)  Umbric Surface (F13) (MLRA 136, 122)  Judge Standard Gleyed Matrix (S4)  Umbric Surface (F13) (MLRA 136, 122)  Judge Standard Gleyed Matrix (S4)	
Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  wetland hydrology must be p	
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema	uc.
Restrictive Layer (if observed):	
Type: NA	$\Box$
NIA I I	No ✓
Depth (inches): NA Hydric Soil Present? Yes	
Remarks:	
Remarks:	·
Remarks:	·
Remarks:	·
Remarks:	



Upland data point wnok006\_u facing North



Upland data point wnok006\_u facing South



Wetland data point wnok006e\_w soil sample



Upland data point wnok006\_u soil sample

Project/Site: Southeast Reliability Project	City/County: NA/Nottoway Sampling Date: 07/29/14
Applicant/Owner: Dominion Transmission	State: VA Sampling Point: wnok007f_v
Investigator(s): W. Medlin, J. Sweitzer	Section, Township, Range: NA
	Local relief (concave, convex, none): concave Slope (%): 0-1
Subregion (LRR or MLRA): LRR P Lat: 37.25889	7717 Long: <u>-78.181714183</u> Datum: <u>NAD 1983</u>
Soil Map Unit Name: Mixed alluvial land (Mn)	NWI classification: PFO1A
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation Soil , or Hydrology significan	ntly 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	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes  No No	1
Hydric Soil Present? Yes V	Is the Sampled Area within a Wetland? Yes Ves No
Wetland Hydrology Present? Yes ✓ No	į
Remarks:	<u>-</u>
This area is a piedmont floodplain depression that has	s a drainage slough which connects to Flat Creek. Many migratory
, ,	rican woodcocks were seen. All three criteria are met. Area is a
wetland.	
*Photos 100-0299 to 0303 (WLM camera)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	
1 =	C Plants (B14) Sparsely Vegetated Concave Surface (B8)
	ulfide Odor (C1)
1 <del></del>	izospheres on Living Roots (C3) Moss Trim Lines (B16) Reduced Iron (C4) Dry-Season Water Table (C2)
	Reduction in Tilled Soils (C6)  Crayfish Burrows (C8)
✓ Drift Deposits (B3) Thin Muck S	<b>—</b> `
1 =	ain 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 (inch	
	nes):
Saturation Present? Yes No Depth (inch (includes capillary fringe)	es): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
NA	
Remarks:	
Hydrology criteria is met.	

# **VEGETATION** (Five Strata) – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft radius )	% Cover	Species?	Status	Number of Dominant Species
<sub>1.</sub> Fraxinus pennsylvanica	40		FACW	That Are OBL, FACW, or FAC: 9 (A)
2. Betula nigra	40	Y	FACW	Total Niverban of Descinant
3. Carpinus caroliniana	30	Y	FAC	Total Number of Dominant Species Across All Strata: 9 (B)
4. Platanus occidentalis	40		FACW	Species / icross / iii Strata.
5. Celtis occidentalis	10		FACU	Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
C.				That Are OBL, FACW, or FAC: 100 (A/B)
0	160	<del></del>		Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 80	20% of	total cover:	32	OBL species $\frac{2}{x}$ $\frac{1}{2}$
Sapling Stratum (Plot size: 15 ft radius				FACW species 157 x 2 = 314
1. Asimina triloba	60	Y	FAC	FAC species 230 x 3 = 690
2. Fraxinus pennsylvanica	20		<b>FACW</b>	· <del></del>
3. Carpinus caroliniana	15		FAC	
4. Celtis occidentalis	15		FACU	UPL species $0 \times 5 = 0$
5				Column Totals: 414 (A) 1106 (B)
5				Prevalence Index = B/A = 2.67
0	110	<del></del>		
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: <u>55</u>	20% of	total cover:	22	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15 ft radius				2 - Dominance Test is >50%
1. Asimina triloba	55	Υ	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Lindera benzoin	60	Y	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3				data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
0	115			be present, unless disturbed or problematic.
	115	<ul><li>Lotal Cov</li></ul>	er	Definitions of Fire Vanatation Chartes
				Definitions of Five Vegetation Strata:
50% of total cover: <u>57.5</u>				
				Tree – Woody plants, excluding woody vines,
50% of total cover: 57.5  Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica		total cover:		
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica	20% of	total cover:	23	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus	20% of 5 10	total cover:	23 FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens	20% of 5 10 2	total cover:	FACW FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens  4. Persicaria hydropiperoides	20% of 5 10	total cover:	23 FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens	20% of 5 10 2	total cover:	FACW FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens  4. Persicaria hydropiperoides  5	20% of 5 10 2	total cover:	FACW FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens  4. Persicaria hydropiperoides  5	5 10 2 5	total cover:	FACW FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens  4. Persicaria hydropiperoides  5	5 10 2 5	total cover:	FACW FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens  4. Persicaria hydropiperoides  5	5 10 2 5	total cover:	FACW FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens  4. Persicaria hydropiperoides  5	5 10 2 5	total cover:	FACW FACW FACW	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
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Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens  4. Persicaria hydropiperoides  5	20% of 5 10 2 5 5	total cover:	FACW FACW OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
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Herb Stratum (Plot size: 10 ft radius )  1. Boehmeria cylindrica  2. Elymus virginicus  3. Carex intumescens  4. Persicaria hydropiperoides  5. 6. 7. 8. 9. 10. 11. 50% of total cover: 11 Woody Vine Stratum (Plot size: 15 ft radius )  1. Smilax rotundifolia	20% of 5 10 2 5	Y Y Y  Total Cover:	FACW FACW OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
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Sampling Point: wnok007f\_w

Profile Desc	ription: (Describe	to the dep	oth needed to docun	nent the	indicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo:	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2	10YR 3/2	100					SL	SL - sandy loam
2-6	10YR 4/1	65	5YR 4/6	35	<u>C</u>	PL	clay	some sandy sediment mixed
6-14	10YR 5/1	85	7.5YR 5/8	15	<u>C</u>	M/PL	SCL	SCL - sandy clay loam
14-20	10YR 6/2	90	10YR 5/8	10	C	<u>M</u>	sand	
	-	. ——			·			
						. ,		
		· ——			·			
1							3	
		letion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gra	ains.	Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface		(0.0) (0.0)			cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
Black Hi	stic (A3) en Sulfide (A4)		☐ Thin Dark Su☐ Loamy Gleye			147, 148)		(MLRA 147, 148) riedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mat		(FZ)		<u> </u>	(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark		<del>-</del> 6)		Пν	/ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar					Other (Explain in Remarks)
_ :	ark Surface (A12)	- ( )	Redox Depre					,
_	Mucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,		
MLRA	\ 147, 148)		MLRA 13	6)				
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N	laterial (F	21) <b>(MLR</b>	A 127, 147	<b>7)</b> un	less disturbed or problematic.
	Layer (if observed):							
Type: <u>N</u>			<del></del>					
	ches): NA		<u>—</u>				Hydric Soil	Present? Yes V No No
Remarks:	ydric soils criteria	a ic mat						
1 13	yunc sons cinena	a 13 111 <del>0</del> 1.						



Wetland data point wnok007f\_w facing South



Wetland data point wnok007f\_w facing West

Project/Site: Southeast Reliability Project	City/County: Nottow	Sampling Date: 07/29/2014	
Applicant/Owner: Dominion Transmission			Sampling Point: wnok007_u
	Section, Township, F		<u> </u>
Landform (hillslope, terrace, etc.): floodplain berm	Local relief (concave, co	novex none). none	Slope (%):_0-1
Subregion (LRR or MLRA): LRR P Lat:	37.258865295	ong: 78.181845957	Olope (70) Datum: NAD 1983
Soil Map Unit Name: Mixed Alluvial Land (Mn)		NWI classi	fication: Upland
Are climatic / hydrologic conditions on the site typical fo			
Are Vegetation, Soil, or Hydrology	· · · · · · · · · · · · · · · · · · ·		
Are Vegetation, Soil, or Hydrology			
SUMMARY OF FINDINGS – Attach site m			
,		,	, ,
Hydrophytic Vegetation Present? Yes   ✓	Is the Sample		,
	- No within a Wetl - No	and? Yes	No <u></u>
Remarks:			
Photos 104-4636 soil, 4637 S, 4638 E, 4639 W (J. Sw Upland plot established on natural levee adjacent to F and hydrology criteria met, but hydric soil criteria not n	Flat Creek. Upland data point associa	ited with backwater (sloug	h) floodplain wetland. Vegetation
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indi	cators (minimum of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Sc	il Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely V	egetated Concave Surface (B8)
	Hydrogen Sulfide Odor (C1)	Drainage F	, ,
	Oxidized Rhizospheres on Living Ro		
<u> </u>	Presence of Reduced Iron (C4)		n Water Table (C2)
	Recent Iron Reduction in Tilled Soils		urrows (C8)
	Thin Muck Surface (C7)		Visible on Aerial Imagery (C9)
	Other (Explain in Remarks)	<del></del>	Stressed Plants (D1)
Iron Deposits (B5)		✓ Geomorph	, ,
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		Shallow Ad	raphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutr	
Field Observations:		170-110011	ar 1631 (153)
	Depth (inches):		
	Depth (inches):		
		Vetland Hydrology Pres	ent? Yes ✓ No
(includes capillary fringe)		,	HO
Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspectio	ns), if available:	
NA .			
Remarks:			15110
Several indicators of wetland hydrology observed due	to location of point on natural levee i	petween active floodplain	and Flat Creek.

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

50% of total cover: 85

50% of total cover: 48

5 ft R \_ )

60

50

25

5

40

5

50

80

40

= Total Cover

Υ

= Total Cover \_ 20% of total cover:\_\_

20% of total cover:

Υ

Υ

Ν

Ν

Υ

Υ

Ν

34

NI

NI

Hydrophytic Vegetation

Present?

170 = Total Cover

20% of total cover:

95 = Total Cover

20% of total cover:\_\_

Tree Stratum (Plot size: \_

Celtis occidentalis

Sapling/Shrub Stratum (Plot size: 15 ft R

1. Juglans nigra

2. Acer negundo

Acer rubrum

5. Betula nigra

1. Asimina triloba

3. Lindera benzoin

Celtis occidentalis

Herb Stratum (Plot size:

2. Carex sp. (no fruiting bodies)

Woody Vine Stratum (Plot size: \_

Toxicodendron radicans

1. Smilax bona-nox

1. Viola sp.

Sampling Point:\_wnok007\_u Absolute Dominant Indicator **Dominance Test worksheet:** % Cover Species? Status Number of Dominant Species FACU That Are OBL, FACW, or FAC: \_\_\_ (A) FAC **Total Number of Dominant** FACU Species Across All Strata: FAC Percent of Dominant Species **FACW** That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: \_\_\_\_\_ x 1 = \_\_ OBL species FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_ **FACU** \_\_\_\_ x 4 = \_\_ FAC UPL species \_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_ \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = \_\_\_ Hydrophytic Vegetation Indicators: \_\_ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% \_ 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>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) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height. **FACU** FAC

Remarks:	(Include photo	numbers here	or on a separate	sheet.)
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Vegetation passes dominance test. Typical well drained piedmont floodplain vegetation.

50% of total cover:

30 Ft R \_ )

Yes \_\_ ✓ No \_\_\_\_\_

Sampling Point: wnok007\_u

Color (moist)   Scoting (moi	
3-18   10 YR 4/4   90 NA NA NA NA NA NA NA NA Sandy Loam NA; Mixed matrix	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Type: NA	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Polyvalue Below Matrix (F2)  Piedmont Floodplain Soils  Stratified Layers (A5)  Depleted Dark Surface (F6)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Depleted Dark Surface (F7)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12) (LRR N, MLRA 147, 148)  MLRA 136)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Red Parent Material (F21) (MLRA 147, 147)  Restrictive Layer (if observed):  Type: NA  Depth (inches): NA  Remarks:	
ydric Soil Indicators:  Histosol (A1)  Histosol (A2)  Polyvalue Below Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Stripped Matrix (S6)  Peledmont Floodplain Soils (F19) (MLRA 136, 122)  Piedmont Floodplain Soils (F19) (MLRA 148)  MLRA 136, 122)  Piedmont Floodplain Soils (F19) (MLRA 148)  Wetland hydrology must be pure strictive Layer (if observed):  Type: NA  Depth (inches): NA  MICA 136, 127  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Loany Gleyed Matrix (F2)  Piedmont Floodplain Soils (F19) (MLRA 148)  Wetland hydrology must be pure strictive Layer (if observed):  Type: NA  Depth (inches): NA  Mydric Soil Present? Yes	
ydric Soil Indicators:  Histosol (A1)  Histosol (A2)  Polyvalue Below Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Stripped Matrix (S6)  Peledmont Floodplain Soils (F19) (MLRA 136, 122)  Piedmont Floodplain Soils (F19) (MLRA 148)  MLRA 136, 122)  Piedmont Floodplain Soils (F19) (MLRA 148)  Wetland hydrology must be pure strictive Layer (if observed):  Type: NA  Depth (inches): NA  MICA 136, 127  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Loany Gleyed Matrix (F2)  Piedmont Floodplain Soils (F19) (MLRA 148)  Wetland hydrology must be pure strictive Layer (if observed):  Type: NA  Depth (inches): NA  Mydric Soil Present? Yes	
Histosol (A1)	
ydric Soil Indicators:  Histosol (A1)  Histosol (A2)  Polyvalue Below Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Stripped Matrix (S6)  Peledmont Floodplain Soils (F19) (MLRA 136, 122)  Piedmont Floodplain Soils (F19) (MLRA 148)  MLRA 136, 122)  Piedmont Floodplain Soils (F19) (MLRA 148)  Wetland hydrology must be pure strictive Layer (if observed):  Type: NA  Depth (inches): NA  MICA 136, 127  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Loany Gleyed Matrix (F2)  Piedmont Floodplain Soils (F19) (MLRA 148)  Wetland hydrology must be pure strictive Layer (if observed):  Type: NA  Depth (inches): NA  Mydric Soil Present? Yes	
Histic Epipedon (A2)	
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Piedmont Floodplain Soils (MLRA 147, 148) Piedmont Floodplain Soils (MLRA 136, 147) Piedmont Floodplain Soils (MLRA 136, 147) Piedmont Floodplain Soils (MLRA 136, 147) Piedmont Floodplain Soils (F7) Other (Explain in Remarks MLRA 136)  Umbric Surface (F12) (LRR N, MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrology must be unless disturbed or problem strictive Layer (if observed): Type: NA Depth (inches): NA Hydric Soil Present? Yes  Hydric Soil Present? Yes  Description (A16)  MLRA 147, 148)  Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (MLRA 127, 147) Piedmont Floodplain Soils (F19) (MLRA 127,	-
Black Histic (A3)	
Stratified Layers (A5)  2 cm Muck (A10) (LRR N)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N,  MLRA 136)  Sandy Gleyed Matrix (S4)  Stripped Matrix (S6)  Stripped Matrix (S6)  Stripped Matrix (S6)  Stripped Matrix (S6)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  MLRA 136, 129  Type:  MA  Depth (inches):  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Depleted Dark Surface (F7)  Depleted Dark Surface (F7)  Depleted Matrix (F3)  Medox Dark Surface (F7)  Depleted Matrix (F3)  Medox Dark Surface (F6)  Depleted Matrix (F8)  Medox Dark Surface (F12) (LRR N,  MLRA 136, 122)  June Matrix (S4)  Multer Material (F13) (MLRA 136, 122)  Multer Material (F13) (MLRA 148)  Medic Soil Present? Yes  Medox Dark Surface (F6)  Urbric Explain in Remarks  Multer Material (F13) (MLRA 136, 122)  Multer Material (F13) (MLRA 136, 122)  Multer Material (F13) (MLRA 148)  Multer Material (F13) (MLRA 148)  Method Indicators of hydrophytic vectors of hydrophytic vec	
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) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problem Restrictive Layer (if observed): Type: NA Depth (inches): NA  Hydric Soil Present? Yes  Redox Dark Surface (F6) Very Shallow Dark Surface Unterval Surface (F7) Other (Explain in Remarks  Redox Dark Surface (F7)  Depleted Dark Surface (F7)  MLRA 136, 122  January Surface (F13) (MLRA 136, 122)  January Surface (F6)  Wery Shallow Dark Surface (F6)  Unterval Surface (F7)  Jesus Surface (F6)  Wery Shallow Dark Surface (F6)  Utery Shallow Dark Surface (F7)  Jesus Surface (F6)  Wery Shallow Dark Surface (F7)  Jesus Surface (F6)  Wery Shallow Dark Surface (F7)  Jesus Surface (F7)  Wery Shallow Dark Surface (F7)  Jesus Surface (F7)  Jesus Surface (F7)  Wery Shallow Dark Surface (F7)  Jesus Surface (F7)  Jesus Surface (F13) (MLRA 136, 122)  Jesus Surface (F13) (MLRA 136, 1	(F19)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N,  MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Stripped Matrix (S6)  Stripped Matrix (S6)  Exerticitive Layer (if observed):  Type:  MA  Depth (inches):  Depleted Dark Surface (F7)  Depleted Dark Surface (F7)  Med Autria (F7)  Med Depth (inches):  Depleted Dark Surface (F7)  Med Depleted Dark Surface (F7)  Med Depleted Dark Surface (F7)  Depleted Dark Surface (F7)  Med Depleted Dark Surface (F1)  Med Dark Surface (F1)  Med Dark Surface (F12) (LRR N,  MLRA 136)  Med Dark Surface (F12) (LRR N,  MLRA 136, 122)  Med Dark Surface (F13) (MLRA 136, 122)  Med Dark Surface (F13) (ML	
Thick Dark Surface (A12) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122)	e (TF12)
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	3)
MLRA 147, 148)  _ Sandy Gleyed Matrix (S4)  _ Sandy Redox (S5)  _ Stripped Matrix (S6)  _ Stripped Matrix (S6)  _ Stripped Matrix (S6)  _ Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)    Stripped Matrix (S6)   Red Parent Material (F21) (MLRA 127, 147)   Stripped Matrix (S6)   St	
Sandy Gleyed Matrix (S4)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problem Restrictive Layer (if observed):  Type: NA Depth (inches): NA Hydric Soil Present? Yes Remarks:	
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problem  Restrictive Layer (if observed):  Type: NA  Depth (inches): NA  Remarks:  Hydric Soil Present? Yes	getation and
Restrictive Layer (if observed):  Type: NA  Depth (inches): NA  Remarks:  Hydric Soil Present? Yes	present,
Type: NA  Depth (inches): NA  Remarks:  Hydric Soil Present? Yes	natic.
Depth (inches): NA Hydric Soil Present? Yes	
Remarks:	
	_ No <u></u> ✓
o indicators of hydric soils observed.	



Upland data point wnok007\_u facing East



Upland data point wnok007\_u facing West



Wetland data point wnok007f\_w soil sample



Upland data point wnok007\_u soil sample

Project/Site: Southeast Reliability Project	City/County: Nottoway		Sampling Date: 07/29/2014
Applicant/Owner: Dominion Transmission		_ State: VA	_ Sampling Point: wnok008f_w
Investigator(s): J. Sweitzer, W. Medlin	Section, Township, Range: N	A	
Landform (hillslope, terrace, etc.): convergent slopes L			Slope (%): 0-3
Subregion (LRR or MLRA): LRR P Lat: 37.25492291			Datum: NAD 1983
Soil Map Unit Name: Louisburg Sandy Loam, Rolling Phase (Lh)		NWI classifica	etion: PFO1B
Are climatic / hydrologic conditions on the site typical for this time of y	vear? Yes No	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are "Norma	ıl Circumstances" pı	resent? Yes No
Are Vegetation, Soil, or Hydrology naturally p		explain any answer	
SUMMARY OF FINDINGS – Attach site map showin		ons, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No			
Hydric Soil Present? Yes ✓ No	- Is the Sampled Area	V 1	No
Wetland Hydrology Present? Yes   ✓ No	-   Willilli a Wellallu :	res	NO
Remarks:			
Photos 104-4640 soils, 4641 S, 4642 E, 4643 W			
This wetland forms at the convergence of two slopes and is the head	dwaters of an ephemeral stream	i (snok009). All 3 cr	iteria met. Area is a wetland.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	)	Surface Soil (	· · · · · · · · · · · · · · · · · · ·
Surface Water (A1) True Aquatic		<del></del>	etated Concave Surface (B8)
High Water Table (A2)  Hydrogen Sul	, ,	✓ Drainage Patt	erns (B10)
	cospheres on Living Roots (C3)	Moss Trim Lir	
	Reduced Iron (C4)	<del></del>	Vater Table (C2)
<u> </u>	eduction in Tilled Soils (C6)	✓ Crayfish Burro	
Drift Deposits (B3) Thin Muck Su			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain	n in Remarks)	Stunted or Str	ressed Plants (D1)
Iron Deposits (B5)		✓ Geomorphic F	Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquit	ard (D3)
Water-Stained Leaves (B9)		Microtopograp	phic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)
Field Observations:	NΛ		
Surface Water Present? Yes No Depth (inche			
Water Table Present? Yes No✓ Depth (inche			
Saturation Present? Yes No ✓ Depth (inche (includes capillary fringe)	s):NA Wetland	Hydrology Present	? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if av	ailable:	
NA	, , ,		
Remarks:			
Several primary and secondary hydrology indicators observed. Hydr	ology criteria met.		

Sampling Point:	wnok008f_	W
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TEGETATION (Four Grata) Good Goldman III		pranto:		Camping Forms
Tree Stretum (Blot size) 30 ft R	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size)		Species?		Number of Dominant Species
1. Acer rubrum	60	<u> </u>	FAC_	That Are OBL, FACW, or FAC: 7 (A)
2. Liquidambar styraciflua	30	Y	FAC	T-t-1 Novebox of Dancin and
3. Salix nigra	5	N	OBL	Total Number of Dominant Species Across All Strata: 7 (B)
4 Ulmus americana	5		FACW	Opecies Across Air Strata.
5 Liriodendron tulipifera	10		FACU	Percent of Dominant Species
5. Linodendron tulipliera			TACO	That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
	110	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 55	$\overline{}$	total cover:_	22	OBL species x 1 =
45 (LD	20 /0 01	lotal cover		
Sapling/Shrub Stratum (Plot size: 15 ft R )				FACW species x 2 =
1. Liquidambar styraciflua	20	Y	FAC	FAC species x 3 =
2. Ulmus americana	10	N	FACW	FACU species x 4 =
3. Acer rubrum	20	Y	FAC	UPL species x 5 =
	10		FAC	Column Totals: (A) (B)
4. Lindera benzoin				Column rotals (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 <sup>1</sup>
		= Total Cove	r	1 <del></del>
50% of total cover: 30		total cover:_		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
E & D				data in Remarks or on a separate sheet)
Herb Stratum (Flot size)	40		E A C\A/	Problematic Hydrophytic Vegetation¹ (Explain)
1. Woodwardia areolata	40	Y	FACW	
2. Woodwardia virginica	5	N	OBL	1
3. Osmunda regalis	5	N	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4		· —		be present, unless disturbed or problematic.
4		<del></del>		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				Hade All back assess (see seeds) alone assessing
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
500/ (1.1.1	$\overline{}$	= Total Cove		of size, and woody plants less than 3.20 it tall.
50% of total cover: <u>25</u>	20% of	total cover:_	10	<b>Woody vine</b> – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:30 Ft R)				height.
1	10	Y	FAC	
2. Smilax rotundifolia	5	<u> </u>	FAC	
		·		
3				
4				Hydrophytic
5				Vegetation
	15	= Total Cove	r	Present? Yes No
50% of total cover:8		total cover:_	_	
Remarks: (Include photo numbers here or on a separate s	heet.)			
Vegetation passes dominance test.				

Sampling Point: wnok008f\_w

Profile Des	cription: (Describe t	o the de	oth needed to docur	ment the i	ndicator o	or confirn	n the absence	of indicators.)
Depth	Matrix		Redo	x Features	3			
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-5	10YR 3/2		NA	NA ———	NA_	NA_	sandy Loam	with organic
0-5	10YR 5/2	50	NA NA	NA_	NA_	NA	sandy Loam	NA
5-7	10YR 5/1	60	NA	NA_	NA_	NA_	sandy Loar	NA
5-7	10YR 3/2	40	NA	NA_	NA_	NA_	sandy Loarr	with organic; Mixed Matrix
7-13	10YR 5/1	100	NA	NA	NA	NA	sandy Loam	Mixed Matrix
13-20	10YR 5/1	90	NA	NA	NA	NA	sandy Loar	
13-20	10YR 3/2	10	NA	NA	NA	NA	sandy Loar	Streaking
								-
1Type: C=C	concentration, D=Depl	etion PM	=Peduced Matrix M	——— S=Masked	Sand Gra	——	<sup>2</sup> Location: PI	 _=Pore Lining, M=Matrix.
Hydric Soil		ellon, Kivi	-Reduced Matrix, Mi	3-Maskeu	Saliu Gia	IIIIS.		tors for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	e (S7)				cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(M</b>	LRA 147,		oast Prairie Redox (A16)
_	listic (A3)		Thin Dark Su				, <u> </u>	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (l	F2)		Pi	edmont Floodplain Soils (F19)
Stratifie	ed Layers (A5)		✓ Depleted Ma	trix (F3)				(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark					ery Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Da				<u> </u>	ther (Explain in Remarks)
	erk Surface (A12)	DD N	Redox Depre			DD N		
	Mucky Mineral (S1) <b>(L</b> <b>A 147, 148)</b>	KK N,	Iron-Mangan MLRA 13		es (F12) <b>(I</b>	LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa		MIRA 13	6 122)	<sup>3</sup> Indi	cators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					tland hydrology must be present,
	d Matrix (S6)		Red Parent I					ess disturbed or problematic.
	Layer (if observed):						1	
Type: N	A							
Depth (in	nches): NA						Hydric Soil	Present? Yes <u>√</u> No
Remarks:							ı	
One indicato	r of hydric soils met: [	Depleted r	natrix (F3).					



Wetland data point wnok008f\_w facing South



Wetland data point wnok008f\_w facing East

Project/Site: Southeast Reliability Project	City/County: NA/Nottoway Sampling Date: 07/29/14
Applicant/Owner: Dominion Transmission	State: VA Sampling Point: wnok008_u
	Section, Township, Range: NA
	cal relief (concave, convex, none): convex Slope (%): 8-12
Subregion (LRR or MLRA): LRR P Lat: 37.2549822	
Soil Map Unit Name: Louisburg sandy loam, rolling phase	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation Soil , or Hydrology significantly	
Are Vegetation Soil , or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Yes No	Is the Sampled Area within a Wetland? Yes No
Hydric Soil Present?  Westland Hydrology Present?  Yes No V	within a Wetland? Yes No
Wetland Hydrology Present? Yes No ✓ Remarks:	L
	dwood forest with semi-mature trees (~30-40 years old) and
	t hydric soils and hydrology criteria are not met. Area is not a wetland.
Well-developed stratification, is vegetation entertained, sat	. Tryullo solis and frydrology officina are not met. 7 tod to flot a westerne.
*Photos 100-0312 to 0316 (WLM camera)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pl	<u> </u>
High Water Table (A2)  Hydrogen Sulfic	<u>=</u>
1 <del></del>	ospheres on Living Roots (C3) Moss Trim Lines (B16)
	educed Iron (C4)
Drift Deposits (B3)  Thin Muck Surf	<b>—</b> '
Algal Mat or Crust (B4)  Other (Explain)	_
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 V Depth (inches)	
Water Table Present? Yes No V Depth (inches)	
Saturation Present? Yes No Depth (inches) (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
NA	
Remarks:	
Hydrology criteria is not met.	

# **VEGETATION** (Five Strata) – Use scientific names of plants.

00 #	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft radius</u> )  1. Pinus taeda	% Cover 20	Species?	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
2. Liriodendron tulipifera	80	Y	FACU	That Aid OBE, I AGW, OF FAC.
3 Acer rubrum	50	Y	FAC	Total Number of Dominant Species Across All Strata: 7 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 71 (A/B)
6				Drawlens Index wadabad
	150	= Total Cov	er	Prevalence Index worksheet:
	20% of	total cover:	30	
Sapling Stratum (Plot size: 15 ft radius				OBL species $0$ $x 1 = 0$ FACW species $0$ $x 2 = 0$
1. Acer rubrum	10	Y	FAC	FAC species $\frac{3}{187}$ $\frac{3}{187}$ $\frac{5}{187}$ $\frac{5}{187}$
2				FACU species 92 x 4 = 368
3				UPL species $0$ $x = 0$
4				Column Totals: 279 (A) 929 (B)
5				Column Totals. 210 (A) 020 (B)
6				Prevalence Index = B/A = 3.33
	10	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover: 5	20% of	total cover:	2	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15 ft radius				2 - Dominance Test is >50%
1. Carpinus caroliniana	25	<u>Y</u>	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Juniperus virginiana	5		FACU	4 - Morphological Adaptations (Provide supporting
3. Lindera benzoin	5		FAC	data in Remarks or on a separate sheet)
4. Asimina triloba	5		FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5				The discrete of Chandries and another discrete account
6				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	40	= Total Cov	er	Definitions of Five Vegetation Strata:
		. ota. oo.		I Definitions of Five vegetation Strata.
50% of total cover: 20				
50% of total cover: 20  Herb Stratum (Plot size: 10 ft radius )				Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )	20% of			
Herb Stratum (Plot size: 10 ft radius )	20% of		8	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 10 ft radius ) 1. Cornus florida 2. Carpinus caroliniana	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 10 ft radius ) 1. Cornus florida 2. Carpinus caroliniana	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
Herb Stratum (Plot size: 10 ft radius ) 1. Cornus florida 2. Carpinus caroliniana 3. 4. 5. 6. 6.	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size: 10 ft radius ) 1. Cornus florida 2. Carpinus caroliniana 3. 4. 5. 6. 7	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius ) 1. Cornus florida 2. Carpinus caroliniana 3	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3	20% of 5 2	total cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 10 ft radius ) 1. Cornus florida 2. Carpinus caroliniana 3	20% of 5 2	Y Y	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius ) 1. Cornus florida 2. Carpinus caroliniana 3. 4. 5. 6. 7. 8. 9. 10. 11. 11.	20% of 5 2	Y Y	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	20% of 5 2	Y Y	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	20% of 5 2	Y Y Y = Total Cover:	FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3	20% of 5 2	Y Y	8  FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	7 20% of 60 10	Y Y Y = Total Cover:	8  FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	20% of 5 2	Y Y Y = Total Cover:	8  FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	7 20% of 60 10	Y Y Y = Total Cover:	8  FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius ) 1. Cornus florida 2. Carpinus caroliniana 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 3.5 Woody Vine Stratum (Plot size: 15 ft radius ) 1. Lonicera japonica 2. Smilax rotundifolia	7 20% of 60 10 2	Total Cover:	8  FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	7 20% of 60 10 2	Total Cover:  Y Y Y  = Total Cover:  Y  = Total Cover:	8  FACU FAC  er  1.4  FAC FAC FACU er	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	7 20% of 60 10 2 72 20% of	Total Cover:  Y Y Y  = Total Cover:  Y  = Total Cover:	8  FACU FAC  er  1.4  FAC FAC FACU er	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: 10 ft radius )  1. Cornus florida 2. Carpinus caroliniana 3.	7 20% of 60 10 2 20% of heet.)	Total Cover:  Y Y  Y  = Total Cover:  Y  = Total Cover:  Y  = Total Cover:	8  FACU FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.  Hydrophytic Vegetation Present?  Yes No No

Sampling Point: wnok008\_u

Profile Desc	ription: (Describe	to the depth	needed to docum	ent the indic	cator or c	onfirm	the absence	of indicators	.)	
Depth	Matrix		Redox	Features						
(inches)	Color (moist)	%	Color (moist)	<u>% Ty</u>	vpe¹ L	$oc^2$	Texture		Remarks	
0-2	10YR 4/2	100					SL	SL - sand	y loam	
2-8	10YR 4/4	100					SL			
8-18	10YR 5/4	100					SL			_
										<del></del> -
						_				
1 <sub>Tymov</sub> C. Co	naontration D Dan	lotion DM I	Dodugod Matrix, MC	Maskad Car	ad Craina		<sup>2</sup> Leastion: D	L Doro Lining	M Motrix	
Hydric Soil I	oncentration, D=Dep	ietion, Rivi=i	Reduced Matrix, MS	=Masked Sai	na Grains.		Location: Pl	L=Pore Lining ators for Prob	, M=Matrix.	ric Soils 3.
Histosol			■ Dark Surface	(07)				cm Muck (A10	•	
=	oipedon (A2)		Polyvalue Bel		S8) (MI D	Δ 147		ciii Muck (A N Coast Prairie R		"
Black His			Thin Dark Sur				140)	(MLRA 147,		
	n Sulfide (A4)		Loamy Gleye		,	,	☐ P	iedmont Flood		19)
	Layers (A5)		Depleted Mat					(MLRA 136,	•	, l
	ck (A10) (LRR N)		Redox Dark S				<b>□</b> ∨	ery Shallow D		TF12)
_ :	d Below Dark Surfac	e (A11)	Depleted Darl		)		□○	ther (Explain i	in Remarks)	
	ark Surface (A12)		Redox Depres							
-	lucky Mineral (S1) (I	LRR N,	Iron-Mangane		F12) <b>(LRR</b>	RN,				
_	\ 147, 148)		MLRA 136	•			3, ,			
	leyed Matrix (S4) edox (S5)		Umbric Surface Piedmont Floor					licators of hydrolog		
	Matrix (S6)		Red Parent M					less disturbed		
	ayer (if observed):	<u> </u>	Red r arent w	atchar (i Z i)	(IVILIXA 12	-7, 177	, un	icss distarbed	or problemat	iic.
Type: NA		•								
	ches): NA		_				Hydric Soil	Present?	Yes	No ✓
Remarks	<u> </u>						1 3			
Hy	dric soils criteri	a is not me	et.							



Upland data point wnok008\_u facing West



Upland data point wnok008\_u facing East



Wetland data point wnok008f\_w soil sample



Upland data point wnok008\_u soil sample

Project/Site: Southeast Reliability Project	City/County: Nottoway		Sampling Date: 07/29/2014
Applicant/Owner: Dominion Transmission		State: VA	Sampling Point: wnok009f_w
	Section, Township, Range: N		
Landform (hillslope, terrace, etc.): convergent slopes			Slope (%):_0-3
Subregion (LRR or MLRA): LRR P Lat:			Datum: NAD 1983
Soil Map Unit Name: Mixed Alluvial Land (Mn)		NWI classific	
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	al Circumstances" p	oresent? Yes ✓ No
Are Vegetation, Soil, or Hydrology		explain any answei	
SUMMARY OF FINDINGS – Attach site m		ons, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes <u>✓</u>	No		
Hydric Soil Present? Yes	- Is the Sampled Area		
Wetland Hydrology Present? Yes   ✓	—   Willing Welland:	Yes	No
Remarks:			
Photos 104-4651 soils, 4652 S, 4653 E, 4654 W			
This wetland forms at the convergence of two slopes	and is the headwaters of an ephemeral stream	m (begins off ROW)	). All 3 criteria met. Area is
a wetland.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; checi	k all that apply)	Surface Soil	Cracks (B6)
<u> </u>	True Aquatic Plants (B14)	,	getated Concave Surface (B8)
	Hydrogen Sulfide Odor (C1)	✓ Drainage Pat	
	Oxidized Rhizospheres on Living Roots (C3)		, ,
1 .	Presence of Reduced Iron (C4)		Water Table (C2)
<u> </u>	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burr	
	Thin Muck Surface (C7)		sible on Aerial Imagery (C9)
	Other (Explain in Remarks)		tressed Plants (D1)
Iron Deposits (B5)		✓ Geomorphic	
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		Shallow Aqui	uphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	• • • •
Field Observations:			1031 (03)
Surface Water Present? Yes No✓	Depth (inches): NA		
Water Table Present? Yes No ✓			
Saturation Present? Yes No _✓	- · · · · · · · · · · · · · · · · · · ·	Hydrology Presen	it? Yes ✓ No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring v	well, aerial photos, previous inspections), if av	ailable:	
Remarks:			
Several primary and secondary hydrology indicators of	observed Hydrology criteria met		
Section primary and occornating the colory management of			

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20 # D	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Free Stratum (Plot size:30 ft R)		Species?		Number of Dominant Species
Acer rubrum	30	<u>Y</u>	FAC	That Are OBL, FACW, or FAC:9 (A)
Liriodendron tulipifera	30	<u>Y</u>	FACU	Total Number of Dominant
Pinus taeda	30	<u>Y</u>	FAC_	Species Across All Strata: 10 (B)
l,				Devent of Deminent Charles
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  90 (A/B
5				
7				Prevalence Index worksheet:
	90	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover: 45	20% of	total cover:_	18	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ft R )				FACW species x 2 =
Ulmus americana	5	Υ	FACW	FAC species x 3 =
Asimina triloba	5	<u> Y</u>	FAC	FACU species x 4 =
Lindera benzoin	5	Y	FAC	UPL species x 5 =
l				Column Totals: (A) (B)
5				Prevalence Index = B/A =
S				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
3				✓ 2 - Dominance Test is >50%
)				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supportin
50% of total cover: 8	20% of	total cover:_	3	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ft R				Problematic Hydrophytic Vegetation¹ (Explain)
1. Athyrium felix-femina	30	<u>Y</u>	FAC	1 Toblematic Trydrophytic Vegetation (Explain)
Boehmeria cylindrica	20	<u>Y</u>	FACW	11-4:
3. Juncus coriaceus	10	N	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Persicaria maculosa	5	N	FACW	Definitions of Four Vegetation Strata:
5. Sambucus nigra	5	N	FAC	John Mondo of Four Vogotation Grata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of
7				height.
3				
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.				
	70	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 35	$\overline{}$	total cover:_	14	or size, and woody plants less than 5.25 it tall.
Noody Vine Stratum (Plot size:30 Ft R)	2070 01	total oover		<b>Woody vine</b> – All woody vines greater than 3.28 ft in
Parthenocissus quinquefolia	10	Υ	FAC	height.
Smilax rotundifolia			FAC	
<u>.                                    </u>				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	_	Present? Yes No
50% of total cover: 8	20% of	total cover:_	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			
egetation passes dominance test.				

Sampling Point: wnok009f\_w

Profile Desc	ription: (Describe t	o the dep	th needed to docur	nent the i	ndicator	or confirm	n the absence of indicators.)	
Depth	Matrix		Redo	x Features	3			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> <u>Remarks</u>	
0-16	2.5Y 5/1	70	7.5YR 4/6	10	С	PL	sandy clay loam	
0-16	10YR 4/1	20	NA	NA	NA	NA	sandy clay loam	
16-20	2.5Y 5/1	90	7.5YR 4/6	10	С	PL	sandy clay loam	
1- 0.0							2	
	oncentration, D=Depl	etion, RM:	Reduced Matrix, M	S=Masked	Sand Gra	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	3
Hydric Soil							Indicators for Problematic Hydric Soi	ls":
Histosol			Dark Surface				2 cm Muck (A10) (MLRA 147)	
	pipedon (A2)		Polyvalue Be					
Black Hi	` '		Thin Dark Su			47, 148)	(MLRA 147, 148)	
_ · ·	n Sulfide (A4)		Loamy Gleye		F2)		Piedmont Floodplain Soils (F19)	
	Layers (A5)		✓ Depleted Ma		0)		(MLRA 136, 147)	
	ick (A10) <b>(LRR N)</b>	(0.4.4)	Redox Dark				Very Shallow Dark Surface (TF12)	
	d Below Dark Surface	(A11)	Depleted Date				Other (Explain in Remarks)	
	ark Surface (A12)	DD N	Redox Depre			DD N		
	lucky Mineral (S1) <b>(L</b>	KK N,	Iron-Mangan		es (F 12) <b>(</b> 1	LKK N,		
	<b>A 147, 148)</b> Gleyed Matrix (S4)		MLRA 13 Umbric Surfa		MI DA 12	6 122\	<sup>3</sup> Indicators of hydrophytic vegetation a	nd
	ledox (S5)		Piedmont Flo					na
	Matrix (S6)		Red Parent N					
	_ayer (if observed):		rear arener	viateriai (i	Z I ) (IVILIX	A 127, 147	The difference of problemate.	
Type: NA								
	ches): NA						Hudria Call Broad and A. Na	
	cnes):						Hydric Soil Present? Yes No	
Remarks:								
One indicator	of hydric soils met: D	epleted m	atrix (F3).					



Wetland data point wnok009f\_w facing South



Wetland data point wnok009f\_w facing East

Project/Site: Southeast Reliability Project	City/County: NA/Nottoway Sampling Date: 07/29/14
Applicant/Owner: Dominion Transmission	State: VA Sampling Point: wnok009_u
Investigator(s): W. Medlin, J. Sweitzer	Section, Township, Range: NA
• • •	ocal relief (concave, convex, none): <u>convex</u> Slope (%): <u>7-10</u>
Subregion (LRR or MLRA): LRR P Lat: 37.253880	228 Long: -78.168226153 Datum: NAD 1983
Soil Map Unit Name: Mixed alluvial land (Mn)	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of y	
	y disturbed? Are "Normal Circumstances" present? Yes V No
	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	In the County of Acres
Hydric Soil Present? Yes No ✓	- Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No ✓	[   — —
Remarks:	<u> </u>
This area is an upland hillslope within a mixed pine-hai	rdwood forest that appears to have been planted with loblolly
pines in the past. Vegetation criteria met, but hydric soil an	
*Photos 100-0320 to 0324 (WLM camera)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Plants (B14) Sparsely Vegetated Concave Surface (B8)
I <del> · · · · · · · · · · · · · · · · ·</del>	fide Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhiz	cospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of F	Reduced Iron (C4) Dry-Season Water Table (C2)
	reduction in Tilled Soils (C6)
Drift Deposits (B3)	<b>=</b>
Algal Mat or Crust (B4)	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	☐ Shallow Aquitard (D3)☐ Microtopographic Relief (D4)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	TAC-Neutral Test (D3)
Surface Water Present? Yes No Depth (inche	s):
Water Table Present? Yes No Depth (inche	
Saturation Present? Yes No Depth (inche	
(includes capillary fringe)	, <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
NA	
Remarks:	
Hydrology criteria is not met.	

# **VEGETATION** (Five Strata) – Use scientific names of plants.

00 #	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30 ft radius 1. Pinus taeda	% Cover 40	Species?	<u>Status</u> FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
2. Liriodendron tulipifera	80	Y	FACU	That Are OBE, I ACW, OF I AC.
3. Quercus phellos	15		FAC	Total Number of Dominant Species Across All Strata: 9 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 56 (A/B)
6	135	= Total Cov		Prevalence Index worksheet:
67.5				Total % Cover of: Multiply by:
50% of total cover: <u>67.5</u>	20% of	total cover:		OBL species $0 \times 1 = 0$
Sapling Stratum (Plot size: 15 ft radius	<b>50</b>	V	FACIL	FACW species $0   x 2 = 0$
1. Liriodendron tulipifera	50	<u>Y</u>	FACU	FAC species 87 x 3 = 261
2. Liquidambar styraciflua	15	Y	FAC	FACU species 160 x 4 = 640
3				UPL species $0 \times 5 = 0$
4				Column Totals: 247 (A) 901 (B)
5				Column Totals: 247 (A) OTT (B)
6				Prevalence Index = B/A = $3.65$
	65	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover: <u>32.5</u>	20% of	total cover:	13	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15 ft radius				2 - Dominance Test is >50%
1. Carya glabra	10	Υ	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Asimina triloba	5		FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3 Liriodendron tulipifera	15	<u>Y</u>	FACU	data in Remarks or on a separate sheet)
4. Quercus falcata	5	<u> </u>	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
"			1700	
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
	35	= Total Cov	er	
		- Total Oov	01	Definitions of Five Vegetation Strata:
50% of total cover: 17.5				Definitions of Five Vegetation Strata:
50% of total cover: 17.5  Herb Stratum (Plot size: 10 ft radius )				Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius	20% of		7	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 10 ft radius	20% of	total cover:	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 10 ft radius	20% of		7	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius	20% of 5 2	total cover:	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus	20% of 5 2	total cover:	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3	20% of 5 2	total cover:	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3	20% of 5 2	total cover:	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3	20% of 5 2	Y Y	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3	20% of 5 2	Y Y	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3. 4. 5. 6. 7. 8.	20% of 5 2	Y Y	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3. 4. 5. 6. 7. 8. 9.	20% of 5 2	Y Y	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3. 4. 5. 6. 7. 8. 9. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	20% of 5 2	Y Y	7 <u>FAC</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3. 4. 5. 6. 7. 8. 9.	20% of 5 2	Y Y	7	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3	20% of 5 2	Y Y	7	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 3.5	20% of 5 2	Y Y	FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3.	20% of 5 2	Y Y	FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 3.5	20% of 5 2	Y Y	FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 3.5  Woody Vine Stratum (Plot size: 15 ft radius )  1. Campsis radicans	20% of 5 2 7 20% of 5 5	Y Y  Total Cover:	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3	7 20% of 5	Total Cover:	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3. 4. 5. 6. 7. 8. 9. 10. 11. 50% of total cover: 3.5  Woody Vine Stratum (Plot size: 15 ft radius )  1. Campsis radicans	7 20% of 5	Total Cover:	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3	7 20% of 5	Total Cover:	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba 2. Euonymus americanus 3	7 20% of 5	Y Y  Total Cover:	FAC FAC FAC FAC FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3	7 20% of 5	Total Cover:	FAC FAC FAC FAC FAC FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.  Hydrophytic Vegetation
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3	7 20% of 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Total Cover:  Y Y Y  = Total Cover:  Y  = Total Cover:	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: 10 ft radius )  1. Asimina triloba  2. Euonymus americanus  3	7 20% of 5 5 5 2 20% of 5 20%	Total Cover:  Y Y Y  = Total Cover:  Y  = Total Cover:	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.  Hydrophytic Vegetation

Sampling Point: wnok009\_u

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the i	indicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 5/3	45					SL	SL - sandy loam; mixed matrix
	10YR 3/2	55					SL	mixed matrix
5-14	10YR 5/4	100					SL	
14-20	10YR 6/4	85	7.5YR 5/8	15	С	M	SL	
	,							
		- ——						
		. ——						
1Type: C=C	ncontration D-Don	lotion DM	=Reduced Matrix, MS		d Sand Gr	nine	<sup>2</sup> Location: D	L=Pore Lining, M=Matrix.
Hydric Soil I		neuon, Kivi	=Reduced Matrix, M.	3=IVIASKE	Janu Gra	ali 15.		ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			☐ Dark Surface	(\$7)				cm Muck (A10) <b>(MLRA 147)</b>
	ipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	II RA 147.		Coast Prairie Redox (A16)
Black His			Thin Dark Su				,	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			, ,	<b>□</b> P	iedmont Floodplain Soils (F19)
□ Stratified	Layers (A5)		Depleted Ma	trix (F3)				(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark					ery Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11)	Depleted Da				.□ 0	ther (Explain in Remarks)
_	rk Surface (A12)		Redox Depre					
_	lucky Mineral (S1) (I	LRR N,	☐ Iron-Mangan		es (F12) <b>(</b>	LRR N,		
	147, 148) leyed Matrix (S4)		MLRA 13  Umbric Surfa	•	/MI DA 12	6 122)	<sup>3</sup> Ind	icators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N					less disturbed or problematic.
	ayer (if observed):	:				· ·	í i	P. C.
Type: NA								
J. —	thes): NA						Hydric Soil	Present? Yes No
Remarks:	1.1 9 9 1							
Hy	dric soils criteria	a is not r	net.					



Upland data point wnok009\_u facing West



Upland data point wnok009\_u facing North



Wetland data point wnok009f\_w soil sample



Upland data point wnok009\_u soil sample

Project/Site: Atlantic Coast Pipeline City/County: NA/Nottoway Sampling Date: 9/11/2014
Applicant/Owner: DoMinion TransMission State: VA Sampling Point: WhoLOOIF
Investigator(s): W. Media, R. Sheriden Section, Township, Range: NA
Landform (hillslope, terrace, etc.): Streams de Seep Local relief (concave, convex, none): Concave Slope (%): 1-2
Subregion (LRR or MLRA): LRR P Lat: 37. 244930321 Long: -78. 134 051195 Datum: NAD 33
Soil Map Unit Name: Louisburg sandy loan, croded hilly phose NWI classification: PFO
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 Vo
Are Vegetation Soil 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
Hydric Soil Present? Yes No within a Wetland? Yes No No No
Wetland Hydrology Present? Yes No No
Remarks: Chan Cide Copper 111 oridance of acres is the dischance of schools of the copper of the cop
Remarks: Streamside sægage w/ evidence of groundwater discharge. Area is a wetland.
MELIONO.
Photos # 100 - 1121 to 1125 Soils, N.E.S.W
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)
Surface Water (A1)  True Aquatic Plants (B14)  Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)
☐ Iron Deposits (B5) ☐ Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9) Microtopographic Relief (D4)
Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No Depth (inches): NA
Water Table Present?  Yes No Depth (inches): NA
Saturation Present? Yes No Depth (inches): O Wetland Hydrology Present? Yes No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
NA
Remarks:
Hydrology criteria met.

<b>VEGETATION</b> (	(Five Strata)	- Use scientific	names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Aces rubrum	60	Y	FAC	That Are OBL, FACW, or FAC: (A)
	20	Ý	FAC	
	20	·	FAC	Total Number of Dominant Species Across All Strata: (B)
'		· ——-	1 10	Species Across All Strata: [B]
4		· <del></del>		Percent of Dominant Species
5		· <del></del>		That Are OBL, FACW, or FAC:
6				Decorded to decord
	<u> 100</u>	= Total Cov	er	Prevalence Index worksheet:
50% of total cover: _ 50	20% o	f total cover:	20	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 15 Ft )	20% 0	i total cover.		OBL species x 1 =
Saping Stratum (Plot size: 18 44	10	<b>V</b>	FAC	FACW species x 2 =
1. Liquidanbor Styracifino			1/10	FAC species x 3 =
2				FACU species x 4 =
3				1
4				UPL species x 5 =
5				Column Totals: (A) (B)
				Provolence Index P/A
6		<del></del>		Prevalence Index = B/A =
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover:	20% o	f total cover:	2	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15 Ft )	_	·		2 - Dominance Test is >50%
1. Vaccinium conjubosum	15	Y	FACW	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.0 -55 -6 -4	16)	· 🛨	UPL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
2. Quercus montana		· <del>- '</del> -		data in Remarks or on a separate sheet)
3. Nyssa sylvatica		<u>Y</u>	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4. Liquidanour styracifina	_5_	<u> </u>	FAC	Troblemate rigarophytic vegetation (Explain)
5				1
6				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	40	= Total Cov	er	
<b>7</b> A			_	Definitions of Five Vegetation Strata:
50% of total cover: 20	20% o	f total cover:	3	Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 ++ )		. ,		approximately 20 ft (6 m) or more in height and 3 in.
1. Athyrium asplenioides	<u> 30 </u>	. <u> </u>	FAC	(7.6 cm) or larger in diameter at breast height (DBH).
2. Glyceria Striata		Y	OBL	Sapling – Woody plants, excluding woody vines,
3. Juncus tennis	5	N	FAC	approximately 20 ft (6 m) or more in height and less
4. Lycopus Virginicus	5	7	FAC	than 3 in. (7.6 cm) DBH.
4. Lycopus Virginias		- <del>   </del>		<b>a.</b>
5. Carex criaita		<u> </u>	OBL	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
6				
7				Herb – All herbaceous (non-woody) plants, including
8				herbaceous vines, regardless of size, and woody
9				plants, except woody vines, less than approximately 3 ft (1 m) in height.
10				it (1 m) in neight.
				Woody vine – All woody vines, regardless of height.
11				
	60	= Total Cov	er	
50% of total cover:	20% o	f total cover:	12	'
Woody Vine Stratum (Plot size: 30 Ft )				
1. Smilax rotundifolia	lo	Υ	FAC	
2				·
3				
4				
5				Hydrophytic
	<u>i0</u>	= Total Cov	er	Hydrophytic Vegetation
50% of total cover: 5				Present? Yes No No
		i total cover:		
Remarks: (Include photo numbers here or on a separate si	neet.)			
مانيم بي من سيان ي				
Criteria met.				· · · · · · · · · · · · · · · · · · ·

Depth (inches) 0-2 2-8	B. F. a. s. ct.	to the de				or confirm	the absence of indicators	i.)
0-2	Matrix Color (moist)	%	Color (moist)	<u>x Feature</u> %	S Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	10YR 3/1	100	-	-		-	Sandy/wocky town	organic content
	104R 5/2	100	•				Sandy loan	Organic Carried
<del>8</del> -15	10YR 5/1	95	104R 5/6	<i>i</i> 0	/3			
						1/06	Sandy loam	. 1. 1 5 1
15-20	104R 5/1	30	754R 5/8	20	<u> </u>	MPL	sardy clay lown	oxidized root chan-
				···				
				<u> </u>				
·								
	-							
Type: C=Co	oncentration, D=Dep	oletion, RM	1=Reduced Matrix, MS	======================================	d Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining	. M=Matrix.
lydric Soil II	ndicators:							plematic Hydric Soils <sup>3</sup> :
Histosol (			Dark Surface				2 cm Muck (A1	
	ipedon (A2)		Polyvalue Be					
Black His	n Sulfide (A4)		☐ Thin Dark Su☐ ✓ ☐ ✓ Mamy Gleye			147, 148)	(MLRA 147,	148) dplain Soils (F19)
	Layers (A5)		Depleted Mai		(1 2)		(MLRA 136,	•
2 cm Mu	ck (A10) (LRR N)		Redox Dark		6)			ark Surface (TF12)
•	Below Dark Surfac	e (A11)	Depleted Dar				☐ Other (Explain	in Remarks)
	irk Surface (A12) lucky Mineral (S1) (	I DD N	Redox Depre			LDDN		
	147, 148)	LKK N,	MLRA 13		es (F12) (	LRK N,		·
	leyed Matrix (S4)		Umbric Surfa	-	(MLRA 13	6, 122)	3Indicators of hyde	rophytic vegetation and
	edox (S5)		Piedmont Flo	•				gy must be present,
	Matrix (S6) ayer (if observed)		Red Parent N	Material (F	21) <b>(MLR</b>	A 127, 147	') unless disturbed	or problematic.
Type:	Jayer (il observed) NA	•						
Depth (inc							Hydric Soil Present?	
emarks:	, 1103). <u>7414</u>		<del></del>				nyulic Soli Present?	Yes V No V
	lydric so	:1<	criteria M	5 <del>L</del>				·
, 1	1701110 30	11.5						
	•	6						
-								
								,
								·



Wetland data point wnol001f\_w facing East



Wetland data point wnol001f\_w facing West



Wetland data point wnol001f\_w soil sample

Project/Site: Atlantic Coast Pipeline City/County: NA/ Nottoway Sampling Date: 9/11/14
Applicant/Owner: Dominion Traismission State: VA Sampling Point: WWoLoot
Investigator(s): W. Medlin, R. Sheridan Section, Township, Range: N.A  Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex Slope (%):15-20
1000
Soil Map Unit Name: Louisburg Sindy lean, eroded hilly phase NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes
3 33 The Herman encountries presents res 100
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 V No
Hydric Soil Present? Yes No V Is the Sampled Area within a Wetland? Yes No V
Wetland Hydrology Present? Yes No No
Remarks: Upland Hardwood slope forest. Not a wetland.
PHOTOS \$100-1126 to 1130 Soils, N.E.S.W
HYDROLOGY
Makened Underland
Sees nearly indicators (infilliment of two required)
Sparsely Vegetated Concave Surface (Bo)
High water Table (A2)  Hydrogen Sulfide Odor (C1)  Saturation (A3)  Drainage Patterns (B10)  Oxidized Rhizospheres on Living Roots (C3)  Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)  Recent Iron Reduction in Tilled Soils (C6)  Crayfish Burrows (C8)
Drift Deposits (B3)  Thin Muck Surface (C7)  Saturation Visible on Aerial Imagery (C9)
Lack Algal Mat or Crust (B4) Lack 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): NA  Water Table Present? Yes No Depth (inches): NA
Septit (inches).
Saturation Present? Yes No Depth (inches): NA Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Hydrology criteria not met.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)		Species?		Number of Dominant Species 7
1. Acer rubrum	50	Y	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidantar Styracifina	50	<u> </u>	FAC	Total Number of Dominant
3. Nyssa sylvatica 4. Lisiodendron tulipifera	15	7	FAC	Species Across All Strata: 12 (B)
4 Liciadendroa tulipifoca	io	N	FACU	(-)
				Percent of Dominant Species That Are OBL FACW or FAC: 58% (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6	125	= Total Co		Prevalence Index worksheet:
				Total % Cover of: Multiply by:
50% of total cover: <u>62.</u>	<u>5</u> 20% o	f total cove	r: <u>25</u>	OBL species x 1 =
Sapling Stratum (Plot size: 15 FF)		_		FACW species x 2 =
1. Liquidanbur styraciflua	15	<u> Y</u>	FAC	
2. Querous Montana		Y	FACU	FAC species x 3 =
3. Liriodendron fulipitera	10	Ý	FACU	FACU species x 4 =
4. Nyssa sylvatica	5	7	FAC	UPL species x 5 =
5. Juniperus virginiana	-5	N	FACU	Column Totals: (A) (B)
1			<u> </u>	Developed by the DIA
6			<del></del>	Prevalence Index = B/A =
·		= Total Co		Hydrophytic Vegetation Indicators:
50% of total cover: 25	20% o	f total cove	r: <i>iO</i>	Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15 ft				2 - Dominance Test is >50%
1. Quercus montana	25	Y_	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Ilex opaca		V	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Vaccinium corynbosum		· 😽	FACW	data in Remarks or on a separate sheet)
4. Quercus alba	5		FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1 -	5			
5. Carpinus caroliniana	<del></del> _	-	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6. <u>Liriodendron</u> fulipifera	<del></del>		FACU	be present, unless disturbed or problematic.
		= Total Co	ver	Definitions of Five Vegetation Strata:
5000 - 51-1-1	000/		1	
50% of total cover:	20% 0	f total cove	r: <u>                                     </u>	Troe Woody plants evaluding woody vines
50% of total cover: 36  Herb Stratum (Plot size: 5 Ft )	20% 0	f total cove		Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 5 ft )	20% o	f total cove	r: 12 FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 5 ft )  1. Athyrium asplezioides	•	f total cove		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 5 ft )  1. Athyrium asplesioides  2. Polystichum acrostichoides	20 10	f total cove	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 ft )  1. Athyrium asplezioides  2. Poinstichum acrostichaides  3. Amelanchier	20 10 2	<u>ү</u> Ү	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 5 ft )  1. Athyrium asplesioides  2. Polystichum acrostichoides  3. Amelanchier  4. Carya tomentosa	20 10 2 2	f total cove	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size:	20 10 2 2	Y Y Z Z Z	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 ft )  1. Athyrium asplesioides  2. Polystichum acrostichoides  3. Amelanchier  4. Carya tomentosu  5	20 10 2 2	У И И	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
Herb Stratum (Plot size:	20 10 2 2	У И И	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including
Herb Stratum (Plot size:	20 10 2 2	Y Y 11 12	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size:	20 10 2 2	Y Y 11 12	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including
Herb Stratum (Plot size:	20 10 2 2	У И И	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2	У И И	FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size:	20 10 2 2	У И И	FACU FACU	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2	Y Y N	FAC FACU	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2	Y Y N	FAC FACU	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0	Y Y N	FAC FACU NI ver	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0	Y Y N	FAC  FACU  NI  ver  G.8  FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0	Y Y N	FAC FACU NI ver	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% o	= Total Co	FAC  FACU  NI  ver  G.8  FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0	= Total Co	FAC  FACU  NI  ver  G.8  FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0 45	= Total Co f total cove	FAC FAC FAC FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0 45	= Total Co	FAC FAC FAC FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0 45 15	= Total Co	FAC FAC FAC Ver	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0 45 15	= Total Co f total cove	FAC FAC FAC Ver	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.  Hydrophytic Vegetation
Herb Stratum (Plot size:	20 10 2 2 2 34 20% 0 45 15	= Total Co	FAC FAC FAC Ver	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine – All woody vines, regardless of height.  Hydrophytic Vegetation

	ription: (Describe t	o the dep	th needed to docun	nent the inc	uicator c	or contirm	n the absence of indicators.)	
Depth	Matrix			x Features	_ 1	. 2	Damada	1
(inches)	Color (moist)	%	Color (moist)	<u> </u>	Type'	Loc <sup>2</sup>	Texture Remarks	-
0-1	10YR 2/2	120					organic duff layer	
1-4	10YR 4/2	100					fine sandy /can	-
4-18	104R 6/4	60					sondy loan Mixed matrix	
	10 YR 4/2	40					Sindy loan Mixed matrix	
18-20	104R5/4	75	7.54R 4/6	25	<u></u>	M	Sandy loan	_
	,		,					
								_
								_
1- 0.0		Intina DM	Doduced Matrix M		Sand Cr		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	_
Hydric Soil		letion, RIM	Reduced Matrix, MS	S=IVIaskeu 3	Sanu Gra	11115.	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol			☐ Dark Surface	(S7)			2 cm Muck (A10) (MLRA 147)	
	pipedon (A2)		Polyvalue Be		e (S8) <b>(N</b>	ILRA 147,		
☐ Black Hi	stic (A3)		Thin Dark Su			47, 148)	(MLRA 147, 148)	
	n Sulfide (A4)		Loamy Gleye		2)		Piedmont Floodplain Soils (F19) (MLRA 136, 147)	
	d Layers (A5) ick (A10) <b>(LRR N)</b>		Depleted Ma		3		Very Shallow Dark Surface (TF12)	
	d Below Dark Surfac	e (A11)	Depleted Da				Other (Explain in Remarks)	
	ark Surface (A12)	, .	Redox Depre					
	Mucky Mineral (S1) (I	_RR N,	☐ Iron-Mangan		s (F12) <b>(</b>	LRR N,		
_	<b>A 147, 148)</b> Gleyed Matrix (S4)		MLRA 13  Umbric Surfa	•	AI RA 13	6. 122)	<sup>3</sup> Indicators of hydrophytic vegetation and	
	Redox (S5)		Piedmont Flo				• • • •	
1	Matrix (S6)		Red Parent I					
Restrictive	Layer (if observed)							/
Туре:			<u> </u>					/
Depth (in	ches): NA						Hydric Soil Present? Yes No	
Remarks:	11			M at				:
	أنتك المالياليا	e / - 1	Aci - A.7+ /					
1	Hydric Soil	s crit	eria not 1	et,				
	Hydric Soil	s crit	zeria not 1	er,				
	Hydric Soil	s crit	eria not 1	· · · ·				
	Hydric Soil	s crit	eria NOT 1					
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Upland data point wnol001\_u facing North



Upland data point wnol001\_u facing West



Upland data point wnol001\_u soil sample

Project/Site: Atlantic Coast Pipeline city/County: Nottoway Sampling Date: 09/11/19 Applicant/Owner: R. Sheridan W. Medlin Dominion State: VA Sampling Point: Wno 1002 Investigator(s): R. Sheridan, W. Medlin Section, Township, Range: NA Landform (hillslope, terrace, etc.): Sepage Slope Local relief (concave, convex, none): Concave Slope (%): 5-8
Subregion (LRR or MLRA): LRRP Lat: 37.243021418 Long: 78.129510694 Datum: NAD) 83  Soil Map Unit Name: Louisburg Standy law rolling phase NWI classification: NA  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 aignificantly disturbed? Are "Normal Circumstances" present? Yes No (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
Photos: 100-1162 to 1164 Seils N. E.SW
HYDROLOGY
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       True Aquatic Plants (B14)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Hydrogen Sulfide Odor (C1)       Drainage Patterns (B10)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Moss Trim Lines (B16)         Water Marks (B1)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Recent Iron Reduction in Tilled Soils (C6)       Crayfish Burrows (C8)         Drift Deposits (B3)       Thin Muck Surface (C7)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Other (Explain in Remarks)       Stunted or Stressed Plants (D1)         Inundation Visible on Aerial Imagery (B7)       Shallow Aquitard (D3)         Water-Stained Leaves (B9)       Microtopographic Relief (D4)         Hydrogen Sulfide Odor (C1)       FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  NA
Hydrology criteria met.

VEGETATION (	(Five Strata)	- Use scientific	names of	plants.
A FOR IVITAL	i ivo otiata,	000 00.0		

20(1-	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30f)	% Cover	Species?		Number of Dominant Species That Are OBL FACW, or FAC: (A)
1 Lirio dendron Whipifera	12	<u> </u>	FACU	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	12	<del></del> _	FAC	Total Number of Dominant
3. Carya tomentasa.	12	<u> </u>	NI	Species Across All Strata: (B)
4. Magnolia virginiana	5	<u> </u>	FACW	Percent of Dominant Species 75% (A/R)
5			<del></del>	That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
	_50_	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 25	20% o	f total cover:	10	OBL species x 1 =
Sapling Stratum (Plot size: 15ft )	,	,	_	FACW species x 2 =
1. Acer rubrum 2. Liqui dambar Styraciflua		. <u> </u>	FAC	FAC species x 3 =
2. Liquidambar Styraciflua	_5_	<u> </u>	FAC	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Column Totals (A) (B)
6.				Prevalence Index = B/A =
	_10_	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover:5	- 20% o	f total cover:	2	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:		,		2 - Dominance Test is >50%
A A				3 - Prevalence Index is ≤3.0 <sup>1</sup>
				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
2				data in Remarks or on a separate sheet)
3				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4				
5			<del></del>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6		Tatal Car		be present, unless disturbed or problematic.
		= Total Cov		Definitions of Five Vegetation Strata:
50% of total cover:	20% c	of total cover		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5++	25	<b>\</b>	· 60 ·	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1 Woodwardia virginica	- 13		OBL	(7.6 cm) of larger in diameter at breast neight (DBH).
2. Elaphantopus caroliniana	- <del>- 5</del>	<u> </u>	FACU	Sapling – Woody plants, excluding woody vines,
3. Nyssa sylvatica	_5_	_ <u>N</u>	FAC	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4				
5				Shrub – Woody plants, excluding woody vines,
6	_			approximately 3 to 20 ft (1 to 6 m) in height.
7				Herb – All herbaceous (non-woody) plants, including
8				herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
9.				ft (1 m) in height.
10				as a large state of baight
11.				Woody vine – All woody vines, regardless of height.
	35	_ = Total Cov	ver	
50% of total cover: <u>17</u>		_		
Woody Vine Stratum (Plot size: 30 F1)	20%	Ji lolai covei	·——	
Woody Vine Stratum (Plot size:)	5	4	FAC	
1. Lonicera japonica 2. Smilax rotunditalia		- <del> </del>	FAC	
2. SMILAX FOTH ANTOLIA			FAC	
3	_			
,				.
4				
4		_		Hydrophytic
5	1	_ = Total Co		Vegetation
4	1			
5	<b>1</b> 20% (			Vegetation

Profile Desc	ription: (Describe	to the dep	th needed to docun	ent the ir	ndicator o	or confirm	the absence of indicators.)
Depth	Matrix		Redox	(Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	
0-9	10YR 3/1	100	NA				Sandy Coam
9-20	104R6/1	100	NA				Sandyloan
	70 11 011	·	141)				3001(000) 2000
							<u> </u>
		letion, RM	=Reduced Matrix, MS	=Masked	Sand Gra	ins.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil							Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be				• •
☐ Black Hi			Thin Dark Su			47, 148)	(MLRA 147, 148)
	n Sulfide (A4) d Layers (A5)		☐ Loamy Gleye ☐ Depleted Mat		-2)		Piedmont Floodplain Soils (F19)
	ick (A10) (LRR N)		Redox Dark S		6)		(MLRA 136, 147)  Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar				Other (Explain in Remarks)
	ark Surface (A12)	,	Redox Depre				Cuter (Explain in Remarks)
_	lucky Mineral (S1) (L	RR N,	Iron-Mangane			.RR N,	
	A 147, 148)		MLRA 136		` ',	·	
Sandy G	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) <b>(N</b>	MLRA 130	5, 122)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	
	Matrix (S6)		Red Parent M	laterial (F2	21) <b>(MLR</b>	127, 147	7) unless disturbed or problematic.
	Layer (if observed):						
Туре:	NH		<del></del>				
Depth (in	ches): NA						Hydric Soil Present? Yes No
Remarks:							
5.11	criferia	10-01					
3011	Critcha	mer	•				



Wetland data point wnol002f\_w facing North



Wetland data point wnol002f\_w facing West



Wetland data point wnol002f\_w soil sample

Project/Site: Atlantic Coast Pipeline City/County: NA National Sampling Date: 4/11/14  Applicant/Owner: Dominion Transmission State: VA Sampling Point: WNoi.003F- Investigator(s): W. Medlin R. Sheridan Section, Township, Range: NA  Landform (hillslope, terrace, etc.): Seepage Slope Local relief (concave, convex, none): Concave Slope (%): 5-6  Subregion (LRR or MLRA): VR P Lat: 37.242.76.39391 Long: 78.129416041 Datum: NAD 83  Soil Map Unit Name: Louisburg Sandy loan Colling phase NWI classification: PFO  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?  Hydric Soil Present?  Yes No No Is the Sampled Area within a Wetland?  Yes No
Wetland Hydrology Present? Yes V No L
Remarks: Forested Seepage Siope- Drains to SNOLOOT. Area is a wetland
Totales seepings stopes stands
Dilatos H ine - 1150 in 1157 Kails of C C IN
PHOTOS # 100 - 1150 to 1153 Soils, N, E, S, W
HYDROLOGY  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)
Surface Water (A1)  True Aquatic Plants (B14)  Jigh Water Table (A2)  True Aquatic Plants (B14)  Hydrogen Sulfide Odor (C1)  Drainage Patterns (B10)
✓ Saturation (A3)
Water Marks (B1)  Presence of Reduced Iron (C4)  Dry-Season Water Table (C2)
Sediment Deposits (B2)  Recent Iron Reduction in Tilled Soils (C6)  Crayfish Burrows (C8)
☐ Drift Deposits (B3) ☐ Thin Muck Surface (C7) ☐ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)
Iron Deposits (B5) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)  Microtopographic Relief (D4)
Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes Depth (inches): NA
Water Table Present? Yes No Depth (inches): NA
Saturation Present? Yes No Depth (inches): 4 Wetland Hydrology Present? Yes No No (includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
$A_{ij}$
Remarks:
Hydrology criteria met.
· • • • • • • • • • • • • • • • • • • •

<b>VEGETATION</b> (	Five Strata	) – Use	scientific	names of	plants.
AFOLIVION	i ive suata	, – 030	JUICITUIL	Hullics Of	piulits.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft)		Species?		
1. Liriodeadron tulipitera	40	V	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1. CITTODENATION THIPPIECE		V V		That Are OBL, FACW, or FAC.
2. Ulmus americana		120	FACW	Total Number of Dominant
3. Liquidambar Styraciflua	25		FAC	Species Across All Strata: (B)
4				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC:
				Tildt Ale Obt., FACW, of FAC:
6	110			Prevalence Index worksheet:
		= Total Cov		Total % Cover of:Multiply by:
50% of total cover:	<b>5</b> 20% o	f total cover:	22	4
Sapling Stratum (Plot size: 15 Ft				OBL species x 1 =
				FACW species x 2 =
1. NA				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				
5				Column Totals: (A) (B)
				Dravalance Index D/A
6				Prevalence Index = B/A =
		= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% o	f total cover		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15 ft )				2 - Dominance Test is >50%
Jimus Sudium (i lot Size. 1 - 1 )	i S	✓	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
1. Nex opaca	<u> 70</u>			<b>!</b> —
2. Imiperus Virginiana		<u> </u>	FAW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
3				1 <del></del>
4				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6	سيد دسي			be present, unless disturbed or problematic.
	15,10	= Total Cov	er	Definitions of Five Vegetation Strata:
50% of total cover: 7,5	- 20% o	f total cover	13	
50% of total cover: 7.5	20% o	f total cover	13	Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 F+ )		f total cover	·	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica	_15	f total cover	OBL	Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 Ft)  1. Woodwardia Virginica  2. Microstegium viminam	i5	f total cover	·	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 Ft)  1. Woodwardia Virginica  2. Microstegium viminam	i5	f total cover	OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium viminam	i5	f total cover	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 Ft)  1. Woodwardia Virginica  2. Microstegium viminoum  3. Lycopus Virginicus  4. Osmanda regalis	i5 15 10 5	У У У	OBL FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: 5 Ft)  1. Woorlwardia Virginica  2. Microstegium viminoum  3. Lycopus Virginicus  4. Osmunda regalis  5.	i5 15 10 5	Y Y V	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium viminoum  3. Lycopus Virginicus  4. Osmunda regalis  5.  6.	i5 15 10 5	Y Y Y N	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: 5 Ft)  1. Woorlwardia Virginica  2. Microstegium viminoum  3. Lycopus Virginicus  4. Osmunda regalis  5.	i5 15 10 5	Y Y Y N	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium vimineum  3. Lycopus Virginicus  4. Oshunda regalis  5	15 15 10 5	Y Y Y N	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size: 5 Ft )  1. Woorlwardia Virginica  2. Microstegium virninam  3. Lycopus Virginicus  4. Osmanda regalis  5.  6.  7.  8.	15 15 10 5	Y Y Y N	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium viminoum  3. Lycopus Virginicus  4. Osmunda regalis  5.  6.  7.  8.  9.	i5 i0 	Y Y Y N	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium vimineum  3. Lycopus Virginicus  4. Osmunda regalis  5	i5 i0 	Y Y Y N	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium viminoum  3. Lycopus Virginicus  4. Osmunda regalis  5.  6.  7.  8.  9.	15 15 10 5	Y Y Y N	OBL FAC OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium vimineum  3. Lywopus Virginicus  4. Osmunda regalis  5. 6. 7. 8. 9. 10. 11. 11.	15 15 10 5	Y Y N	OBL FAC OBL OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium vimineum  3. Lywopus Virginicus  4. Osmunda regalis  5. 6. 7. 8. 9. 10. 11. 11.	15 15 10 5	Y Y N	OBL FAC OBL OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 Ft )  1. Woorlwardia Virginica  2. Microstegium virningum  3. Lycopus Virginicus  4. Osmunda regalis  5. 6. 7. 8. 9. 10. 11. 50% of total cover: 22	15 15 10 5	Y Y N	OBL FAC OBL OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium vimineum  3. Lycopus Virginicus  4. Osuunda regalis  5	15 10 5 5 	Y Y N	OBL FAC OBL OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 Ft )  1. Woorlwardia Virginica  2. Microstegium virningum  3. Lycopus Virginicus  4. Osmunda regalis  5. 6. 7. 8. 9. 10. 11. 50% of total cover: 22	15 10 5 5 	Y Y N	OBL FAC OBL OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
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Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium viminoum  3. Lycopus Virginicus  4. Osmunda regalis  5.  6.  7.  8.  9.  10.  11.  50% of total cover: 22  Woody Vine Stratum (Plot size: 30 Ft )  1. Smilax rotundifolia	15 10 5 	Y Y N = Total Cover	OBL FAC OBL OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 Ft )  1. Woorlwardia Virginica  2. Microstegium virningum  3. Lywpus Virginicus  4. Osmunda regalis  5. 6. 7. 8. 9. 10. 11. 50% of total cover: 22  Woody Vine Stratum (Plot size: 30 ft )  1. Smilax rotundifolia  2. 3	15 10 5 	= Total Cover	OBL FAC OBL OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
Herb Stratum (Plot size: 5 Ft )  1. Woodwardia Virginica  2. Microstegium vimineum  3. Lycopus Virginicus  4. Osuunda regalis  5	15 10 5 	= Total Cover	OBL FAC OBL OBL	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
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Profile Desc	cription: (Describe to	o the dep				or confirn	n the absence of indicators.)
Depth	Matrix	%		x Features	SType <sup>1</sup> _	Loc <sup>2</sup>	Toytura Domestica
(inches)	Color (moist)		Color (moist)	<u> </u>	_ rype	LOC	Texture Remarks
0-1	104R2/2	100					Soudy loan high organic content
1-7	10YR 4/2	100					sardy loan
7-16	10 YR 5/2	90	10YR G/B	<u>· /o</u>	_ <i>C</i>	<u>M</u>	Sardy loan
							·
							<u></u>
					-		
		<del></del>		<del></del>			
1 <sub>T</sub> 0.0				· —			2 2. 2
Hydric Soil	oncentration, D=Deple	etion, RM:	=Reduced Matrix, MS	s=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			☐ Dark Surface	(\$7)			2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ce (S8) (N	/ILRA 147.	
	stic (A3)		Thin Dark Su	rface (S9)	(MLRA		(MLRA 147, 148)
	en Sulfide (A4)		oamy Gleye		F2)		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mai		-0)		(MLRA 136, 147)
1	ıck (A10) <b>(LRR N)</b> d Below Dark Surface	(Δ11)	Redox Dark S				☐ Very Shallow Dark Surface (TF12)☐ Other (Explain in Remarks)
	ark Surface (A12)	(A11)	Redox Depre				Cher (Explain in Remarks)
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,	
	A 147, 148)		MLRA 130	•			2
	Gleyed Matrix (S4)		Umbric Surfa				<sup>3</sup> Indicators of hydrophytic vegetation and
	Redox (S5) I Matrix (S6)		☐ Piedmont Flo☐ Red Parent N				· · · · · · · · · · · · · · · · ·
	Layer (if observed):			naterial (i	ZI) (WIZI	.,, 127, 14	unless distanced of problematic.
Type:	NA						
	ches): NA		<u> </u>				Hydric Soil Present? Yes V No No
Remarks:	<del></del>	- 1		·			
	Hydric Soils	cut	eria met.				
	,						



Wetland data point wnol003f\_w facing North



Wetland data point wnol003f\_w facing South



Wetland data point wnol003f\_w soil sample

Project/Site: Atlantic Coast Pipeline City/County: NA/ Nottoway Sampling Date: 9/11/2014
Applicant/Owner: Dominion Transmission State: VA Sampling Point: WNOLOO3
Investigator(s): W. Medlin, R. Sheridan Section, Township, Range: NA
Landform (hillslope, terrace, etc.): Small ridge Slope Local relief (concave, convex, none): Convex Slope (%): 3-4
Subregion (LRR or MLRA): <u>LRR F</u> Lat: <u>37. 242872728</u> Long: <u>-73. 129466936</u> Datum: <u>NAD 83</u>
Soil Map Unit Name: Louisburg Sandy lean, rolling phase NWI classification: NA
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 Veg
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
Hydric Soil Present? Yes No within a Wetland? Yes No V
Wetland Hydrology Present? Yes No V
WNOLOOZ and adequately justifies the delineated boundary. Area is not a wetland
16/Not 007 and advanately just fine the delinest of boundary Arms is not - well a
who been me the formery justifies the centified muchay. They is not a well and
PHOTOS # 100-1157 to 1161 Soils, N.E.S. W
HYDROLOGY
Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)
Surface Water (A1)  True Aquatic Plants (B14)  Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Hydrogen Sulfide Odor (C1)  Drainage Patterns (B10)
Saturation (A3)  Oxidized Rhizospheres on Living Roots (C3)  Moss Trim Lines (B16)
Water Marks (B1)  Presence of Reduced Iron (C4)  Dry-Season Water Table (C2)
Water Marks (b1)   Control of Reduced For (C4)
Sediment Denosits (B2)  Recent Iron Reduction in Tilled Soils (C6)  Crayfish Burrows (C8)
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)
Drift Deposits (B3)
Drift Deposits (B3)  Thin Muck Surface (C7)  Algal Mat or Crust (B4)  Thin Muck Surface (C7)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)
Drift Deposits (B3)  Algal Mat or Crust (B4)  Drift Deposits (B5)  Thin Muck Surface (C7)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Geomorphic Position (D2)
Drift Deposits (B3)  Thin Muck Surface (C7)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Thin Muck Surface (C7)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Geomorphic Position (D2)  Shallow Aquitard (D3)
Drift Deposits (B3)
□ 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)
Drift Deposits (B3)
□ 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) □ Shallow Aquitard (D3) □ Water-Stained Leaves (B9) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5)  Field Observations: Surface Water Present? Yes □ No □ Depth (inches): ▲ A
□ 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) □ Shallow Aquitard (D3) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5)  Field Observations:  Surface Water Present? Yes □ No □ Depth (inches): ▶ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑
□ 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) □ Shallow Aquitard (D3) □ Water-Stained Leaves (B9) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ FAC-Neutral
Drift Deposits (B3)
□ 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) □ Geomorphic Position (D2) □ Inundation Visible on Aerial Imagery (B7) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Sturation Present? Yes □ No □ Depth (inches): NA Water Table Present? Yes □ No □ Depth (inches): NA Wetland Hydrology Present? Yes □ No □ Depth (inches): NA Wetland Hydrology Present? Yes □ No □ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
□ 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) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Stunted or Stressed Plants (D1) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ Depth (inches): □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D
□ 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) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Stunted or Stressed Plants (D1) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ Depth (inches): □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D
□ 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) □ Geomorphic Position (D2) □ Inundation Visible on Aerial Imagery (B7) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Sturation Present? Yes □ No □ Depth (inches): NA Water Table Present? Yes □ No □ Depth (inches): NA Wetland Hydrology Present? Yes □ No □ Depth (inches): NA Wetland Hydrology Present? Yes □ No □ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
□ 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) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Stunted or Stressed Plants (D1) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ Depth (inches): □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D
□ 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) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Stunted or Stressed Plants (D1) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ Depth (inches): □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D
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□ 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) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Stunted or Stressed Plants (D1) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ Depth (inches): □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D
□ 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) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Stunted or Stressed Plants (D1) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ Depth (inches): □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D
□ 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) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Stunted or Stressed Plants (D1) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ Depth (inches): □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D
□ 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) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ Aquatic Fauna (B13) □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D5) □ Stunted or Stressed Plants (D1) □ Stunted or Stressed Plants (D1) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-Neutral Test (D5) □ Depth (inches): □ FAC-Neutral Test (D5) □ FAC-Neutral Test (D